

2024

NEEDS AND ASSETS REPORT



 **FIRST THINGS FIRST**

East Maricopa Region

EAST MARICOPA REGIONAL PARTNERSHIP COUNCIL 2024 NEEDS AND ASSETS REPORT

Funded by the
First Things First East Maricopa Regional Partnership Council

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INTRODUCTION

Ninety percent of a child's brain growth occurs before kindergarten and the quality of a child's early experiences impacts whether their brain will develop in positive ways that promote learning. First Things First (FTF) was created by Arizonans to help ensure that Arizona children have the opportunity to start kindergarten prepared to be successful. Understanding the critical role the early years play in a child's future success is crucial to our ability to foster each child's optimal development and in turn, impact all aspects of well-being in our communities and our state.

This Needs and Assets Report for the East Maricopa Region helps us in understanding the needs of young children, the resources available to meet those needs and gaps that may exist in those resources. An overview of this information is provided in the Executive Summary and documented in further detail in the full report.

The report is organized by topic areas pertinent to young children in the region, such as population characteristics or educational indicators. Within each topic area are sections that set the context for why the data found in the topic areas are important (Why it Matters), followed by a section that includes available data on the topic (What the Data Tell Us).

The FTF East Maricopa Regional Partnership Council recognizes the importance of investing in young children and ensuring that families and caregivers have options when it comes to supporting the healthy development and education of young children in their care. It is our sincere hope that this information will help guide community conversations about how we can best support school readiness for all children in the East Maricopa Region. To that end, this information may be useful to local stakeholders as they work to enhance the resources available to young children and their families and as they make decisions about how best to support children birth to age 5 in communities throughout the region.

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We also want to thank parents and caregivers, local service providers and members of the public who attended regional council meetings and voiced their opinions, as well as all the organizations working to transform the vision of the regional council into concrete programs and services for children and families in the East Maricopa Region.

Lastly, we want to acknowledge the current and past members of the FTF East Maricopa Regional Partnership Council whose vision, dedication and passion have been instrumental in improving outcomes for young children and families within the region. As we build upon those successes, we move ever closer to our ultimate goal of creating a comprehensive early childhood system that ensures children throughout Arizona are ready for school and set for life.

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EXECUTIVE SUMMARY

The East Maricopa Region. The First Things First East Maricopa Region lies to the east of the city of Phoenix, and includes three cities (Chandler, Scottsdale, and Tempe), five towns (Fountain Hills, Paradise Valley, Guadalupe, Cave Creek, and Carefree), two unincorporated communities (Sun Lakes and Rio Verde), two Phoenix neighborhoods (Ahwatukee and Paradise Valley Village) and one Indian reservation (the Fort McDowell Yavapai Nation). This region lies entirely within Maricopa County. Note that although the Salt River Pima Maricopa Indian Community and the Gila River Indian Community border the East Maricopa Region, neither is included in this region. Both form their own First Things First regions.

Population Characteristics. According to the U.S. Census, the East Maricopa Region had a population of 930,475 in 2020, an 11% increase from 2010, when 836,533 people resided in the region. Conversely, the population of young children birth to age 5 decreased 11% over the same period from 54,701 in 2010 to 48,741 in 2020. This pattern was similar to that seen across the state as a whole which experienced a 12% increase in the total population, but a 12% decrease in the population of young children from 2010 to 2020. Nearly one in 10 households (9%) in the region included a young child in 2020. This is a lower proportion of households than across Maricopa County as a whole (14%) and the state (13%). The 2020 Census undercount of young children does not appear to have substantially impacted the East Maricopa Region. Generally speaking, the recorded births for a given year align with the number of children of a specific age counted in the 2020 Census. In fact, for most ages there appear to be more children than were born in the region (e.g., 8,625 4-year-olds in 2020 but only 8,232 children born in the region in 2016), which could suggest families with young children are moving into the region.

Most East Maricopa Region residents identify as Non-Hispanic White (69% of all age population, 55% of children birth to age 4). Young children in the region are more likely to be identified as Hispanic (27%) than all residents (16%), although both are lower than the population of young children (44%) and all ages (31%) identifying as Hispanic across the state. The region also has a lower proportion of the entire population and children birth to age 4 identified as American Indian (4% and 6% respectively) and Multiracial (11% and 20%) than the state across all categories. The East Maricopa Region has a similar proportion of Black or African American residents (6%) and young children (10%) to Arizona overall and a higher proportion of Asian or Pacific Islander (10% and 16%) than the state (5% and 7%).

A quarter (25%) of all children birth to age 5 in the region live with foreign-born parents, a slightly higher proportion than the state overall (24%). However, home language is still predominantly English (82%), compared to only 73% statewide. There are relatively fewer Spanish-speaking homes (9% in the region vs. 20% statewide) and slightly more who speak another language at home (9% vs. 6%). Of those who speak a language other than English at home, a smaller proportion of individuals do not speak English “very well” in the region (5%) compared to the state (8%). Similarly, the percentage of limited-English-speaking households in the region (2%) is half that of the state (4%). The number of English

Language Learners (ELL) increased at the region, county and state levels between 2020-21 and 2021-22. In the region, 4% of students were identified as English Language Learners in the 2021 school year.

Young children in East Maricopa are more likely than children across the state and county to live with two married parents. Over two-thirds (69%) live with two married parents, compared to 59% of young children across Arizona overall. Over a quarter (27%) of young children in the region live in a household with one parent, which is lower than the proportion statewide (37%).

Eight percent of children birth to age 5 in the region live in their grandparent's household, which is lower than the proportion of young children in those living situations across the state (13%). Of grandparents who live with and are responsible for their grandchildren under age 18 in the East Maricopa Region, more than half are 60 or older (52%), female (64%) and in the labor force (54%). About 1 in 6 (18%) are living below the poverty level. Most of these households also include the child's parents even though the grandparent identifies as being responsible for the child, with 38% lacking a parent. Overall, in the East Maricopa Region, 11% of co-resident grandparents have grandchildren under age 18 in their household with no parent present, comparable to the proportion than across the state (11%).

Economic Circumstances. The county's economic vitality is reflected in family incomes. Median family income for families in Maricopa County is higher than for families across Arizona for all household types, although the state values are heavily influenced by Maricopa County given the county's massive population. Married couple families in Maricopa County earn a median of \$106,700, while single-parent families tend to earn less than half of that (\$54,000 for single-male-headed families and \$38,300 for single-female-headed families with children).

The East Maricopa Region is relatively prosperous. According to 2017-2021 American Community Survey (ACS) estimates, a smaller proportion of the total population (9%) and children birth to age 5 (11%) live in poverty compared to those across the county (12% and 18%, respectively) and state (13% and 20%, respectively). Rates of poverty for young children have decreased at all geographies (region, county, state, nation) in recent years, but they shrank relatively less in East Maricopa, dropping only 4 percentage points (from 15% to 11%) compared to an 8-point decline at the county and state levels. There are also relatively fewer young children in low-income families in the region compared to the county and the state. In the East Maricopa Region, 78% of children live above 185% of the poverty threshold, compared to 65% and 61% in the county and state. In 2021, for a family of two adults and two children, this equates to an income of \$50,836, which is still far below the self-sufficiency standard for two parents with one infant and one preschooler in 2022 in Maricopa County (\$84,764).

In the East Maricopa Region, there are usually around 700 children receiving Temporary Assistance for Needy Families (TANF), representing children living in families with extreme financial hardship. This value rose from a low of 634 in state fiscal year (SFY) 2019 to a high of 752 in SFY 2021, before falling back to 682 in SFY 2022. In SFY 2022, the percentage of young children participating in TANF in the region (1.4%) was half of that of the state overall (2.8%), again reflecting the relative prosperity of the region. Participation in the Supplemental Nutrition Assistance Program (SNAP) by households with young children declined in the East Maricopa Region between SFYs 2018 and 2022 as did participation

across the state. The number of young children birth to age 5 participating in SNAP also decreased during those years in both the region and state. The percentage of young children participating in SNAP was lower in the region than across the state between SFY 2018 and SFY 2022, with 20% of children birth to age 5 participating in the region in SFY 2022, compared to 40% across the state.

The number of children birth to age 4 enrolled in and participating in the Women, Infants, and Children program (WIC) in the East Maricopa Region and across the state generally declined in recent years, except for a slight uptick in enrollment and participation in the region and state, in 2022. The program supports healthy nutrition for about 8,000 young children in the region. Among those enrolled, the vast majority participate in the WIC program. In 2022, participation rates were at 96% for women and children, and 98% for infants in the East Maricopa Region.

The number of lunches served through the National School Lunch Program (NSLP), Summer Food Service Program (SFSP), and Child and Adult Care Feeding Program (CACFP) varied substantially between program years 2019-20 and 2021-22. After the change in school meal policy following the start of the COVID-19 pandemic, meal service through SFSP increased sevenfold in Maricopa County between 2019-20 and 2020-21, while meal service through NSLP fell by more than half. In the 2021-22 school year, NSLP meal service increased and SFSP meal service decreased, though neither program has yet returned to pre-pandemic levels. Compared to 2019-20, the number of lunches served through CACFP more than doubled in Maricopa County in 2021-22, indicating higher ongoing participation in CACFP following the start of the pandemic.

Unemployment rates in Maricopa County track with Arizona's but tend to be slightly lower. Despite the spike during the height of the COVID-19 pandemic, unemployment rates fell to their lowest level in six years in 2022 with a 3.3% unemployment rate in Maricopa County and a 3.8% rate across Arizona. The labor force participation rate is higher in the East Maricopa Region (66%) than across Arizona (61%). The region has a lower proportion of adults who are not in the labor force (34%) compared to Arizona as a whole (39%). An estimated 94% of young children in the East Maricopa Region live in families with at least one parent in the labor force, slightly higher than the proportion across the state (90%). More than two-thirds of children birth to age 5 in the region (66%) live with all parents in the labor force, making it likely that these families need some form of child care.

Traditionally, housing has been deemed affordable for families if it costs less than 30% of annual household income. Nearly three in 10 households (29%) in the region and across the state spend 30% or more of their income on housing. Housing costs do differ by home ownership status, with fewer homeowners in the region (21%) and state (21%) spending 30% or more of household income on housing, compared to 42% of renter-occupied households in the region and 45% across the state. The McKinney-Vento Act definition of homelessness includes children living in shelters, transitional housing, campgrounds, motels, trailer parks and cars, as well as children whose families are temporarily living within another family's household. Less than 2% of students enrolled in public and charter schools in the region experienced homelessness in the 2021-22 school year, similar to the proportion across the state.

Looking at households, 93% in the East Maricopa Region have both a computer (including smartphones) and broadband internet connectivity, which is higher than the proportion across the county (90%) and state overall (88%). Looking at the population, the majority (95%) of people (all-ages) in the East Maricopa Region live in households with both a computer and internet connection. Children are even more likely to live in a household with a computer and an internet connection, with 97% of those under age 18 with this access in the region. These values are higher than those of comparable groups at the county and state level.

Educational Indicators. In the 2021-22 school year, 1,507 children were enrolled in preschool in the East Maricopa Region. Kindergarten through 3rd grade enrollments for the region were all much higher, ranging from 8,716 in kindergarten to a high of 9,315 in 2nd grade. Kindergarten through 3rd grade chronic absence rates, while noticeably lower in the region than the county or the state, have more than doubled in recent years, increasing from 11% in 2020-21 to 26% in 2021-22 in the region.

In the 2021-22 school year, 57% of 3rd grade students in the East Maricopa Region were meeting or exceeding proficiency expectations for 3rd grade English Language Arts (ELA). While this is a frustratingly low proportion of proficient students, it has been rising and is notably higher than the proportion across the county (43%) and state (41%). Math proficiency parallels ELA proficiency. Passing rates have climbed slightly across the region, county, and state, and East Maricopa students outperform peers elsewhere. However, even with these increases, only 56% of the region's students achieve passing scores.

Despite other educational strengths, four- and five-year graduation rates in the East Maricopa Region have been below state and county rates in recent years. In 2021 (the most recent year of data available for both rates), the four-year graduation rate for the region was 69% and the five-year graduation rate was 73%, compared to 76% and 79% in Maricopa County and Arizona overall. The region's lower rates appear to be driven by a large number of charter operators that have a campus in the region but also run large online or virtual schools (which can include students who reside outside of the region). These operators substantially affect the regional graduation rate due to their size and extremely low graduation rates. The 7th-12th grade dropout rate for the East Maricopa Region rose from 3% in 2019-20 to 5% in 2021-22, on par with the county and state.

A large majority (81%) of the adult population in the East Maricopa Region has more than a high-school education, meaning they generally have higher educational attainment than other residents of Maricopa County and Arizona, where about two-thirds have at least some college education. In 2021, 93% of births in the East Maricopa Region were to mothers who had at least a high school diploma, GED or higher educational attainment. This is higher than the proportions in the county (86%) and Arizona in 2021 (86%).

Early Learning. In the East Maricopa Region, about half (49%) of children ages 3 and 4 are estimated to be enrolled in preschool or kindergarten, which is a notably higher proportion than across the county (35%) and state (36%). Preschool enrollment in the East Maricopa Region has declined in recent years

from 53% to 49%. The county and state saw smaller declines during this time. In 2021, preschool enrollment in Arizona hit a 10-year low, suggesting this is a statewide issue.ⁱ

Nearly all licensed child care capacity in the region is provided by child care centers (94%), with a small fraction provided by family child care providers (6%). Given that there are approximately 49,000 children in East Maricopa, including 32,300 children with all parents in the labor force, an availability of 41,221 child care slots in the region suggests that supply may be close to meeting demand, although factors like hours, specific location, and cost may still present barriers. An area is labeled a child care desert if the ratio of children to child care slots is 3 to 1 or more. Looking collectively across all children birth to age 5, the East Maricopa Region is not considered a desert. However, for infant care, the situation is more dire. There are five times the number of infants in the region as available slots for those children, although this is less of an issue than it is statewide where the ratio of infants to child care slots is 10 to one. About one-third (37%) of licensed providers offer infant care. The median monthly costs of child care provided by certified family homes in Maricopa County are the lowest priced type of care in the region with an average cost of \$714 per month for infants and \$630 for children ages 1 to 5 for full-time care. The many—and often large—licensed centers and public schools providing child care in Maricopa County are notably more expensive than home-based care, meaning there are relatively few slots with the more budget-friendly providers.

Child care costs as a percentage of income are slightly elevated in Maricopa County compared to the state overall. In 2022, sending an infant to a licensed center in Maricopa County cost approximately one-sixth (17%) of a family's income, compared to 15% for families across the state. The percentage of income spent for older children's care is lower in comparison in both the region and state. Median child care costs have increased sharply in the region and state since 2018. For example, the cost of care in the most available type of care in the region, licensed centers, increased 20% for one infant, 22% for one 1–2-year-old and 24% for one 3–5-year-old between 2018 and 2022.

The number of children eligible for and receiving Arizona Department of Economic Security (DES) child care assistance in the region has generally mirrored the pattern seen across the state in recent years. Both the number of children eligible for and the number of children receiving assistance have increased overall since 2017. The region and the state saw unsurprising drops in participation during the height of the COVID-19 pandemic in 2020. Data from the region and the state for 2021 and 2022 suggest that the number of eligible children is declining. Children are automatically eligible for DES child care assistance when they are involved with Arizona Department of Child Safety (DCS). For DCS-involved children, the number of children eligible for assistance in the region has decreased in recent years, from a high of 977 young children in 2019, to 726 in 2022, generally mirroring the pattern seen across the state. Again, like the pattern seen across the state, the receipt of DES assistance among eligible DCS-involved children increased from 2020 to 2021, but then decreased again in 2022 in the region.

ⁱ For more information, see <https://www.firstthingsfirst.org/wp-content/uploads/2023/12/State-Needs-and-Assets-Report-2023.pdf>

The 174 Quality First child care providers in the East Maricopa Region enrolled 11,209 young children in 2023. Two-thirds (66%) of children in Quality First sites in the region were enrolled at a site with a 3-5-star rating, indicating a high-quality provider, though 28% of children were at a site that had yet to receive a rating, rather than a site with only 1-2 stars. Only about 5% of children enrolled in a Quality First provider site in the region were served by Quality First Scholarships in 2023. Statewide, about 12% of children in Quality First Providers are supported with Quality First Scholarships.

Twenty-eight child care providers in the region are nationally accredited, representing 9% of providers in the region. However, these accredited providers tend to be large, with a collective capacity of 5,708, representing 14% of child care capacity in the region. DES defines quality environments as child care providers with a 3-, 4-, or 5-star Quality First rating, a national accreditation or a Child Development Associate credential for family child care providers. At the regional level in 2022, 68% of non-DCS-involved young children and 72% of DCS-involved young children receiving DES child care assistance were enrolled in quality environments, the same as across the state.

In Arizona, the Arizona Early Intervention Program (AzEIP), the Division of Developmental Disabilities (DDD), and the Arizona Department of Education (ADE) Early Childhood Special Education Program are designed to provide services to families with children who have special needs. Parents and families in the East Maricopa Region are consistently more likely to self-refer their children birth to age 2 to AzEIP than parents across the state (e.g., 31% of 2022 referrals in the region were from family, compared to 21% statewide). However, the proportion referred by physicians in both the East Maricopa Region and across the state increased between 2018 and 2021, only to decline slightly in 2022 when there was a jump in “other” referral sources that year. About 4 in 10 (39%) young children referred to AzEIP in FFY 2022 were found eligible (17%) or received services (22%) in the East Maricopa Region, very similar to the proportions across the county and state. In the East Maricopa Region, the number of children birth to age 2 receiving services from AzEIP declined by about 100 children between 2018 and 2022. The pattern in the region follows that in the state – a steady decline from 2018 to 2021 with a slight uptick in 2022.

The East Maricopa Region and state also have similar patterns of DDD service provision, with a sharp drop during the pandemic (SFY 2020 to SFY 2021), along with a previous sharp drop between SFY 2018 and SFY 2019. In SFY 2022, 388 children birth to age 5 received DDD services in the East Maricopa Region. Qualifying children may receive services from AzEIP and/or DDD, a number which can be used to estimate the total number of young children receiving early intervention services in a region. The total number of children birth to age 2 receiving AzEIP and/or DDD services declined overall between SFY 2019 and SFY 2022 in both the region and the state, with the lowest point in SFY 2020. Based on 2020 Census population counts, 2.5% of children birth to age 2 were receiving AzEIP and/or DDD services in the region, similar to the 2.6% across the state in SFY 2022.

The number of preschoolers with disabilities served in Local Education Agencies (LEAs) has decreased in both the region and the state in recent years. In SFY 2022, 698 preschoolers with disabilities were served in the East Maricopa Region, the lowest number served since SFY 2018. In the region, county

and state, the most common type of disability was a developmental delay (43% at all geographies), followed by a speech or language impairment (30% in region and state, 29% in county).

Conversely, the number of kindergarten through 3rd grade students enrolled in special education in public and charter schools between SFY 2018 and SFY 2022 has increased for both the region and the state. Enrollments increased slightly in SFY 2022 (n=881) from SFY 2021 (n=848) following a decrease from SFY 2020 (n=928) in the region. In SFY 2022, 38% of the 3,985 students (K-3rd) enrolled in special education in the region were diagnosed with a speech or language impairment, 25% with a developmental delay, 12% with a specific learning disability, and 12% with autism, proportions similar to the county and state.

Child Health. In the East Maricopa Region, about one in every 14 people (7%) do not have health insurance coverage, a lower proportion than across the county (11%) or state of Arizona overall (11%). Health insurance coverage for young children specifically is similar to that of the overall population in the region, with 6% of children birth to age 5 not having health insurance, but this proportion is closer to that seen across the county (7%) and state (7%) and higher than the rate nationally (4%). The proportion of young children without health insurance has slightly decreased in the region, state and across the country in recent years. The proportion of births in the region paid for by the Arizona Health Care Cost Containment System (AHCCCS) or the Indian Health Service (IHS, which covers about 1% of births in the East Maricopa Region) has decreased from 29% in 2018 to 25% in 2022. Reflecting the relatively strong economic security among families in the region, this is a much lower proportion than seen in the county or state as a whole.

Mothers in the East Maricopa Region more consistently began prenatal care in the first trimester than mothers across Arizona as a whole between 2018 and 2022, with 79% in that category in the region in 2022, compared to 71% across the state. The region also had a smaller proportion of births to mothers with inadequate prenatal care over those years, with 1.1% with no prenatal care at all and 3.2% with fewer than five visits if they did have prenatal care in 2022 compared to births across the state (2.3% and 4.7% respectively).

The region generally saw a decrease in the proportion of births to teenaged mothers between 2018 and 2022, a pattern similar to what was seen across the state. The proportion of births to mothers under age 20 in the region fell from 2.8% in 2018 to 1.8% in 2021, rising slightly to 2.0% in 2022. The region consistently had a lower proportion of teenaged mothers than the state as a whole. The East Maricopa Region has also had a lower proportion of births to mothers who smoked cigarettes while pregnant than the state as a whole, and the proportion has been declining. In 2022, only about 1.4% of East Maricopa births were to mothers who reported smoking cigarettes while pregnant, and the region did not meet the Healthy People 2030 target of 4.3% or less. Between 2018 and 2022, 777 newborns in the region were hospitalized because of maternal drug use during pregnancy, with an average length of stay of 9.9 days. This translates to 2.0 per 100 live births compared to 3.3 statewide.

More than one in five births in the region and state in recent years were to mothers with pre-pregnancy obesity, with 22.9% in 2022, which is lower than the 27.1% seen statewide. The proportion of births to mothers with gestational diabetes has steadily increased in the region from 8.4% in 2018 to 9.9% in

2022, similar to the proportions across Arizona as a whole. More than one in 10 mothers in Arizona (13.7%) reported experiencing postpartum depression in 2020 according to the Pregnancy Risk Assessment Monitoring System.¹

The proportion of babies born at low birth weight have generally been similar in the region and state, with 8.1% of births considered low birth weight in the East Maricopa Region and 7.8% across Arizona in 2022. The proportion of preterm births (less than 37 weeks gestation) has been slightly lower in the region compared to the state in recent years with the region at 9.5% and the state at 10% in 2021 (the most recent year that both data points are available). However, the proportion of preterm births in the region has been on the rise since 2019 and did not meet the Healthy People 2030 target of 9.4% of births or less in 2021 and 2022, rising to 10.0% in 2022. Despite the increase in preterm births, births with an admission to a NICU in the region have declined over the last 5 years, dropping below the rate seen across the state in 2020. In 2022, 7.1% of births in the region had a NICU admission. In the East Maricopa Region, rates of breastfeeding were the same or slightly higher than those across the state from 2018 through 2022. In 2022, 81% of WIC-enrolled infants in the region were ever breastfed, compared to 79% statewide.

Childhood immunizations protect against many diseases, including diphtheria, tetanus and pertussis (DTaP); polio; and measles, mumps and rubella (MMR). Across all required immunizations, children in child care in the East Maricopa Region had slightly lower vaccination rates (DTaP 88.8%; Polio 90.3%; MMR 91.0%) than the state as a whole (DTaP 90.6%; Polio 92.2%; MMR 93%) in the 2022-23 school year. The East Maricopa Region also failed to meet the Healthy People 2030 DTaP immunization target of 90%, which the state met. The proportion of children in child care receiving immunization exemptions has been higher in the region than the state since the 2018-19 school year. In the 2022-23 school year, 4.2% of students in the region in child care were exempt from all immunizations. For kindergarteners, vaccination rates are consistently slightly higher in the region than the county or state. Both the region and state, however, failed to meet the Healthy People 2030 kindergarten MMR immunization target of 95%. These immunization rates may be too low to assure community immunity of preventable infectious diseases. For measles, for example, 95% of children need to be vaccinated to create herd immunity in order to protect communities and achieve and maintain measles elimination. The East Maricopa Region has consistently had higher rates of children in kindergarten receiving personal belief exemptions than the state. During the 2022-23 school year, 8.2% of children in kindergarten received a personal belief exemption in the East Maricopa Region compared to 7.3% of children statewide. However, personal belief exemption rates have steadily climbed in the state since 2020-21, whereas the region seems to have plateaued. In both the state and the region, medical exemptions from immunizations are much less common than personal belief exemptions.

The pattern of confirmed and probable cases of Respiratory Syncytial Virus (RSV) and influenza in young children birth to age 5 were similar in both the region and state with an increase in RSV cases since 2020, but a marked decrease in influenza in 2021, followed by a steep increase. In 2022, there were 530 cases of RSV and 456 cases of influenza in young children in the region, the highest numbers since 2019.

Falls were the most common unintentional injuries that led to emergency department visits for children under 5 in both the region and the state between 2016 and 2020, followed by ‘other’ injuries or being ‘struck by or against’ an object or person. During those years, there were 1,919 emergency department visits due to falls in the region, 511 for other reasons, and 442 due to being struck. The pattern of injuries prompting inpatient hospitalizations was also generally similar between the region and state, with falls being most common followed by poisonings. Between 2016 and 2020, 54 young children in the region were hospitalized due to a fall, and 51 due to poisoning. Between 2019 and 2021, the infant mortality rate was lower in the East Maricopa Region (4.5 deaths per 1,000 live births), than across the state (5.4); the region met the Healthy People 2030 target of 5.0 or less. Between 2018 and 2021, 255 children birth to age 17 died in the East Maricopa Region. One in five deaths (20%) were due to congenital malformations, with accidents being the second most common cause of death (16%). Across the state, these two causes of death were also the two leading causes of death of children under 18, but in reverse (15% and 20%, respectively). The third leading cause of death in the region was low birth weight (10%), followed by intentional harm or suicide accounting for 6% of deaths.

Family Support and Literacy. The number of opioid-related deaths has risen steadily across the county and state in recent years. In Maricopa County, deaths more than doubled, from 586 in 2017 to 1,288 in 2021, the most recent year of data. The county also had thousands of non-fatal overdoses each year, climbing from 1,088 in 2017 to 2,264 in 2021. To help address opioid addiction, the state of Arizona has made three resources available in recent years; the Opioid Assistance and Referralⁱⁱ line launched in 2018, no cost availability of naloxone (also called Narcan, a medication that rapidly reverses opioid overdose) to many organizations across the state through the Arizona Department of Health Services (ADHS) and access to naloxone without a prescription at pharmacies.

In Maricopa County, the number of child abuse and neglect reports assigned for investigation by DCS has been around 13,000, going from a low of 12,503 in the first half of 2020 to a high of 14,224 in the second half of 2021. The number of children under 18 removed by DCS decreased overall in the region and across the state between January 2020 and December 2022. Nonetheless, 1,793 children were removed by DCS in Maricopa County in the last six months of 2022. Neglect was the most common type of substantiated maltreatment during this period in both the region (67%) and state (71%), followed by physical abuse (26% and 24% respectively).

In the last six months of 2022, more than half (55%) of young children birth to age 5 placed in out-of-home care by DCS across Arizona were able to remain with family through a kinship placement. Children in DCS custody most often exited out-of-home care to be reunified with their parents (55%) or adopted (39%). The number of licensed kinship foster homes in Arizona steadily declined between 2018 and June 2022, though there was an uptick again in the latter half of 2022. Generally, fewer than one in five kinship homes are licensed, and the number of unlicensed kinship homes increased slightly overall during the same period and overtook the number of community foster homes during the pandemic.

ⁱⁱ For more information, please see <https://www.azdhs.gov/oarline/>

ABOUT THIS REPORT

There is growing acknowledgement of the role our physical, social, and economic environments play in our day-to-day health and wellbeing.² These factors, known as the social determinants of health, have an especially strong effect on the development of young children ages birth to 5 and accumulate over time.^{3, 4} Measuring and addressing these conditions can significantly impact not only early health and education outcomes, but also health and economic circumstances later in life.^{5, 6, 7} It is important to acknowledge that structural inequities in access to quality health care, schools, and education as well as living, working and leisure conditions lead to disparate outcomes within and between groups of people.⁸ For example, the U.S.'s history of segregation, discriminatory policy and differential investment across communities has created generational disparities in outcomes for people of color.⁹ Native communities have additionally experienced periods of genocide, forced relocation and assimilation leading to systemically poorer economics and health compared with other groups.^{10, 11} This Needs and Assets Report covers many structural and social determinants of health including population characteristics, economic characteristics, early learning and educational indicators, child health, and family support and literacy for the First Things First (FTF) East Maricopa Region.

The data in this report come from a variety of sources including federal and state agencies and local agencies or service providers. Federal government sources include publicly available data from the 2020 Census and the 2017-2021 American Community Survey (ACS) 5-Year Estimates. Data in this report from the ACS summarize the responses from samples of residents taken between 2017 and 2021. Because these estimates are based on samples rather than the entire population, ACS data should not be considered exact. Estimates for smaller geographies, such as regions, are less accurate than estimates for larger geographies, such as the state, because they are based on smaller sample sizes.

Data were provided to FTF by state agencies including the Arizona Department of Health Services (ADHS), the Arizona Department of Education (ADE) and the Arizona Department of Economic Security (DES). In most cases, the data in this report were calculated specifically for the Needs and Assets process and are more detailed than the data that are published by these agencies for the general public. Whenever possible, this report will use data tailored to the region, but in some cases, there are only county-level or statewide data available to report. This report also includes publicly available data for the state and counties to supplement data received through specific requests, including from state agencies such as the Arizona Department of Commerce's Office of Economic Opportunity (OEO) and the Arizona Department of Child Safety (DCS) semi-annual child welfare reports.

In most tables in this report, the top rows of data correspond to the FTF East Maricopa Region. Not all data are available at the FTF regional level because not all data sources analyze their data based on FTF regional boundaries. The other table rows present data that are useful for comparison purposes, including Maricopa County, the state of Arizona and national estimates or targets where available. Data tables and graphs are as complete as possible. Data which are not available for a particular geography are indicated by the abbreviation "N/A." State agencies have varying policies about reporting small values. Entries such as "<11" are used when the count is too small to be reported and has been

suppressed to protect privacy. In some cases, table entries will indicate a range of values such as "1 to 9" because the suppression policy prevented the vendor from knowing the exact value, but comparison of these ranges of possible values to other values in the table or figure may still be useful. Table entries of "DS" indicate that data have been suppressed and we are unable to provide a useful range of possible values. Additional data tables not included in the body of the report can be found in Appendix 1.

THE EAST MARICOPA REGION

The First Things First regional boundaries were established to create regions that (a) reflect the view of families in terms of where they access services, (b) coincide with existing boundaries or service areas of organizations providing early childhood services, (c) maximize the ability to collaborate with service systems and local governments, (d) facilitate the ability to convene a Regional Partnership Council, and (e) allow for the collection of demographic and indicator data.

The First Things First East Maricopa Region lies to the east of the city of Phoenix, and includes three cities (Chandler, Scottsdale, and Tempe), five towns (Fountain Hills, Paradise Valley, Guadalupe, Cave Creek, and Carefree), two unincorporated communities (Sun Lakes and Rio Verde), two Phoenix neighborhoods (Ahwatukee and Paradise Valley Village) and one Indian reservation (the Fort McDowell Yavapai Nation). This region lies entirely within Maricopa County. Note that although the Salt River Pima Maricopa Indian Community and the Gila River Indian Community border the East Maricopa Region, neither is included in this region. Both of them form their own First Things First regions.

Figure 1 below shows the geographical area covered by the East Maricopa Region. Additional information available at the end of this report includes a map of the region by zip code in Appendix 3, a table listing zip codes for the region in Appendix 3 and a map of school districts in the region in Appendix 4.



POPULATION CHARACTERISTICS

POPULATION CHARACTERISTICS

Why It Matters

Accurate information about the number and characteristics of families allows policymakers and program providers to understand what resources are needed in their communities, including where services should be located and how to tailor offerings to the specific needs of those who are likely to use them.^{12, 13, 14, 15} For example, identifying which communities have high numbers of families with young children can facilitate strategic investments in libraries, playgrounds, health care facilities, social services and educational systems, which can help families with young children thrive.^{16, 17} Program and policy decisions that are informed by data on the composition of children’s home and community environments help ensure more effective supports for families and have a greater chance to improve well-being, economic security and educational outcomes for children.

2020 Census data and its limitations

The release of 2020 Census data in 2023 provided updated information on the population of Arizona and the nation as a whole. However, the 2020 Census faced unprecedented challenges in conducting an accurate count of the population, the foremost of which included the COVID-19 pandemic and its related disruptions to institutions such as local and tribal governments, schools and health care facilities.^{18, 19, 20, 21, 22} Overall, data quality reviews of the 2020 Census have concluded that the data are generally reliable and accurate for the overall population; however, specific groups that have been undercounted in the past were again undercounted, often more severely.²³ Young children birth to age 4 were undercounted by 3-5% nationwide (meaning that as many as one in 20 children birth to age 4 were missed by the Census).²⁴ Nationwide, American Indians living on reservations and Hispanic or Latino individuals were also undercounted by 5.6% and 5.0%, respectively, marking notable increases in undercounting rates compared to the 2010 Census (4.9% and 1.5%, respectively). These undercounts are important to keep in mind when using Census data, particularly data for young children and for communities with substantial American Indian and Hispanic or Latino populations. Undercounted communities risk receiving fewer resources for at least the next decade since the decennial census counts are the basis of many federal funding allocations.^{25, 26}

What the Data Tell Us

Population, race and ethnicity

While young children make up a small proportion of the overall population, their well-being has wide-reaching impacts on families, social service systems and the state’s future population. Continued investment in children’s well-being and the well-being of their families was deemed by the National Academy of Sciences as “the most efficient strategy” for strengthening the future workforce and supporting a thriving community.^{27, 28}

Knowing the racial-ethnic composition of communities can inform efforts to ensure equitable access to services and resources. Many racial and ethnic minority groups in the U.S. experience reduced access to health care services, more poverty and housing inequality, poorer living conditions and increased rates of homelessness in comparison to non-Hispanic White Americans.^{29, 30, 31, 32} These inequities result in disproportionately worse overall health as indicated by higher rates of disease and illness, untreated mental and physical health conditions and lower life expectancies within these groups.³³ Understanding a community’s racial-ethnic composition is also critical for identifying communities facing higher risks from environmental and public health hazards due to historic underinvestment and other factors—as the COVID-19 pandemic made woefully clear.³⁴

How the East Maricopa Region is faring

- According to the U.S. Census, the East Maricopa Region had a population of 930,475 in 2020 (Table 1), an 11% increase from 2010, when 836,533 people resided in the region (Table 2). Conversely, the population of young children birth to age 5 decreased 11% over the same period from 54,701 in 2010 to 48,741 in 2020. This pattern was similar to that seen across the state as a whole which experienced a 12% increase in the total population, but a 12% decrease in the population of young children from 2010 to 2020 (Figure 2).
- Nearly one in 10 households (9%) in the region included a young child in 2020. This is a lower proportion of households than across Maricopa County as a whole (14%) and the state (13%) (Table 1).
- The 2020 Census undercount of young childrenⁱⁱⁱ does not appear to have substantially impacted the East Maricopa Region. Generally speaking, the recorded births for a given year align with the number of children of a specific age counted in the 2020 Census (Figure 3). In fact, for most ages there appear to be more children than were born in the region (e.g., 8,625 4-year-olds in 2020 but only 8,232 children born in the region in 2016), which could suggest families with young children are moving into the region.^{iv}
- Most East Maricopa Region residents identify as Non-Hispanic White (69% of all age population, 55% of children birth to age 4). Young children in the region are more likely to be identified as Hispanic (27%) than all residents (16%), although both are lower than the population of young children (44%) and all ages (31%) identifying as Hispanic across the state. The region also has a lower proportion of the entire population and children birth to age 4 identified as American Indian (4% and 6% respectively) and Multiracial (11% and 20%) than the state across all categories (Figure 4 & Figure 5). The East Maricopa Region has a similar proportion of Black or African American residents (6%) and young children (10%) to Arizona

ⁱⁱⁱ See “2020 Census data and its limitations” at the beginning of the Population Characteristics section for fuller context on the 2020 Census undercount of young children.

^{iv} Other explanations could include differences in child age due to when their birthday falls in the year, relative to the census date, and error in the Census data introduced by differential privacy.

overall and a higher proportion of Asian or Pacific Islander (10% and 16%) than the state (5% and 7%).

Table 1. Population and households in the 2020 U.S. Census

Geography	Total population	Population (ages 0-5)	Total number of households	Number and percent of households with one or more children (ages 0-5)	
				Number	Percent
East Maricopa Region	930,475	48,741	390,733	36,486	9%
Maricopa County	4,420,568	310,813	1,643,579	222,016	14%
Arizona	7,151,502	480,744	2,705,878	345,601	13%
United States	331,449,281	22,401,565	126,817,580	16,429,111	13%

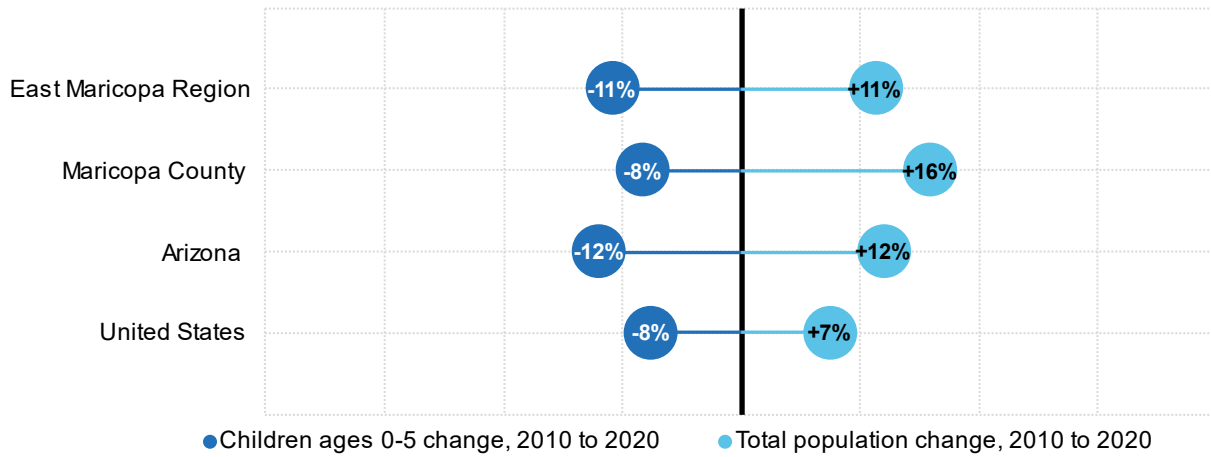
Source: U.S. Census Bureau. (2023). 2020 Decennial Census, Demographic & Housing Characteristics (DHC), Tables P1, P14, P20 & HCT3

Table 2. Change in the total population and population of children birth to age 5, 2010 to 2020 Census

Geography	Total population			Population (Ages 0-5)		
	2010	2020	% Change 2010 to 2020	2010	2020	% Change 2010 to 2020
East Maricopa Region	836,533	930,475	+11%	54,701	48,741	-11%
Maricopa County	3,817,117	4,420,568	+16%	339,217	310,813	-8%
Arizona	6,392,017	7,151,502	+12%	546,609	480,744	-12%
United States	308,745,538	331,449,281	+7%	24,258,220	22,401,565	-8%

Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14, HCT3. U.S. Census Bureau (2010). 2010 Decennial Census, Summary File 1, Tables P1, P14, P20.

Figure 2. Change in the total population and population of children birth to age 5, 2010 to 2020 Census



Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14, HCT3. U.S. Census Bureau (2010). 2010 Decennial Census, Summary File 1, Tables P1, P14, P20.

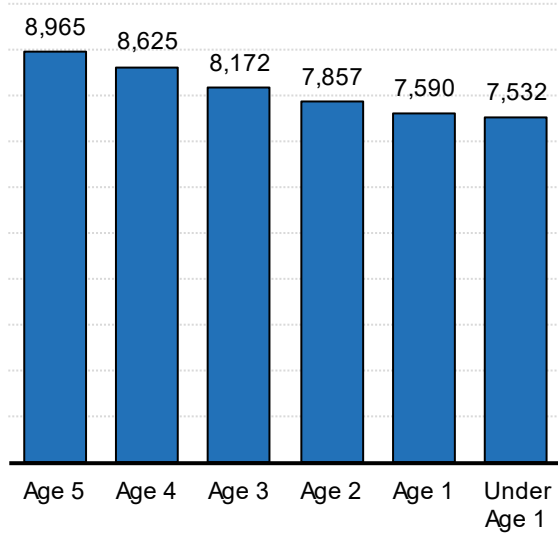
Table 3. Population birth to age 5 by single years of age in the 2020 Census

Geography	Population (Ages 0-5)	Population under age 1	Population age 1	Population age 2	Population age 3	Population age 4	Population age 5
East Maricopa Region	48,741	7,532	7,590	7,857	8,172	8,625	8,965
Maricopa County	310,813	46,904	48,734	50,509	52,958	54,598	57,110
Arizona	480,744	72,415	75,163	78,159	82,033	84,600	88,374
United States	22,401,565	3,480,117	3,532,512	3,672,703	3,797,741	3,917,162	4,001,330

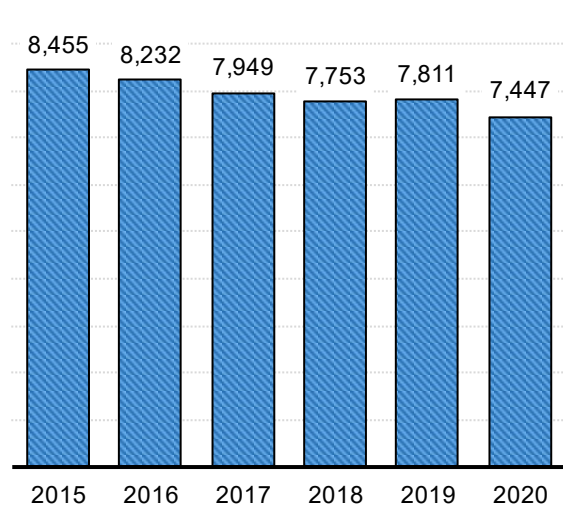
Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14. U.S. Census Bureau (2010). 2010 Decennial Census, Summary File 1, Tables P1, P14.

Figure 3. Children by single year of age in the 2020 Census compared to births (2015 to 2020)

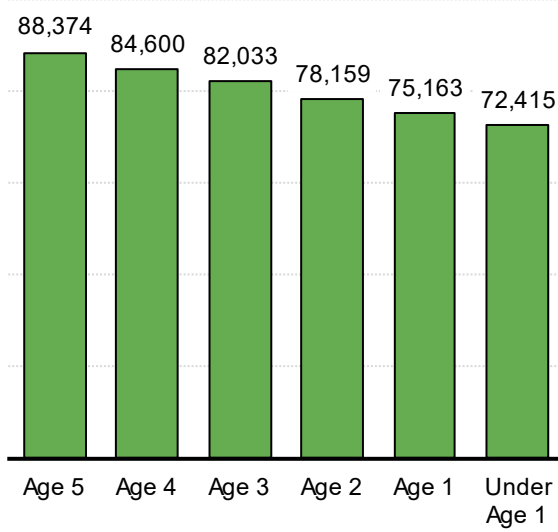
Children by age, East Maricopa Region



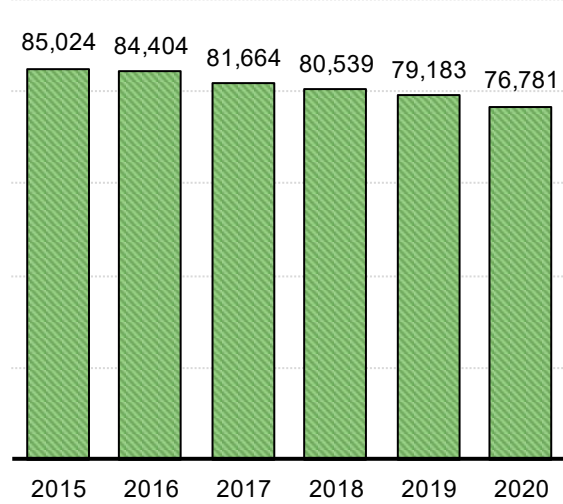
Births by year, East Maricopa Region



Children by age, Arizona

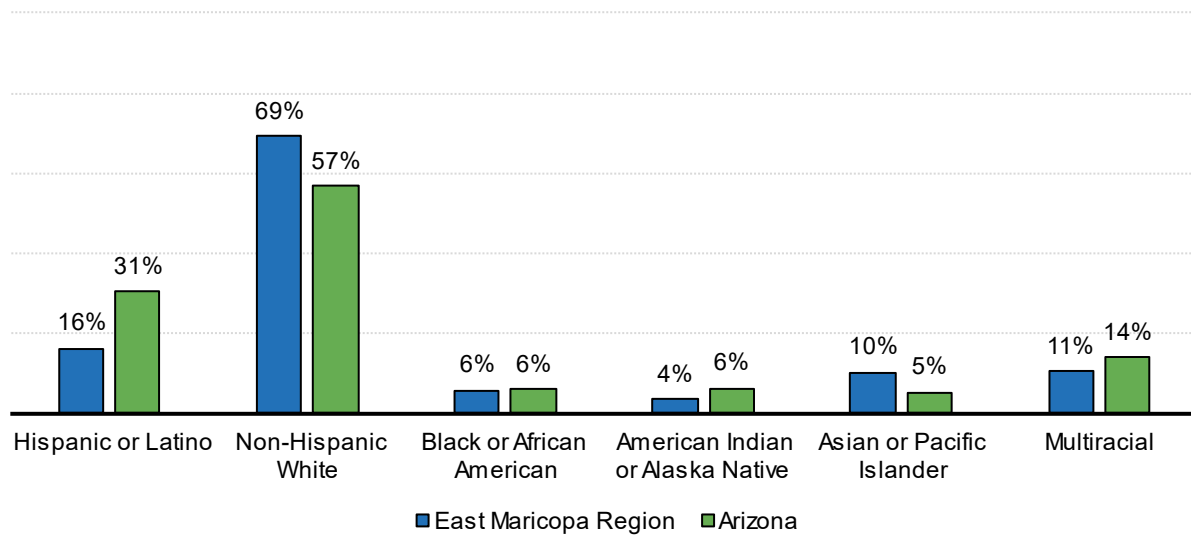


Births by year, Arizona



Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data.

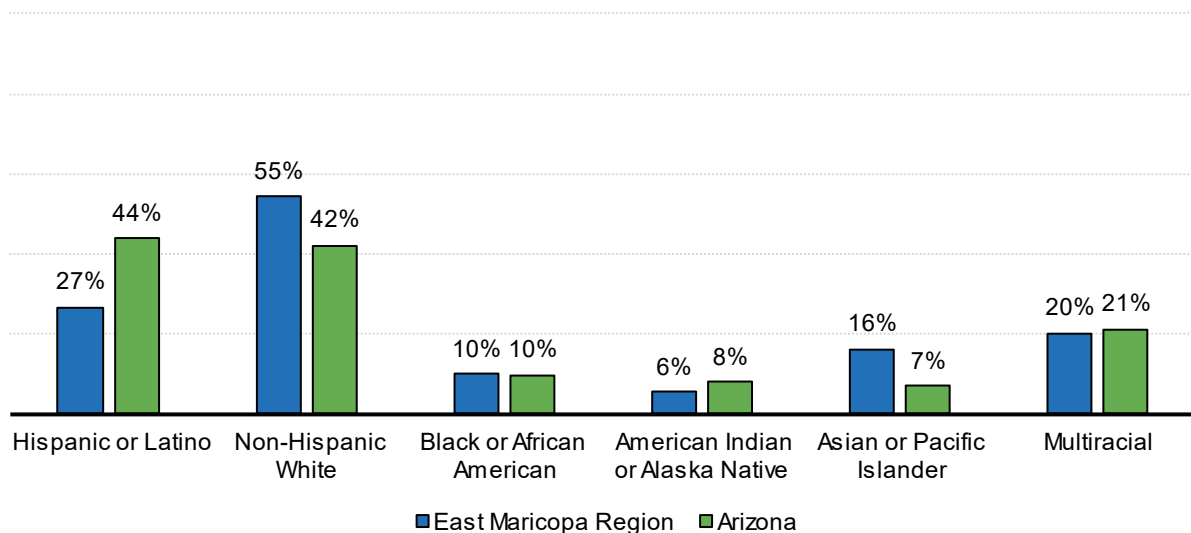
Figure 4. Race and ethnicity of the population of all ages, 2020 Census



Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), P6, P7, P8, P9, P12, P12A-W.

Note: The six percentages shown in this figure may sum to more or less than 100% because (a) persons reporting Hispanic ethnicity are counted twice if their race is Black, American Indian, Asian, Pacific Islander, or any combination of two or more races, (b) persons reporting any other race are not counted here unless they have Hispanic ethnicity, and (c) rounding.

Figure 5. Race and ethnicity for children birth to age 4, 2020 Census



Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), P6, P7, P8, P9, P12, P12A-W.

Note: The six percentages shown in this figure may sum to more or less than 100% because (a) persons reporting Hispanic ethnicity are counted twice if their race is Black, American Indian, Asian, Pacific Islander, or any combination of two or more races, (b) persons reporting any other race are not counted here unless they have Hispanic ethnicity, and (c) rounding.

Immigrant families and language use

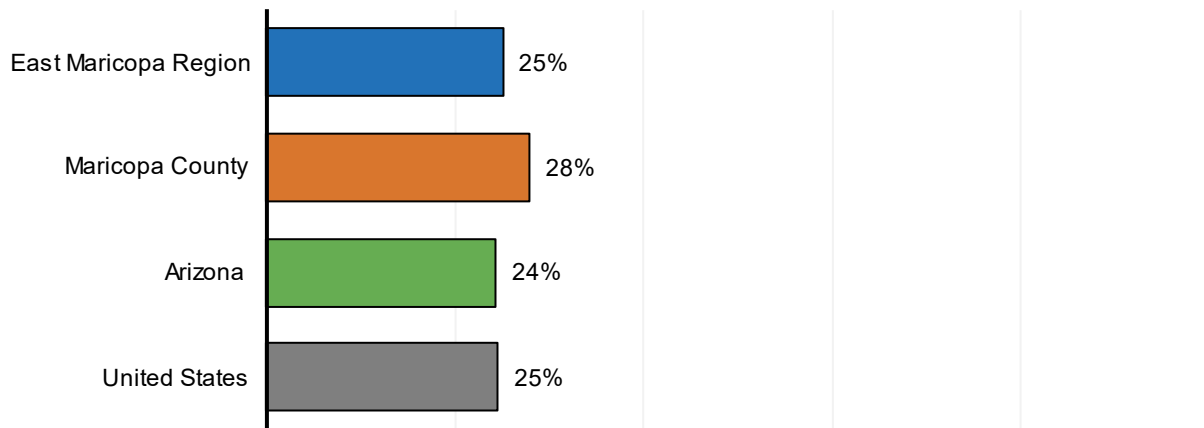
Both immigrants of all ages and children born to immigrant parents are growing populations in the U.S., and the U.S. is continuing to become an increasingly diverse nation.^{35, 36} Immigrant parents in Arizona have typically lived in the U.S. for at least nine years, and the vast majority of young children of these foreign-born parents are citizens.^{37, 38, 39} Some immigrant parents avoid using social services for which they and their children legally qualify due to fear of deportation or risking their legal status in the country.^{40, 41, 42} This can put immigrant families and children at risk of reduced access to medical care and increased food insecurity, which can lead to long-term impacts on health and educational attainment, as well as community-level economic impacts.^{43, 44, 45, 46} Understanding the needs of immigrant families and their children is essential to ensuring they have access to available resources that can help them thrive.⁴⁷

Language provides an important connection to family, community and culture.⁴⁸ Mastery of more than one language is an asset in school readiness and academic achievement and may offer cognitive and social-emotional benefits in early school experiences and across one's lifetime.^{49, 50, 51, 52, 53} However, families with lower English proficiency may face barriers to accessing information about health care and other services or engaging with their children's teachers. Children who do not yet have a full grasp of English may also experience difficulties in school, impeding their academic success and resulting in negative health outcomes.^{54, 55} Knowing the languages spoken and level of English proficiency in a region can inform the development of resources and services in multiple languages, ensuring that they are accessible to all families.^{56, 57}

How the East Maricopa Region is faring

- A quarter (25%) of all children birth to age 5 in the region live with foreign-born parents, a slightly higher proportion than the state overall (24%) (Figure 6).
- However, home language is still predominantly (82%) English, compared to only 73% statewide (Figure 7). There are relatively fewer Spanish-speaking homes (9% in the region vs. 20% statewide) and slightly more (9% vs. 6%) who speak another language at home.
- Of those who speak a language other than English at home, a smaller proportion of individuals do not speak English "very well" in the region (5%) compared to the state (8%) (Figure 8).
- Similarly, the percentage of limited-English-speaking households in the region (2%) is half that of the state (4%) (Figure 9).
- The number of English Language Learners (ELL) increased at the region, county and state levels between 2020-21 and 2021-22. In the region, 4% of students were identified as English Language Learners in the 2021 school year (Table 4).

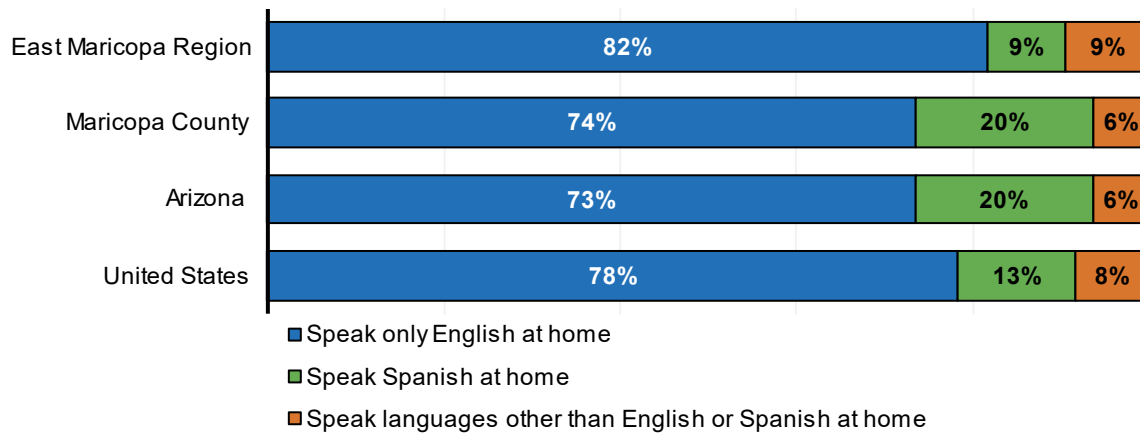
Figure 6. Children birth to age 5 living with parents who are foreign-born, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B05009

Note: The term "parent" here includes stepparents.

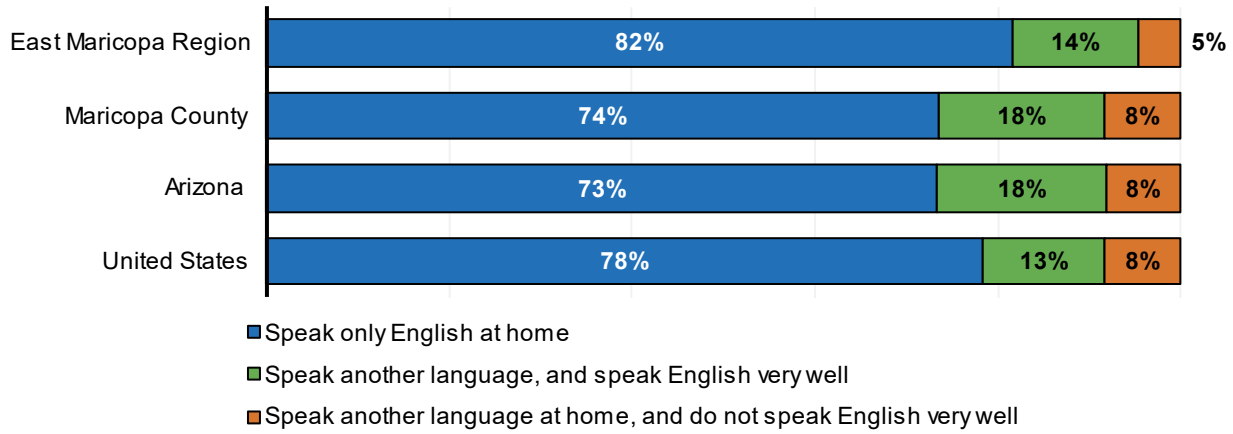
Figure 7. Language spoken at home (by persons ages 5 and older), 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table C16001

Note: The three percentages in each bar may not sum to 100% because of rounding. The American Community Survey (ACS) no longer specifies the proportion of the population who speak Native North American languages for geographies smaller than the state. In Arizona, Navajo and other Native American languages (including Apache, Hopi, and O'odham) are the most commonly spoken (2%), following English (73%) and Spanish (20%).

Figure 8. English-language proficiency (for persons ages 5 and older), 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table C16001

Note: The three percentages in the figure should sum to 100%, but may not because of rounding.

Figure 9. Share of households that are limited-English-speaking, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table C16002

Note: A "limited-English-speaking" household is one in which no one over the age of 13 speaks English very well.

Table 4. Number of English Language Learners enrolled in all grades, 2020-21 to 2021-22

Geography	Number of PS-12 students who were English Language Learners		Percent of PS-12 students who were English Language Learners	
	2020-21	2021-22	2020-21	2021-22
East Maricopa Region schools	4,829	5,314	3%	4%
Maricopa County schools	57,629	62,074	8%	8%
Arizona schools	86,405	91,881	8%	8%

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Notes: English Language Learners are students who do not score 'proficient' in the English language based on the Arizona English Language Learning Assessment (AZELLA) and thus are eligible for additional supportive services for English language acquisition. Legislation in Arizona requires children in Arizona public schools be taught in English, and English Language Learners to attend English immersion programs. Senate Bill 1014 passed in 2019, increased the flexibility districts have in structuring English Language Learners immersion programs, and lessened the duration required of this instruction. For more information see <https://www.azed.gov/oelas/structured-english-immersion-models>

Family and household composition

Young children in Arizona live in many types of families, each of which has possible implications for child development.⁵⁸ For example, families with two married parents tend to offer stability that promotes child well-being.^{59, 60, 61} Single-parent households tend to be at higher risk for poverty, and can face challenges accessing health and education resources.^{62, 63, 64, 65, 66, 67, 68} Multi-generational living, particularly arrangements where grandparents live in the home with children and parents, has long been practiced in some cultures and communities but is becoming increasingly common in U.S. families of all racial and ethnic groups.^{69, 70, 71, 72} These living arrangements can offer financial and social benefits but also specific stressors, such as managing conflicts in parenting styles and family roles.^{73, 74, 75, 76, 77} It is also increasingly common for children to live in kinship care, defined as the care of children by someone other than their parents, such as relatives or close friends.^{78, 79, 80} These kinship caregivers, especially grandparents who care for their grandchildren, can face unique challenges, including navigating the logistics of informal guardianship (e.g., difficulties in registering children for school), coping with parental absence and addressing the challenges of being an aging caregiver for a young child.^{81, 82, 83, 84} Each of these family structures carries with it a unique set of strengths and challenges that are important to consider in relation to the health and development of children.^{85, 86, 87}

How the East Maricopa Region is faring

- Young children in East Maricopa are more likely than children across the state and county to live with two married parents. Over two-thirds (69%) live with two married parents, compared to 59% of young children across Arizona overall. Over a quarter (27%) of young children in the region live in a household with one parent, which is lower than the proportion statewide (37%) (Table 5).
- Eight percent of children birth to age 5 in the region live in their grandparent’s household, which is lower than the proportion of young children in those living situations across the state (13%) (Figure 10).
- Of grandparents who live with and are responsible for their grandchildren under age 18 in the East Maricopa Region, more than half are 60 or older (52%), female (64%) and in the labor force (54%). About 1 in 6 (18%) are living below the poverty level. A majority of these households also include the child’s parents even though the grandparent identifies as being responsible for the child, with 38% lacking a parent (Table 6).
- Overall, in the East Maricopa Region, 11% of co-resident grandparents have grandchildren under age 18 in their household with no parent present, comparable to the proportion than across the state (11%) (Figure 11).

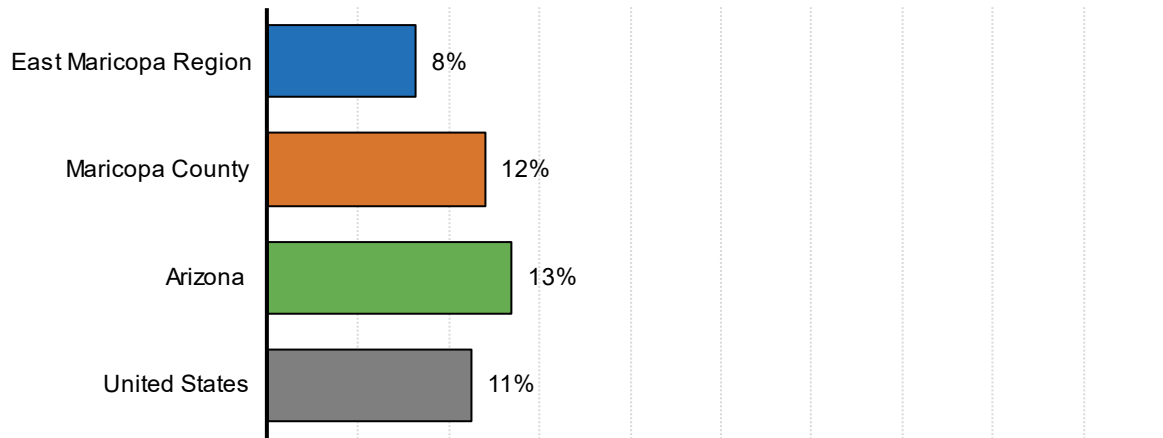
Table 5. Living arrangements for children birth to age 5, 2017-2021 ACS

Geography	Estimated number of children (birth to 5 years old) living in households	Living with two married parents	Living with one parent	Living not with parents but with other relatives	Living with non-relatives
East Maricopa Region	50,694	69%	27%	1%	2%
Maricopa County	320,211	60%	36%	2%	2%
Arizona	496,219	59%	37%	3%	2%
United States	23,353,556	64%	32%	2%	2%

Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Tables B05009, B09001, & B17001

Note: The four percentages in each row should sum to 100%, but may not because of rounding. The term "parent" here includes stepparents. Please note that due to the way the ACS asks about family relationships, children living with two unmarried, cohabitating parents are not counted as living with two parents (these children are counted in the 'one parent' category).

Figure 10. Grandchildren birth to age 5 living in a grandparent's household, 2020 Census



Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P14, PCT11.

Note: This table includes all children (under 6 years old) living in a household headed by a grandparent, regardless of whether the grandparent is responsible for them, or whether the child's parent lives in the same household.

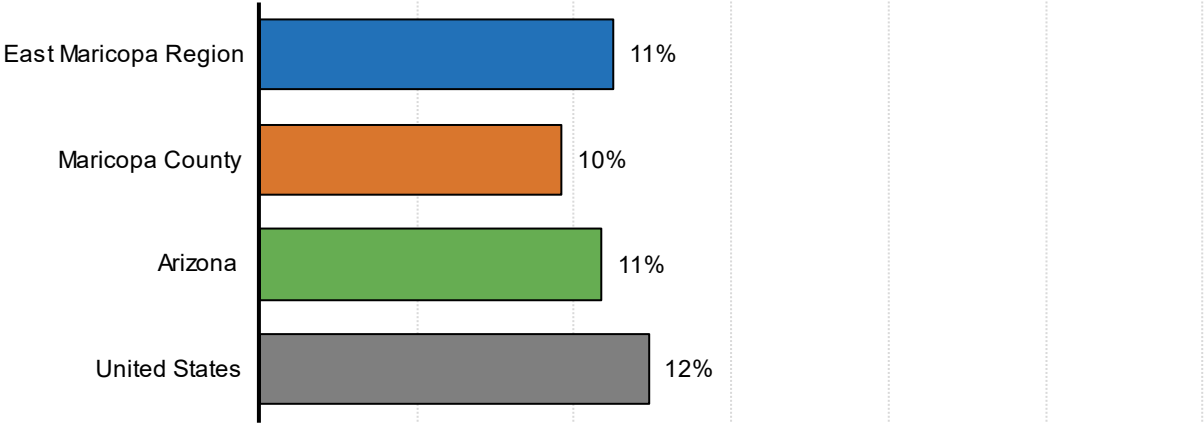
Table 6. Selected characteristics of grandparents who are responsible for one or more grandchildren under age 18 in their households, 2017-2021 ACS

Geography	Estimated number of grandparents who live with and are responsible for grandchildren under 18 years old	Percent of these grandparents who:					
		Do not have the child's parents in the household	Are 60 years old or older	Are female	Do not speak English very well	In labor force	Have an income below the poverty level
East Maricopa Region	3,275	38%	52%	64%	16%	54%	18%
Maricopa County	29,827	32%	42%	63%	20%	61%	17%
Arizona	56,079	33%	45%	62%	21%	57%	21%
United States	2,319,443	38%	47%	63%	14%	56%	18%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Tables B10051, B10054, B10056, & B10059

Note: Grandparents are considered responsible for their grandchild or grandchildren if they are "currently responsible for most of the basic needs of any grandchildren under the age of 18" who live in the grandparent's household.

Figure 11. Percent of grandparents who are living with their grandchildren birth to age 17 with no parent present in the household, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Tables B10051, B10054, B10056, & B10059

Note: The denominator in this figure is all grandparents living with grandchildren (including both grandparents who are responsible for their grandchildren and those that are not).

Additional data tables related to *Population Characteristics* can be found in Appendix 1 of this report.



ECONOMIC CIRCUMSTANCES

ECONOMIC CIRCUMSTANCES

Why it Matters

A family's economic stability impacts children's well-being and predicts a variety of health outcomes.⁸⁸ Children who grow up in poverty and unstable economic conditions are more likely to experience negative effects on their cognitive, behavioral, social and emotional development compared to those in stable economic environments.^{89, 90, 91, 92, 93} The challenges they face might continue into adulthood, and such difficulties may be passed on to the next generation.^{94, 95, 96} Poverty also affects children by straining parent well-being and parent-child interactions. Stressors related to poverty, like unemployment, food and housing insecurity and poor mental and physical health, make it difficult for caregivers to provide the necessary support for children's optimal development.⁹⁷ In light of these broad impacts, economic stability is a key social determinant of health and is included as a domain in the Healthy People 2030 Objectives.^v

What the Data Tell Us

Income and poverty

Poverty is associated with reduced access to nutrition, green space and health care and greater exposure to psychosocial stress and environmental toxins, factors that can both directly and indirectly hinder children's growth and brain development.^{98, 99, 100} Children living in poverty are thus at a higher risk of negative impacts including being born at a low birth weight, lower school achievement and poor health.^{101, 102, 103, 104, 105, 106, 107} Economic hardship is included in some definitions of adverse childhood experiences (ACEs) and children living in poverty experience other non-economic ACEs, such as parental divorce or separation, exposure to violence, parental incarceration and living with someone with mental illness or a substance use disorder, at higher rates than children in higher income households.^{108, 109} Given the many negative effects of poverty on child development, programs that alleviate poverty through providing cash assistance or food, housing or health care assistance can improve child well-being.¹¹⁰

The Temporary Assistance for Needy Families Cash Assistance Program (TANF)^{vi} provides temporary cash benefits and supportive services to children and families. Eligibility is based on citizenship or qualified resident status, Arizona residency and limits on resources and monthly income.¹¹¹

^v For more information on the Economic Stability Healthy People 2030 Objectives please see <https://health.gov/healthypeople/objectives-and-data/browse-objectives/economic-stability>

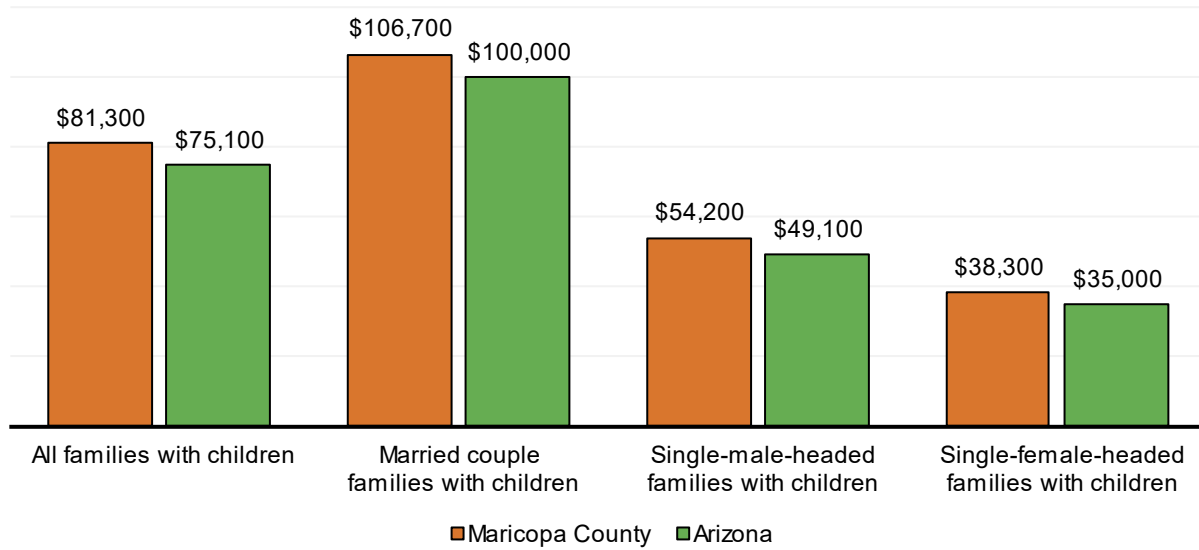
^{vi} For more information see: <https://www.acf.hhs.gov/ofa/programs/temporary-assistance-needy-families-tanf> and <https://des.az.gov/ca>

How the East Maricopa Region is faring

- The county’s economic vitality is reflected in family incomes. Median family income for families in Maricopa County is higher than for families across Arizona for all household types, although the state values are heavily influenced by Maricopa County given county’s massive population. Married couple families in Maricopa County earn a median of \$106,700, while single-parent families tend to earn less than half of that (\$54,000 for single-male-headed families and \$38,300 for single-female-headed families with children) (Figure 12).
- The East Maricopa Region is relatively prosperous. According to 2017-2021 American Community Survey (ACS) estimates, a smaller proportion of the total population (9%) and children birth to age 5 (11%) live in poverty compared to those across the county (12% and 18%, respectively) and state (13% and 20%, respectively) (Figure 13).
- Rates of poverty for young children have decreased at all geographies (region, county, state, nation) in recent years, but they shrank relatively less in East Maricopa, dropping only 4 percentage points (from 15% to 11%) compared to an 8-point decline at the county and state levels (Figure 14).
- There are also relatively fewer young children in low-income families in the region compared to the county and the state. In the East Maricopa Region, 78% of children live above 185% of the poverty threshold, compared to 65% and 61% in the county and state (Figure 15). In 2021, for a family of two adults and two children, this equates to an income of \$50,836, which is still far below the self-sufficiency standard^{vii} for two parents with one infant and one preschooler in 2022 in Maricopa County (\$84,764).
- In the East Maricopa Region, there are usually around 700 children receiving TANF, representing children living in families with extreme financial hardship. This value rose from a low of 634 in SFY 2019 to a high of 752 in state fiscal year (SFY) 2021, before falling back to 682 in SFY 2022 (Figure 16). In SFY 2022, the percentage of young children participating in TANF in the region (1.4%) was half of that of the state overall (2.8%), again reflecting the relative prosperity of the region (Figure 17).

^{vii} For more information on the Arizona 2022 Self-sufficiency standard, please see https://womensgiving.org/wp-content/uploads/2022/12/AZ2022_SSS_Web.pdf

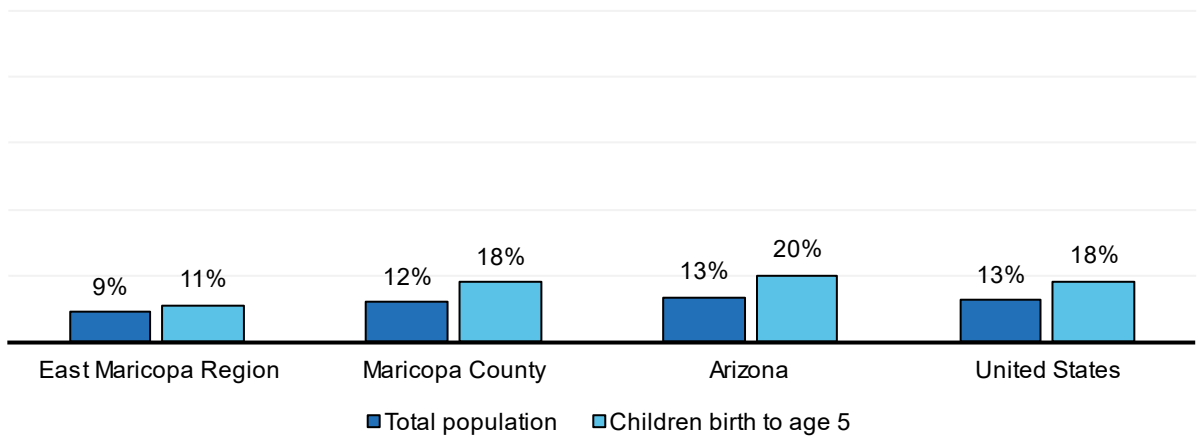
Figure 12. Median family income for families with children birth to age 17, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B19126

Note: Half of the families in the population are estimated to have annual incomes above the median value, and the other half have incomes below the median. The median family income for all families includes families without children birth to age 17.

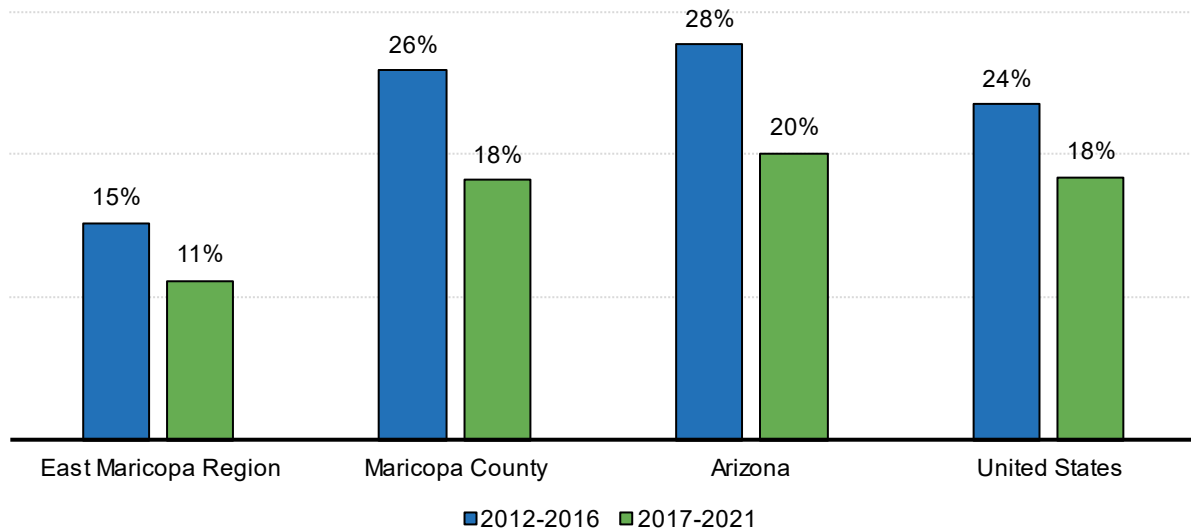
Figure 13. Rates of poverty for persons of all ages and for children birth to age 5, 2017-2021 ACS



Source: U.S. Census Bureau. (2020). American Community Survey 5-year estimates 2017-2021, Table B17001

Note: This graph includes only persons whose poverty status can be determined. Adults who live in group settings such as dormitories or institutions are not included. Children who live with unrelated persons are not included. In 2021, the poverty threshold for a family of two adults and two children was \$27,479; for a single parent with one child, it was \$18,677.

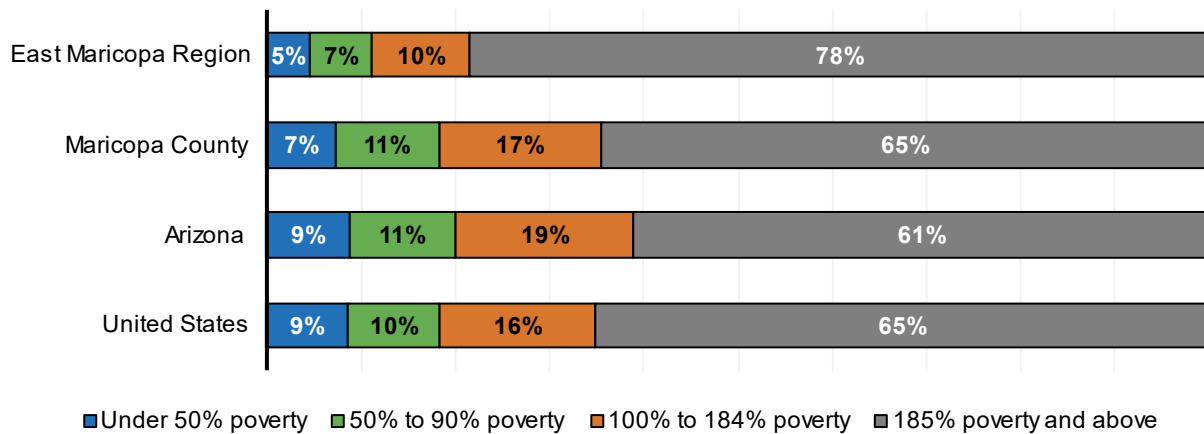
Figure 14. Rates of poverty for children birth to age 5, 2012-2016 and 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B17001. U.S. Census Bureau. (2017). American Community Survey 5-year estimates 2012-2016, Table B17001.

Note: This graph includes only persons whose poverty status can be determined. Adults who live in group settings such as dormitories or institutions are not included. Children who live with unrelated persons are not included. In 2021, the poverty threshold for a family of two adults and two children was \$27,479; for a single parent with one child, it was \$18,677.

Figure 15. Children birth to age 5 living at selected poverty thresholds, 2017-2021 ACS

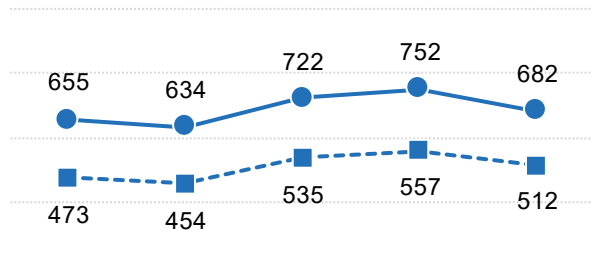


Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B17024

Note: The four percentages in each bar should sum to 100% but may not because of rounding. In 2021, the poverty threshold for a family of two adults and two children was \$27,479; for a single parent with one child, it was \$18,677. The 185% thresholds are \$50,836 and \$34,552, respectively.

Figure 16. Number of children birth to age 5 and families with children birth to age 5 receiving TANF, state fiscal years 2018 to 2022

East Maricopa Region

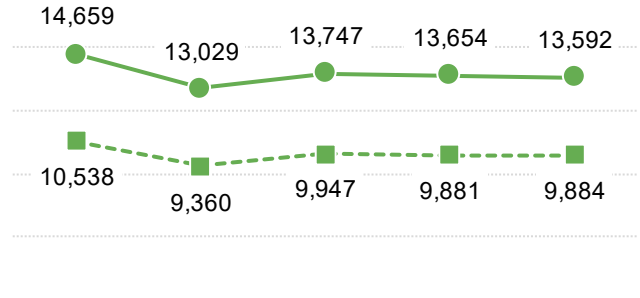


SFY2018 SFY2019 SFY2020 SFY2021 SFY2022

--- Families with children (ages 0-5) participating in TANF

— Children (ages 0-5) participating in TANF

Arizona



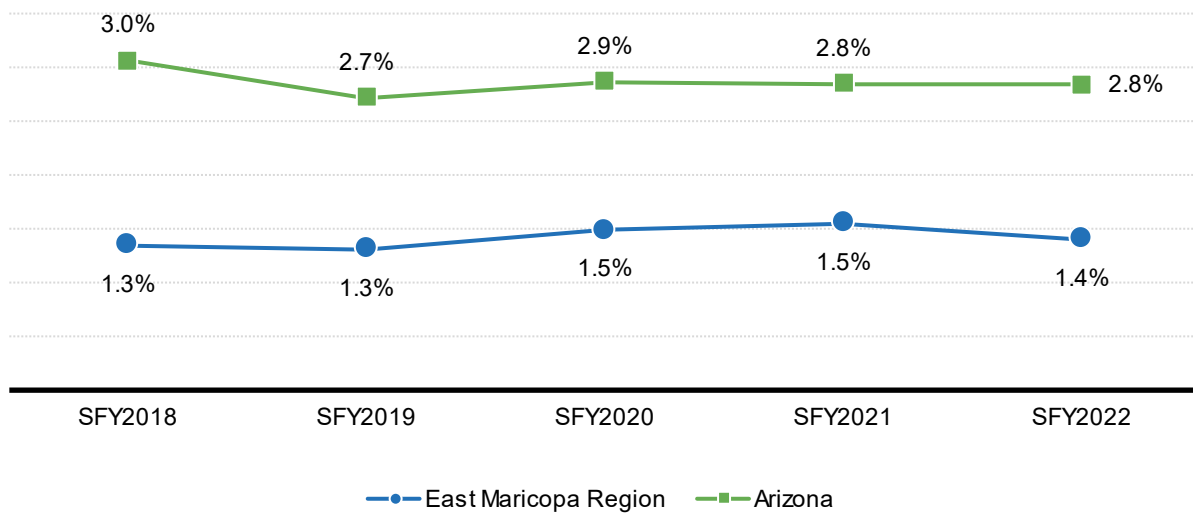
SFY2018 SFY2019 SFY2020 SFY2021 SFY2022

--- Families with children (ages 0-5) participating in TANF

— Children (ages 0-5) participating in TANF

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data.

Figure 17. Estimated percent of children birth to age 5 participating in TANF, state fiscal years 2018 to 2022



Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

Food security

Many families struggle with consistent access to “enough food for an active, healthy life,” a problem known as food insecurity.¹¹² Food insecurity is linked with many aspects of child and parent well-being; it can be a major source of stress for parents and has been linked to health and behavioral problems for children, such as poorer parent-child attachment, decreased social skills and self-control and increased risk of depression.^{113, 114, 115, 116, 117, 118}

The Supplemental Nutrition Assistance Program (SNAP; also referred to as “nutrition assistance” and “food stamps”),^{viii} is administered by the Arizona Department of Economic Security and aims to support working families who are unable to afford the food necessary to sustain their health with their income alone. Nationally, about one in every five children participates in SNAP, and families on average receive a benefit of up to \$2.61 per person for each meal.¹¹⁹ The SNAP program has been shown to reduce hunger and improve access to healthy food options among those who utilize it.¹²⁰

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC)^{ix} is a federally funded program administered by the Arizona Department of Health Services aimed to support economically disadvantaged women who are pregnant, postpartum and/or breastfeeding, along with infants and young children. The program’s services include directing participants to health services, nutrition and breastfeeding education and supplemental funding for food. In Arizona, WIC provided an average monthly benefit of \$42 per month in 2022, lower than the national average of \$48 per month.¹²¹

School meals provide another important nutritional safety net for children and their families. The National School Lunch Program (NSLP),^x administered by the Arizona Department of Education (ADE) and funded by the United States Department of Agriculture (USDA), provides meals for students of low-income families at a reduced price. The Summer Food Service Program (SFSP),^{xi} also funded by the USDA and administered by ADE, works to keep all children birth to age 18 fed when school is out of session by providing free meals (breakfast, lunch, supper) and snacks at community sites. SFSP unites community sponsors like camps, faith-based organizations and schools with sites like parks, libraries, community centers and apartment complexes in high-need areas to distribute food.¹²² In March 2020, in response to school closures due to the COVID-19 pandemic, the USDA issued waivers allowing year-round operation of SFSP to serve meals to children of all ages engaging in remote learning; these waivers remained in effect through June 2022 and led to increased meal service through SFSP compared to NSLP for many schools.¹²³ The Child and Adult Care Food Program (CACFP),^{xii} also funded by the USDA, gives reimbursements to participating child care centers, preschools, emergency centers and after-school programs for nutritious meals and snacks served to eligible children. Eligible providers

^{viii} For more information see: <https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program> and <https://des.az.gov/na>

^{ix} For more information see: <https://www.fns.usda.gov/wic> and <https://www.azdhs.gov/prevention/azwic/>

^x For more information see: <https://www.fns.usda.gov/nslp>

^{xi} For more information see: <https://www.azed.gov/hns/sfsp>

^{xii} For more information see: <https://www.azed.gov/hns/cacfp>

include for-profit child care centers serving at least 25% free or reduced-price lunch participants or any non-profit program.¹²⁴

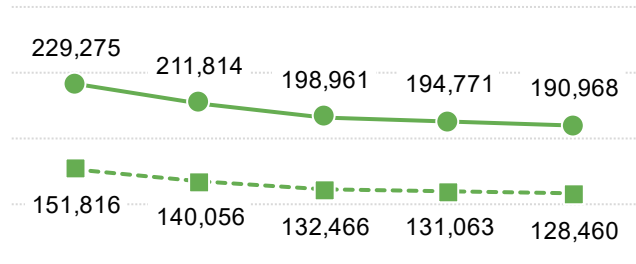
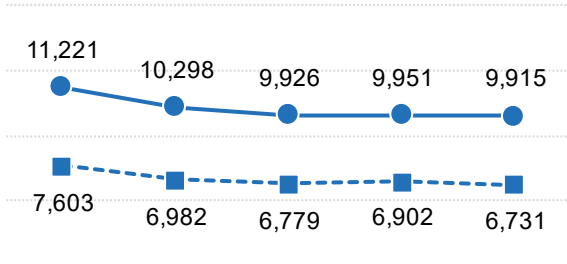
How the East Maricopa Region is faring

- Participation in SNAP by households with young children declined in the East Maricopa Region between SFYs 2018 and 2022 as did participation across the state. The number of young children birth to age 5 participating in SNAP also decreased during those years in both the region and state. The percentage of young children participating in SNAP was lower in the region than across the state between SFY 2018 and SFY 2022, with 20% of children birth to age 5 participating in the region in SFY 2022, compared to 40% across the state (Figure 18 & Figure 19).
- The number of children birth to age 4 enrolled in and participating in WIC in the East Maricopa Region and across the state generally declined in recent years, with the exception of a slight uptick in enrollment and participation in the region and state in 2022 (Figure 20). The program supports healthy nutrition for about 8,000 young children in the region.
- Among those enrolled, the vast majority participate in the WIC program. In 2022, participation rates were at 96% for women and children, and 98% for infants in the East Maricopa Region (Figure 21).
- The number of lunches served through the NSLP, SFSP, and CACFP meal programs varied substantially between program years 2019-20 and 2021-22. After the change in school meal policy following the start of the COVID-19 pandemic, meal service through SFSP increased sevenfold in Maricopa County between 2019-20 and 2020-21, while meal service through NSLP fell by more than half. In the 2021-22 school year, NSLP meal service increased and SFSP meal service decreased, though neither program has yet returned to pre-pandemic levels (Figure 22).
- Compared to 2019-20, the number of lunches served through CACFP more than doubled in Maricopa County in 2021-22, indicating higher ongoing participation in CACFP following the start of the pandemic (Figure 22).

Figure 18. Number of children birth to age 5 and households with children birth to age 5 participating in SNAP, state fiscal years 2018 to 2022

East Maricopa Region

Arizona

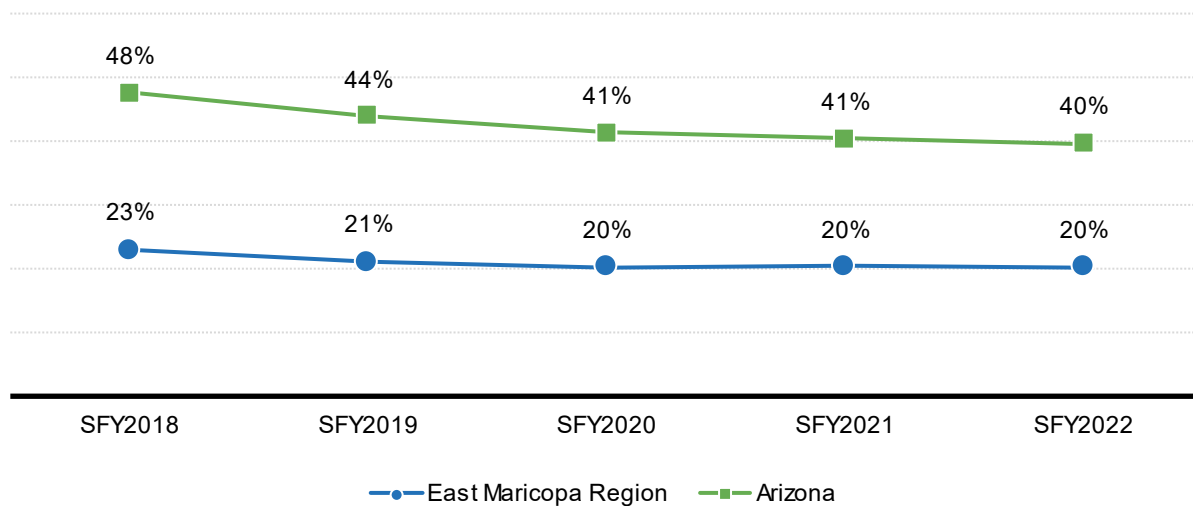


SFY2018 SFY2019 SFY2020 SFY2021 SFY2022
 --- Families with children (ages 0-5) participating in SNAP
 — Children (ages 0-5) participating in SNAP

SFY2018 SFY2019 SFY2020 SFY2021 SFY2022
 --- Families with children (ages 0-5) participating in SNAP
 — Children (ages 0-5) participating in SNAP

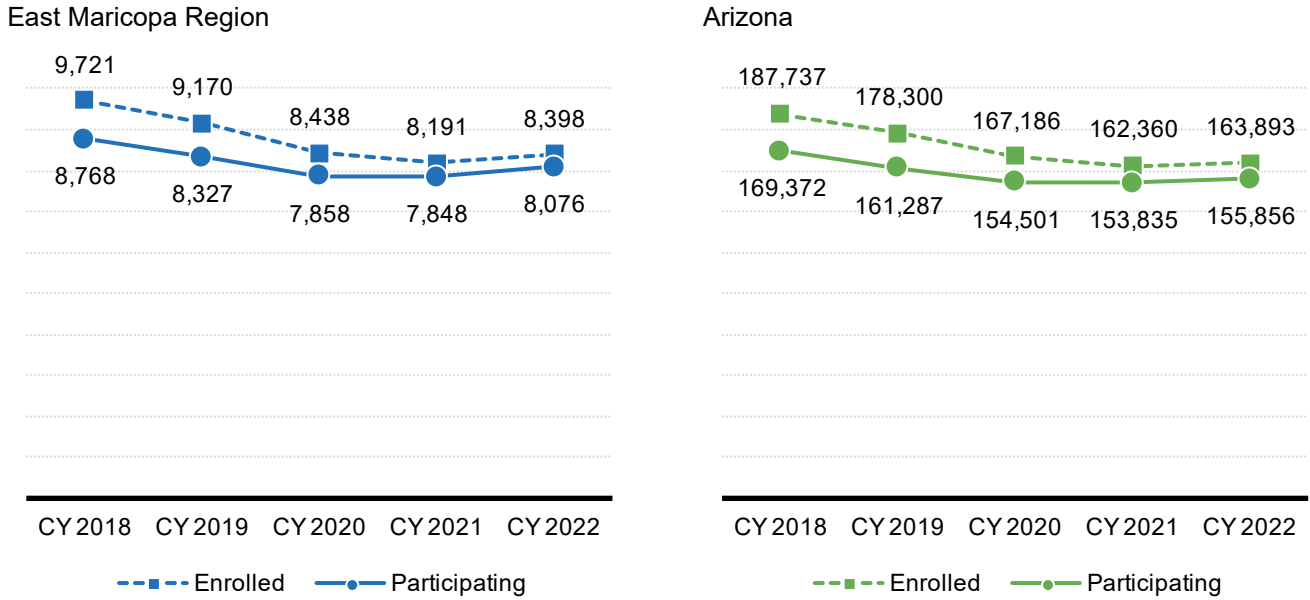
Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data.

Figure 19. Estimated percent of children birth to age 5 participating in SNAP, state fiscal years 2018 to 2022



Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

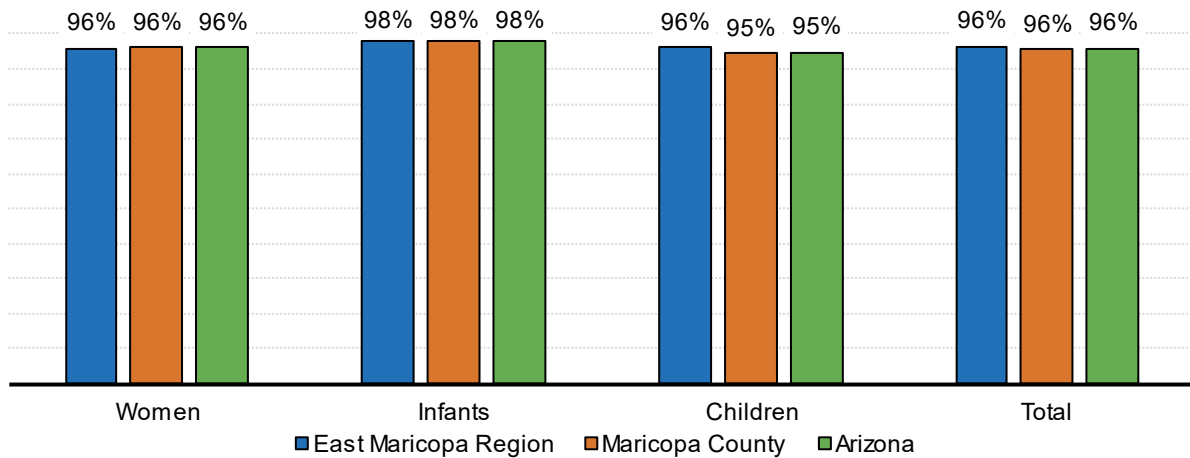
Figure 20. Children birth to age 4 enrolled and participating in WIC, 2018 to 2022



Source: Arizona Department of Health Services (2023). [WIC Dataset]. Unpublished data.

Note: Children are counted as 'participating' if they received benefits during the time period in question.

Figure 21. WIC participation rates by category, 2022



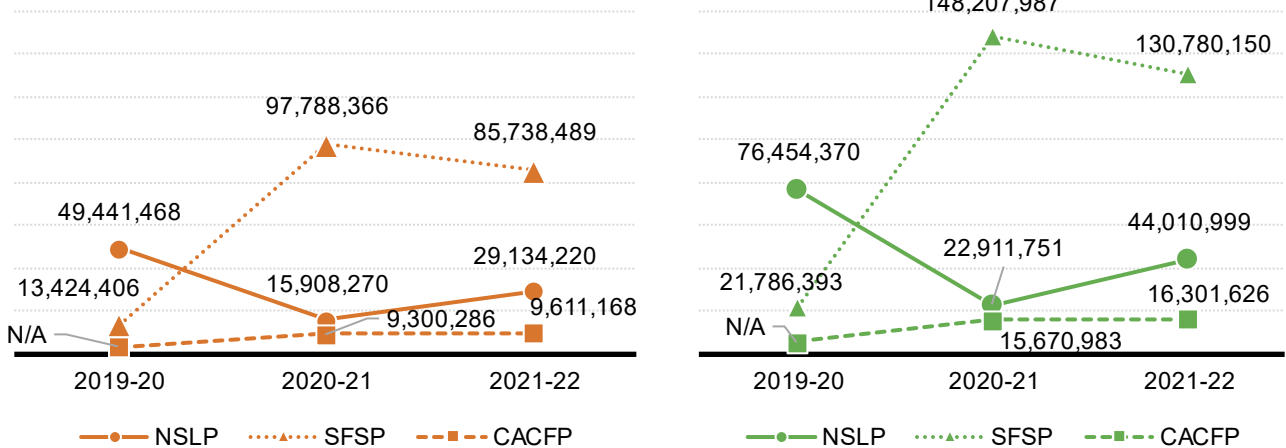
Source: Arizona Department of Health Services (2023). [WIC Dataset]. Unpublished data.

Note: Individuals are counted as 'participating' if they received benefits during the time period in question.

Figure 22. Trends in lunches served through school nutrition programs, 2019-20 to 2021-22

Maricopa County

Arizona



Source: Arizona Department of Education (2021). [Health and Nutrition Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Due to the COVID-19 pandemic, the USDA issued a substantial number of waivers for school nutrition programs to allow greater flexibility for schools to get meals to students in need. More information on the pandemic’s effect on school nutrition can be found on the ADE website: <https://www.azed.gov/hns/covid19>

Employment

Unemployment and underemployment^{xiii} can impact families in ways that affect children’s health and well-being.¹²⁵ Unemployment can limit access to resources that support children’s physical and mental health, like health insurance, and can also contribute to family stress, conflict, homelessness and child abuse.^{126, 127} Children with parents who have lost their jobs may also experience poorer school performance and behavioral issues, resulting in grade repetition, suspension or expulsion.¹²⁸

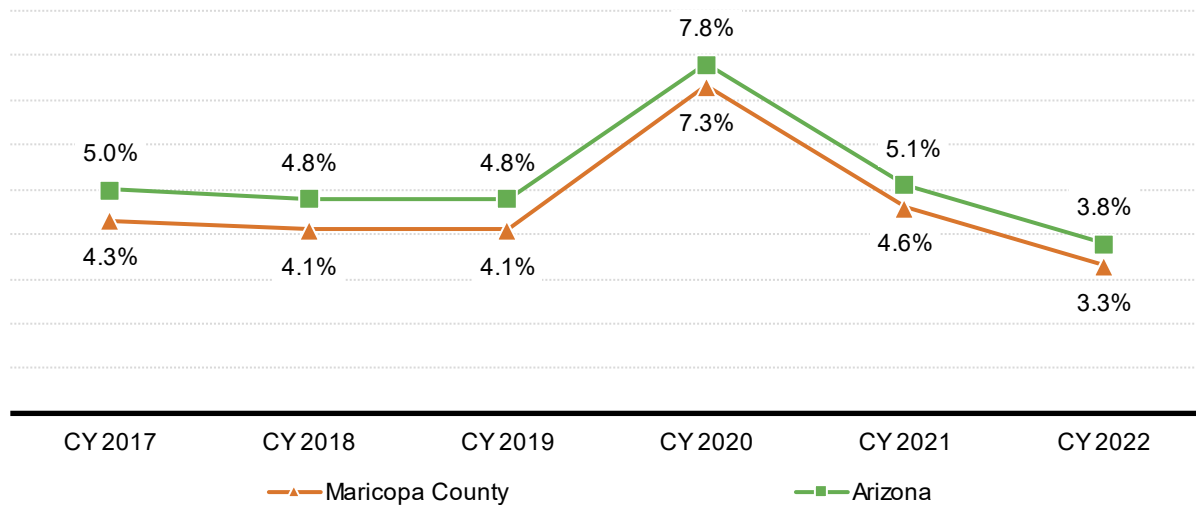
Education and employment support programs for parents and caregivers are important for increasing wages and improving the economic stability of families. “Two-generation” or “2Gen” approaches address the needs of both parents and children simultaneously through programs to support children and families together, such as a family literacy program that provides educational support to parents while enrolling children in free high-quality preschool.^{129, 130, 131} These programs have the goal of decreasing the intergenerational effects of poverty by building parental capacity and protective factors within families.^{132, 133, 134}

^{xiii} Underemployment means that someone works fewer hours than they would like or is in a job that does not require the skills or training that they have.

How the East Maricopa Region is faring

- Unemployment rates in Maricopa County track with Arizona’s but tend to be slightly lower. Despite the spike during the height of the COVID-19 pandemic, unemployment rates fell to their lowest level in six years in 2022 with a 3.3% unemployment rate in Maricopa County and a 3.8% rate across Arizona (Figure 23).
- The labor force participation rate^{xiv} is higher in the East Maricopa Region (66%) than across Arizona (61%). The region has a lower proportion of adults who are not in the labor force (34%) compared to Arizona as a whole (39%) (Table 7 & Figure 24).
- An estimated 94% of young children in the East Maricopa Region live in families with at least one parent in the labor force, slightly higher than the proportion across the state (90%). More than two-thirds of children birth to age 5 in the region (66%) live with all parents in the labor force, making it likely that these families need some form of child care (Table 8 & Figure 25).

Figure 23. Average annual unemployment rates (not seasonally adjusted), 2017 to 2022



Source: Arizona Commerce Authority (2021), Office of Economic Opportunity, Local Area Unemployment Survey (LAUS)

^{xiv} The “labor force” is all persons who are working (employed) or looking for work (unemployed). The “labor force participation rate” is the fraction of the population who are in the labor force, whether employed or unemployed. Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The “unemployment rate” is the fraction of the civilian labor force which are unemployed.

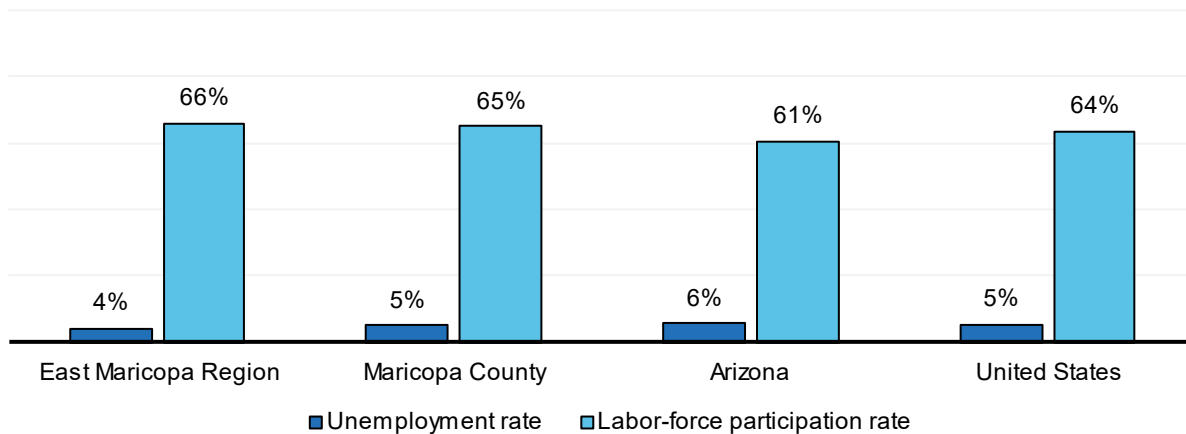
Table 7. Unemployment and labor-force participation for the population ages 16 and older, 2017-2021 ACS

Geography	Estimated working-age population (age 16 and older)	Unemployment rate	Labor-force participation rate	In the labor force and employed	In the labor force but unemployed	In armed forces	Not in the labor force
East Maricopa Region	768,762	4%	66%	63%	3%	0.0%	34%
Maricopa County	3,450,881	5%	65%	62%	3%	0.2%	35%
Arizona	5,650,624	6%	61%	57%	3%	0.4%	39%
United States	264,087,642	5%	64%	60%	3%	0.5%	36%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2022, Table B23025

Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The "labor force participation rate" is the fraction of the population who are in the labor force, whether employed or unemployed. The "unemployment rate" is the fraction of the civilian labor force which are unemployed. The last four percentages in each row (employed, unemployed, in armed forces, and not in the labor force) should sum to 100% but may not because of rounding.

Figure 24. Unemployment and labor-force participation for the population ages 16 and older, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B23025

Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The "labor force participation rate" is the fraction of the population who are in the labor force, whether employed or unemployed. The "unemployment rate" is the fraction of the civilian labor force which are unemployed.

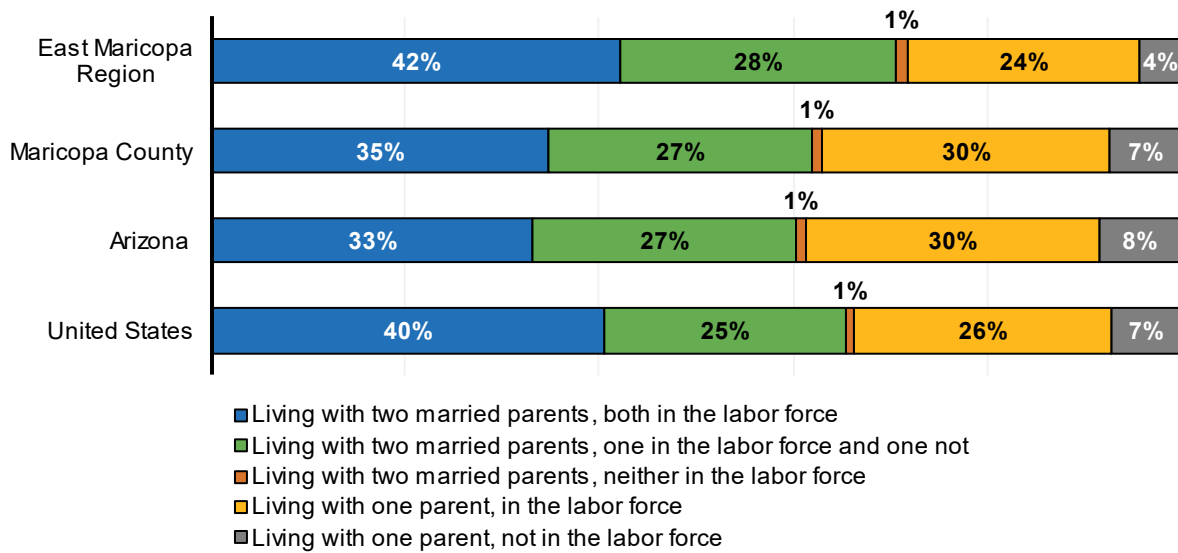
Table 8. Parents of children birth to age 5 who are or are not in the labor force, 2017-2021 ACS

Geography	Estimated number of children (birth to 5 years old) living with parent(s)	Living with two married parents, both in the labor force	Living with two married parents, one in the labor force and one not	Living with two married parents, neither in the labor force	Living with one parent, in the labor force	Living with one parent, not in the labor force
East Maricopa Region	48,987	42%	28%	1%	24%	4%
Maricopa County	307,353	35%	27%	1%	30%	7%
Arizona	473,732	33%	27%	1%	30%	8%
United States	22,399,131	40%	25%	1%	26%	7%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B23008

Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The term "parent" here includes stepparents. The five percentages in each row should sum to 100%, but may not because of rounding. Please note that due to the way the ACS asks about family relationships, children living with two unmarried, cohabitating parents are not counted as living with two parents (these children are counted in the 'one parent' category).

Figure 25. Parents of children birth to age 5 who are or are not in the labor force, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B23025

Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The term "parent" here includes stepparents. The five percentages in each row should sum to 100% but may not because of rounding. Please note that due to the way the ACS asks about family relationships, children living with two unmarried, cohabitating parents are not counted as living with two parents (these children are counted in the 'one parent' category).

Housing instability and internet access

Housing instability can have harmful effects on the development of young children. High housing costs relative to family income are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health and homelessness.^{135, 136, 137} High relative housing costs leave inadequate funds for other necessities, such as food and utilities.¹³⁸ This can negatively affect the physical, social-emotional and cognitive development of children, with severe forms of housing instability associated with poorer performance in school.^{139, 140}

Another increasingly important utility in homes is reliable internet access. Access to broadband (high-speed) internet enables quick access to a far greater number of resources and information, telehealth options and other opportunities that can be critical for education and employment. Internet access has been deemed a “super determinant” of health because of its influence on more traditional social determinants of health such as education, employment, health care access and social connection.¹⁴¹ Household access to computers and high-speed internet is also important for school-aged children who may need this technology for school assignments and projects, particularly during the later years of primary education and beyond.¹⁴² Lack of access to reliable high-speed internet disproportionately occurs in rural areas and pockets of segregated urban areas, and this disparate access is known as the digital divide. Due to the importance of high-speed internet access, the federal government has instituted several funding initiatives to improve access to and the affordability of high-speed internet, including in Arizona.^{xv}

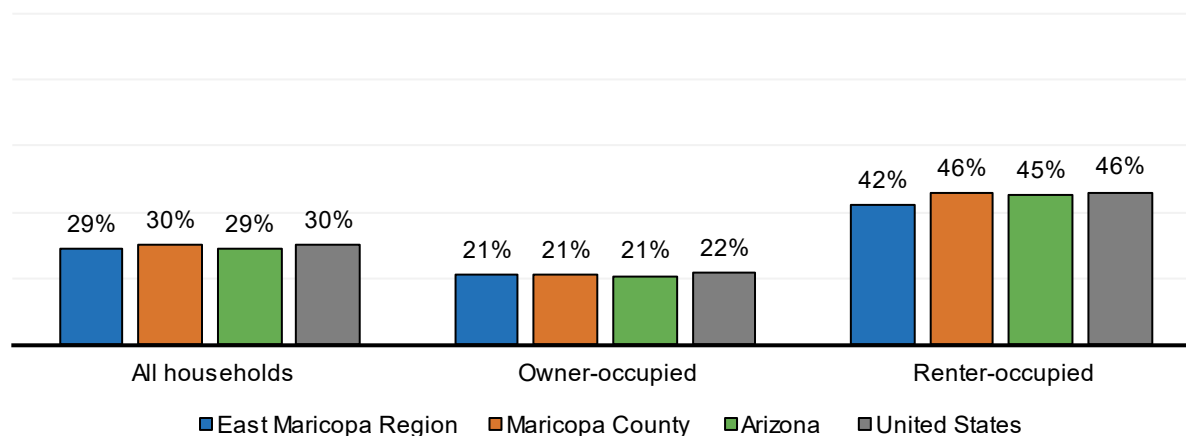
How the East Maricopa Region is faring

- Traditionally, housing has been deemed affordable for families if it costs less than 30% of annual household income.¹⁴³ Nearly three in 10 households (29%) in the region and across the state spend 30% or more of their income on housing. Housing costs do differ by home ownership status, with fewer homeowners in the region (21%) and state (21%) spending 30% or more of household income on housing, compared to 42% of renter-occupied households in the region and 45% across the state (Figure 26).
- The McKinney-Vento Act definition of homelessness includes children living in shelters, transitional housing, campgrounds, motels, trailer parks and cars, as well as children whose families are temporarily living within another family’s household. Less than 2% of students enrolled in public and charter schools in the region experienced homelessness in the 2021-22 school year, similar to the proportion across the state (Table 9).
- Looking at households, 93% in the East Maricopa Region have both a computer (including smartphones) and broadband internet connectivity, which is higher than the proportion across the county (90%) and state overall (88%) (Table 10).

^{xv} For more information, please see <https://internetforall.gov/program/digital-equity-act-programs>

- Looking at the population, the majority (95%) of people (all-ages) in the East Maricopa Region live in households with both a computer and internet connection. Children are even more likely to live in a household with a computer and an internet connection, with 97% of those under age 18 with this access in the region. These values are higher than those of comparable groups at the county and state level (Figure 27 & Figure 28).

Figure 26. Percent of households spending 30% or more of household income on housing by home ownership status, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B25106

Table 9. Students experiencing homelessness (all grades) enrolled in public and charter schools, 2019-20 to 2021-22

Geography	Number of students experiencing homelessness			Percent of students who were homeless		
	2019-20	2020-21	2021-22	2019-20	2020-21	2021-22
East Maricopa Region	N/A	659	900	N/A	<2%	<2%
Maricopa County	7,439	4,744	6,008	<2%	<2%	<2%
Arizona	12,931	8,542	11,161	<2%	<2%	<2%

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Regional data were not available for 2019-20 due to differences in how data were pulled in prior RNA cycles. The McKinney-Vento Act provides funding and supports to ensure that children and youth experiencing homelessness have access to education. Under the McKinney-Vento Act, children are defined as homeless if they lack a “fixed, regular, and adequate nighttime address.” This includes children living in shelters, cars, transitional housing, campground, motels, and trailer parks, as well as children who are living ‘doubled up’ with another family due to loss of housing or economic hardship. More information can be found on the ADE website: <https://www.azed.gov/homeless>

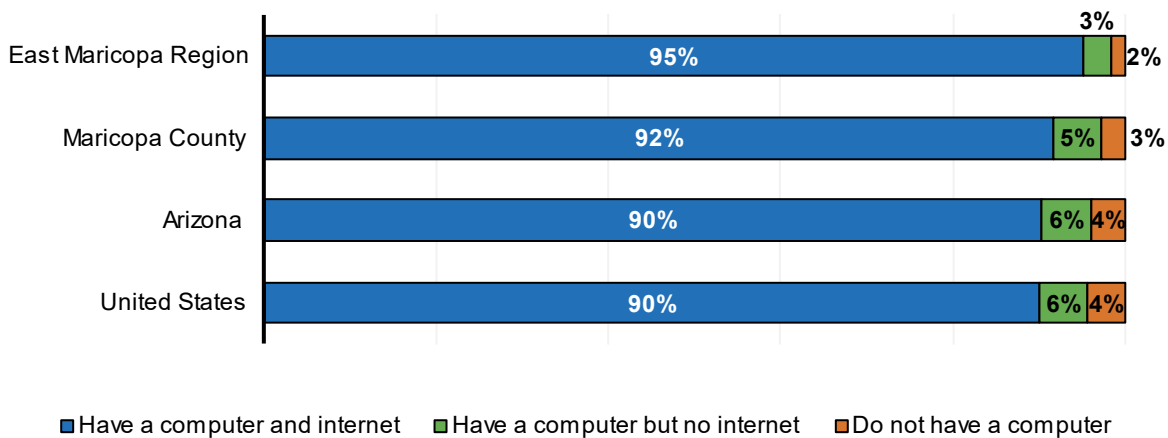
Table 10. Households with a computer and broadband internet connectivity, 2017-2021 ACS

Geography	Estimated number of households	Number and percent of households with a computer and broadband internet connectivity	
East Maricopa Region	386,370	360,932	93%
Maricopa County	1,632,151	1,462,374	90%
Arizona	2,683,557	2,350,265	88%
United States	124,010,992	106,957,995	86%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B28008.

Note: In this table, “computer” includes desktops, laptops, tablets and smartphones.

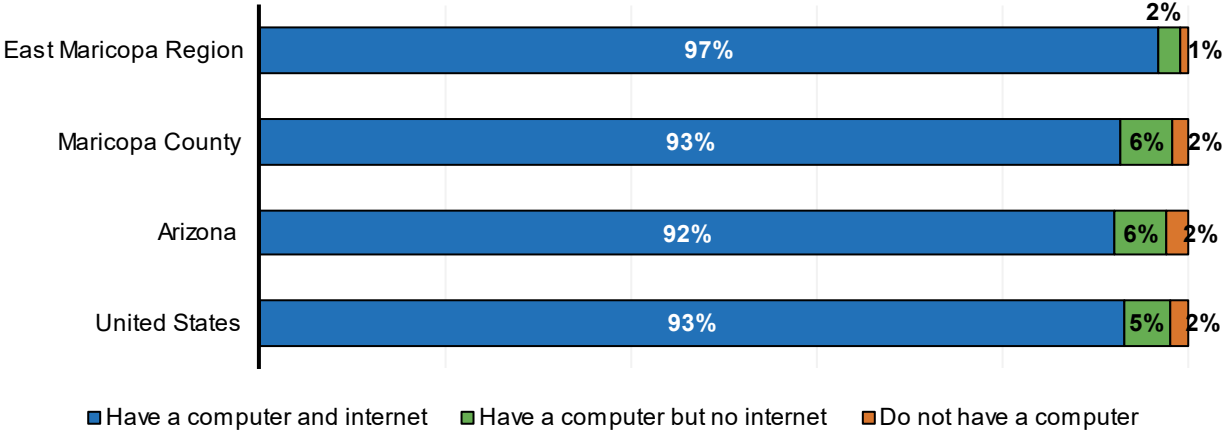
Figure 27. Persons of all ages in households with and without computers and internet connectivity, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B28005

Note: The three percentages in each bar should sum to 100%, but may not because of rounding.

Figure 28. Children birth to age 17 in households with and without computers and internet connectivity, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B28005

Note: The three percentages in each bar should sum to 100%, but may not because of rounding.

Additional data tables related to *Economic Circumstances* can be found in Appendix 1 of this report.



EDUCATIONAL INDICATORS

EDUCATIONAL INDICATORS

Why it Matters

A community's K-12 education system can support positive outcomes for children, families and the overall well-being of the community. Individuals who have higher levels of education tend to live longer and healthier lives.¹⁴⁴ Graduating from high school, in particular, is associated with better health, financial stability and socio-emotional outcomes as well as a lower risk for incarceration compared to dropping out of high school.^{145, 146} Children with parents that have attained higher levels of education are more likely to do well in school, such as score higher in reading, math and science in their first four years of school and attain higher levels of education themselves.^{147, 148, 149} High-quality early learning experiences also set a strong foundation for children's learning in kindergarten, elementary school and beyond.¹⁵⁰ When children participate in high-quality early education, they are more likely to perform better in reading and math in later grades.¹⁵¹ Given these lifetime and intergenerational impacts of educational attainment, it is critical to provide substantial support for early education and promote policies and programs that encourage the success of Arizona's children.

What the Data Tell Us

School attendance and absenteeism

School attendance is an important factor in predicting the academic performance and future health of children. Chronic absenteeism, defined as missing 10% of school days in a school year, predicts a student experiencing academic difficulties and even dropping out of school entirely.¹⁵² Children who are part of a racial or ethnic minority group, have disabilities or other health conditions, or live in low-income families are at increased risk of absenteeism.^{153, 154}

How the East Maricopa Region is faring

- In the 2021-22 school year, 1,507 children were enrolled in preschool in the East Maricopa Region. Kindergarten through 3rd grade enrollments for the region were all much higher, ranging from 8,716 in kindergarten to a high of 9,315 in 2nd grade (Table 11).
- Kindergarten through 3rd grade chronic absence rates, while noticeably lower in the region than the county or the state, have more than doubled in recent years, increasing from 11% in 2020-21 to 26% in 2021-22 in the region (Figure 29).

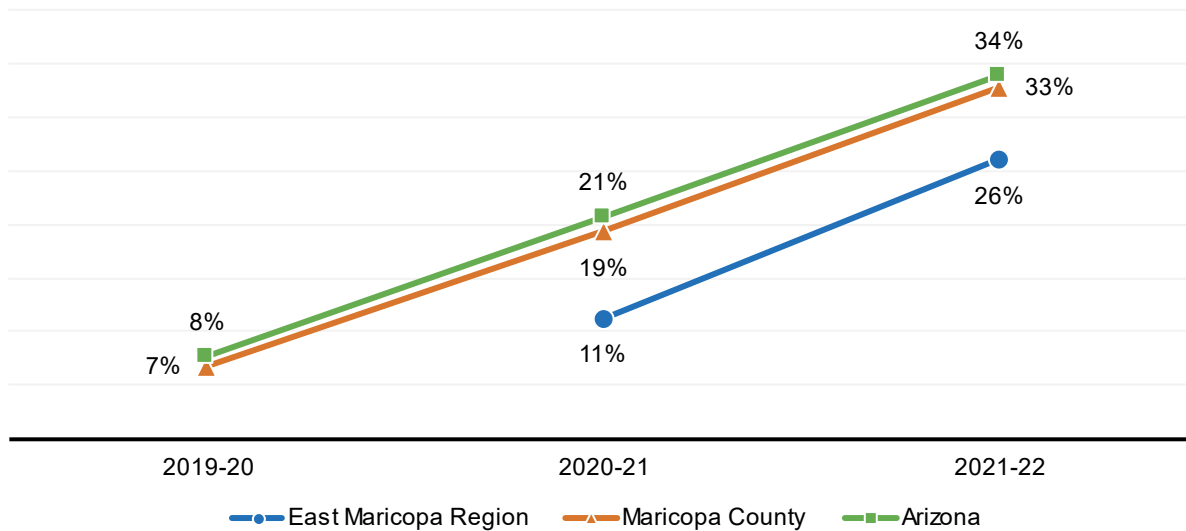
Table 11. Preschool to 3rd grade students enrolled in public and charter schools, 2021-22

Geography	Preschool	Kindergarten	1st Grade	2nd Grade	3rd Grade
East Maricopa Region schools	1,507	8,716	8,788	9,315	9,224
Maricopa County schools	11,550	52,578	52,611	54,896	54,515
Arizona schools	17,840	79,423	79,202	82,342	82,243

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: Please note that most preschool students in this table are either preschoolers with disabilities receiving services through an LEA or students enrolled in inclusive preschool classrooms. Students enrolled in paid preschool programs at public and charter schools may not be represented in this table due to the way these totals are calculated at the school level.

Figure 29. Chronic absenteeism rates for kindergarten to 3rd grade students, 2019-20 to 2021-22



Source: Arizona Department of Education (2023). [Absenteeism Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Regional data were not available for 2019-20 due to difference in how data were pulled in prior RNA cycles. Students are considered chronically absent if they miss more than 10% of the school days in a school year. This figure includes children who are absent due to chronic illness. Please note that school closures and transitions to distance learning substantially affected how attendance was tracked by schools in the spring of 2020.

Achievement on standardized testing

All Arizona public schools, including both district and charter schools (but not private schools), are required to administer state and federally mandated standardized tests. Between 2019 and 2022, the statewide English Language Arts (ELA) and math assessment tool for 3rd through 8th graders in public schools was Arizona’s Statewide Achievement Assessment for English Language Arts and Math

(AzM2), previously called Arizona’s Measurement of Educational Readiness to Inform Teaching (AzMERIT).^{xvi, 155, 156} The *Move on When Reading* policy, enacted by the Arizona legislature in 2010, states that a 3rd grade student shall not be promoted to 4th grade if their reading score falls far below the 3rd grade level, as established by the State Board of Education.^{xvii, 157}

These policies are intended to help identify struggling readers who may benefit from more targeted literacy interventions. Children’s 3rd grade reading comprehension and proficiency skills can predict their future academic success, such as their likelihood of graduating high school and attending college.¹⁵⁸ Poor reading skills are associated with a six-fold increase in the likelihood of dropping out of high school in comparison to proficient readers.¹⁵⁹

How the East Maricopa Region is faring

- In the 2021-22 school year, 57% of 3rd grade students in the East Maricopa Region were meeting or exceeding proficiency expectations for 3rd grade English Language Arts (ELA). While this is a frustratingly low proportion of proficient students, it has been rising and is notably higher than the proportion across the county (43%) and state (41%) (Table 12 & Figure 30).
- Math proficiency parallels ELA proficiency. Passing rates have climbed slightly across the region, county, and state, and East Maricopa students outperform peers elsewhere. However, still only 56% of the region’s students achieve passing scores (Table 13 & Figure 31).

Table 12. Assessment results: 3rd Grade English Language Arts, 2021-22

Geography	Students Tested	Falls Far Below	Approaches	Meets	Exceeds	Passing
East Maricopa Region schools	DS	32%	12%	32%	24%	57%
Maricopa County schools	52,861	45%	12%	27%	16%	43%
Arizona schools	79,586	47%	12%	26%	15%	41%

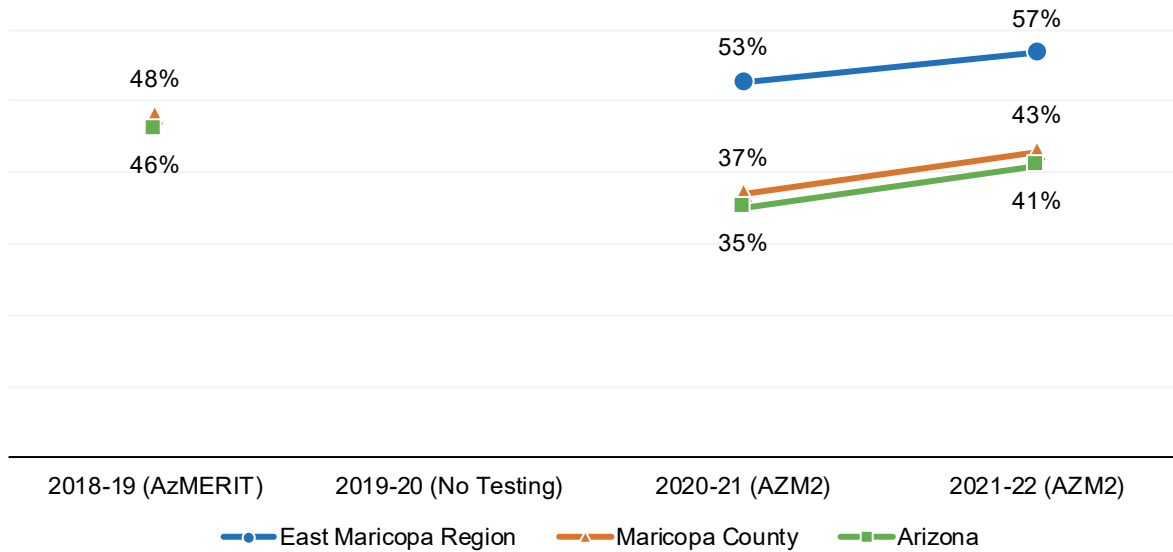
Source: Arizona Department of Education (2023). [Assessment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: The number of students tested is suppressed at the regional level due to redaction requirements from the ADE data access process.

^{xvi} In 2022, AzM2 was replaced by Arizona’s Academic Standards Assessment (AASA).

^{xvii} Exceptions exist for students identified with or being evaluated for learning disabilities or reading impairments, English language learners and those who have demonstrated reading proficiency on alternate forms of assessment approved by the State Board of Education. Students who test in the ‘far below’ proficiency range can also be promoted to 4th grade if they complete summer school and then demonstrate reading at a proficient level. Given these exceptions, historically very few 3rd grade students (<1%) have been retained due to *Move on When Reading*. As of 2022, schools with early elementary grade students are now required to screen all kindergarten and first grade students for dyslexia and have at least one teacher who has complete ADE-approved trainings in reading instruction, intensifying instruction and understanding and recognizing dyslexia.

Figure 30. Trends in passing rates for 3rd Grade English Language Arts assessments, 2021-22



Source: Arizona Department of Education (2021). [Assessment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Comparable regional passing rates were not available for 2018-19 due to differences in how the data were pulled.

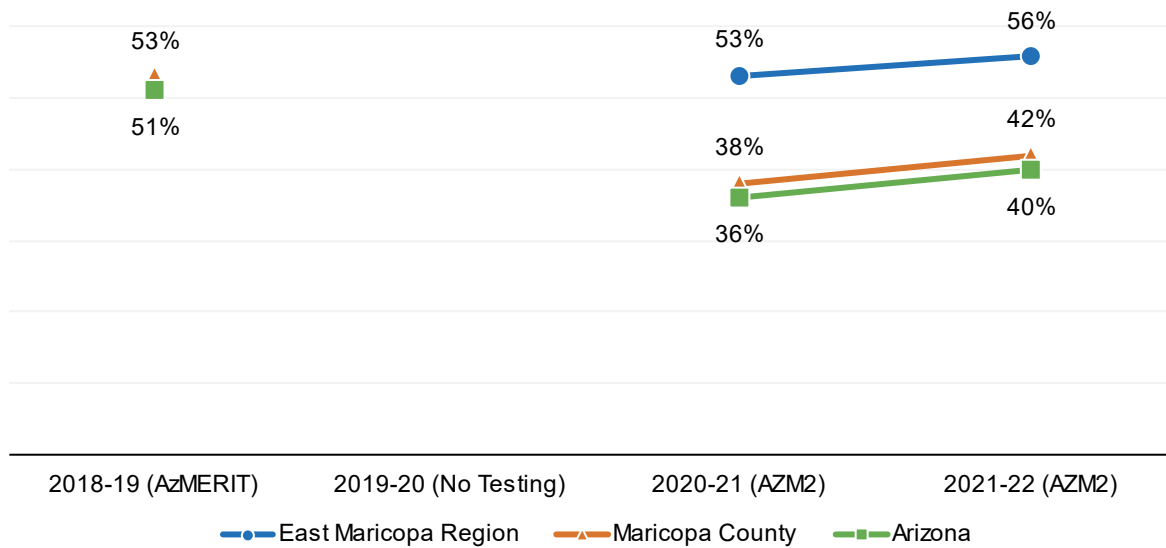
Table 13. Assessment results: 3rd Grade Math, 2021-22

Geography	Students Tested	Falls Far Below	Approaches	Meets	Exceeds	Passing
East Maricopa Region schools	DS	20%	24%	34%	22%	56%
Maricopa County schools	52,423	31%	27%	29%	13%	42%
Arizona schools	80,445	33%	27%	28%	12%	40%

Source: Arizona Department of Education (2023). [Assessment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: The number of students tested is suppressed at the regional level due to redaction requirements from the ADE data access process.

Figure 31. Trends in passing rates for 3rd Grade Math assessments, 2018-19 to 2021-22



Source: Arizona Department of Education (2021). [Assessment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Comparable regional passing rates were not available for 2018-19 due to differences in how the data were pulled.

Graduation rates and adult educational attainment

High school graduation and dropout rates within a region can provide insight into the assets within and challenges faced by a community and its future workforce. Adults who graduated from high school have higher rates of employment, higher incomes and better overall health compared to adults who dropped out of high school, even if they received a high school equivalency degree, such as the General Educational Development certificate (GED).¹⁶⁰ Maternal education is associated with an array of child outcomes starting with infant health,^{161, 162, 163} and both targeted and universal programs serving children from families with lower educational backgrounds can support child development.^{164, 165}

In contrast to the U.S. as a whole, Arizona has a larger proportion of disconnected youth, defined as teenagers ages 16 to 19 who are neither attending school nor employed,^{xviii} which has been linked to negative physical and mental health outcomes and higher rates of unemployment.¹⁶⁶ Native youth, both nationally and in Arizona, are disproportionately disconnected and therefore particularly vulnerable to these negative outcomes and may need additional support.¹⁶⁷

^{xviii} Age ranges used for 'disconnected youth' vary by source, with some estimates including both teenagers ages 16-19 and young adults ages 20-24 and others focusing on only teenagers or young adults.

How the East Maricopa Region is faring

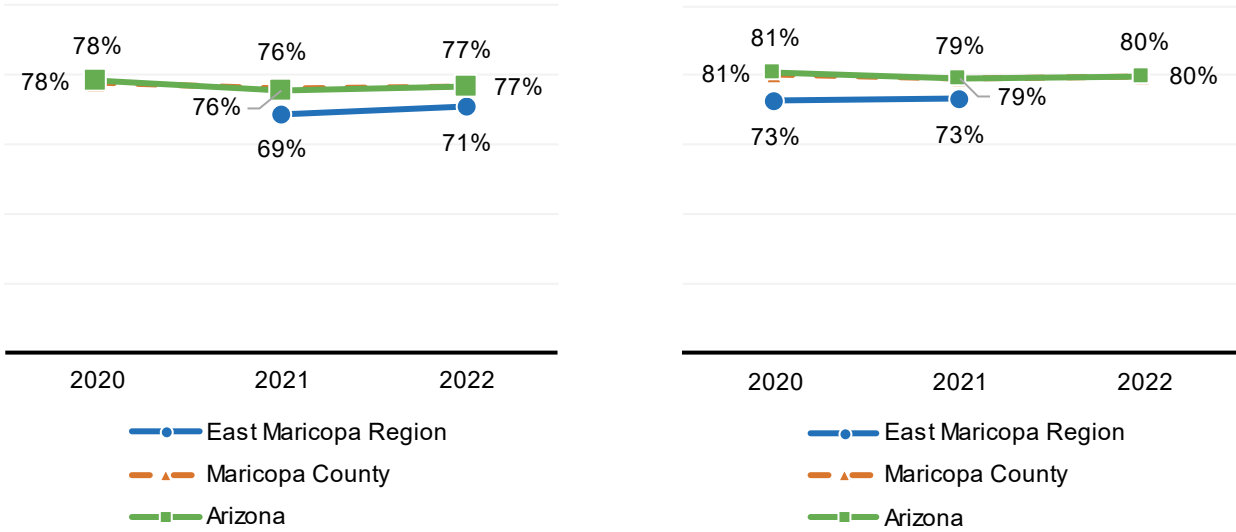
- Despite other educational strengths, four- and five-year graduation rates in the East Maricopa Region have been below state and county rates in recent years. In 2021 (the most recent year of data available for both rates), the four-year graduation rate for the region was 69% and the five-year graduation rate was 73%, compared to 76% and 79% in Maricopa County and Arizona overall (Figure 32 & Table 14). The region's lower rates appear to be driven by a large number of charter operators that have a campus in the region but also run large online or virtual schools (which can include students who reside outside of the region). These operators substantially affect the regional graduation rate due to their size and extremely low graduation rates.
- The 7th-12th grade dropout rate for the East Maricopa Region rose from 3% in 2019-20 to 5% in 2021-22, on par with the county and state (Table 15).
- A large majority (81%) of the adult population in the East Maricopa Region has more than a high-school education, meaning they generally have higher educational attainment than other residents of Maricopa County and Arizona, where about two-thirds have at least some college education (Figure 33).
- In 2021, 93% of births in the East Maricopa Region were to mothers who had at least a high school diploma, GED or higher educational attainment. This is higher than the proportions in the county (86%) and Arizona in 2021 (86%)^{xix} (Table 16).

^{xix} For precision, summed values were computed in the raw data with decimals, which occasionally produces a slightly different sum than the table data summed without decimals.

Figure 32. Trends in 4-year and 5-year graduation rates, 2020 to 2022

4-year graduation rates

5-year graduation rates



Source: Arizona Department of Education (2023). [Graduation Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: Regional data were not available for 2020 4-year graduation rates, and 5-year graduation rates for 2022 had yet to be released at the time of the data pull for this report (December 2023). Regional graduation rates appear lower than county rates in part due to the presence of several large charter schools in the region that serve non-traditional students.

Note: In the methods developed in this cycle to handle school data, schools were assigned to regions based on their physical location. This is similar to the approach used by ADE to assign districts to county (based on district or charter operator’s mailing address). There are a large number of charter operators located within the East Maricopa Region. In particular, four of these charter operators had four-year graduation rates that were lower than 40 percent in 2022. Several of these charter operators manage online or virtual schools that have very large numbers of students. These operators substantially affect the regional graduation rate due to their size and extremely low graduation rates. The charter operators in question all have mailing addresses and listed school locations within the East Maricopa Region, and their data is included in Maricopa County data. Due to the clustering of these operators in the East Maricopa Region the effect on the regional graduation rates is particularly pronounced compared to other regions in Maricopa County.

Table 14. Trends in 4-year and 5-year graduation rates, 2020 to 2022

Geography	4-Year Graduation Rates			5-Year Graduation Rates		
	2020	2021	2022	2020	2021	2022
East Maricopa Region schools	N/A	69%	71%	73%	73%	N/A
Maricopa County schools	78%	76%	77%	81%	79%	80%
Arizona schools	78%	76%	77%	81%	79%	80%

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Regional data were not available for 2020 4-year graduation rates, and 5-year graduation rates for 2022 had yet to be released at the time of the data pull for this report (December 2023). Regional graduation rates appear lower than county rates in part due to the presence of several large charter schools in the region that serve non-traditional students. The 5-year graduation rate reflects the percentage of students who graduated high school within 5 years of entry. See

<https://www.azed.gov/sites/default/files/2017/08/2018%2006%2001%20Graduation%20DO%20and%20Persistence%20Rate%20Tech%20Manual.pdf?id=598a34233217e10ce06647ff>

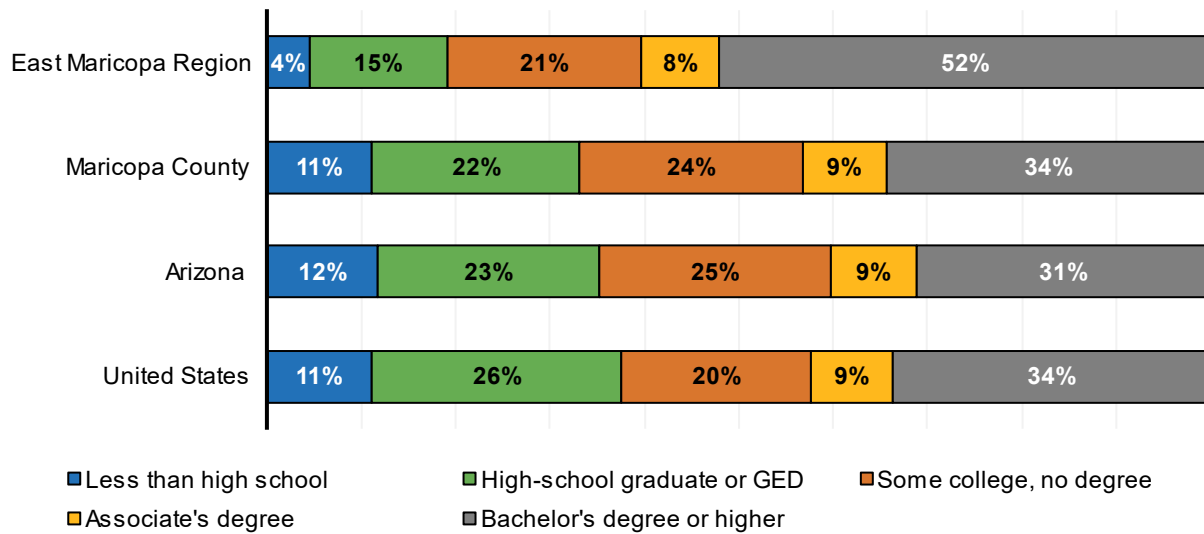
Table 15. 7th to 12th grade dropout rates, 2019-20 to 2021-22

Geography	Dropout Rate, 2019-20	Dropout Rate, 2020-21	Dropout Rate, 2021-22
East Maricopa Region schools	3%	3%	5%
Maricopa County schools	3%	4%	5%
Arizona Schools	3%	4%	5%

Source: Arizona Department of Education (2023). [Dropout Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Notes: Dropouts are defined by ADE as students who were enrolled in school at any time during the school year but were not enrolled at the end of the year and who did not transfer to another school, graduate, or die. Dropout rates are calculated by dividing the number of dropouts by the total enrollment. In many elementary districts, dropout rates reflect students who transferred out and were lost to follow-up.

Figure 33. Level of education for the adult population (ages 25 and older), 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table B15002

Note: The five percentages in each bar should sum to 100%, but may not because of rounding.

Table 16. Level of education for the mothers of babies born in 2020 and 2021

Geography	Calendar year	Number of births	Mother had less than a high-school education	Mother finished high school or had GED	Mother had more than a high-school education
East Maricopa Region	2020	7,447	7%	15%	77%
	2021	7,624	6%	17%	76%
Maricopa County	2020	49,191	14%	25%	60%
	2021	50,245	13%	26%	60%
Arizona	2020	76,781	15%	27%	57%
	2021	77,857	14%	27%	58%

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this table. A small number of births are missing data on maternal educational attainment, so percentages in this table may not sum to 100%.

Additional data tables related to *Educational Indicators* can be found in Appendix 1 of this report.



EARLY LEARNING

EARLY LEARNING

Why it Matters

Early childhood is a pivotal time for building crucial physical, cognitive and social-emotional skills.^{168,}
¹⁶⁹ Early experiences are important for healthy brain development and set the stage for lifelong learning and well-being.^{170, 171, 172} Just as rich, stimulating environments can promote healthy development, early negative experiences can also have lasting effects.^{173, 174} However, considering the major COVID-19 pandemic-related challenges experienced by many Arizona families, it is important to remember that predicted short- and long-term effects of adverse experiences are not inevitable.^{175, 176} Access to quality early care and learning environments can be a powerful protective factor for every child, and the effects can be particularly life-changing for children facing chronic stressors and for children with disabilities.^{177, 178}

Quality early care and educational experiences help children develop into capable learners by supporting many crucial systems in the body.¹⁷⁹ In addition to promoting healthy brain development, positive and adverse experiences in the first few years of life can shape a child's immune functioning, ability to handle stress in a healthy way and capacity to learn and thrive.¹⁸⁰ Each of these factors contribute to being a skillful learner.¹⁸¹

What the Data Tell Us

Access to early care and education

Early childhood systems play a key role in supporting children, parents, caregivers and communities as a whole.^{182, 183} Unfortunately, many Arizona families continue to face obstacles when seeking quality early care and education. Communities in both urban and rural areas of Arizona face a gap between the number of young children and licensed child care slots.^{184, 185, 186, 187} According to the Center for American Progress, almost half of Arizonans (48%), including the majority of rural, low-income and Hispanic or Latino families, live in a “child care desert,” defined as areas where there are three times as many children as there are available child care opportunities.^{188, 189}

Analyses by the Bipartisan Policy Center indicate that Arizona needed an additional 76,740 licensed or registered early care and education slots to have enough for all young children in working families in 2019.¹⁹⁰ Because the COVID-19 pandemic forced many child care centers and home-based providers to close either temporarily or permanently, care has been disrupted for many more families in Arizona and nationwide.¹⁹¹ Disruptions to child care arrangements may have been especially burdensome for Hispanic and Latino households,¹⁹² which is meaningful to Arizona given the high proportion of young children who are Hispanic or Latino compared to children nationwide. Parents and caregivers in Hispanic and Latino households were less likely to use paid leave or to simultaneously supervise their children while working – likely due to lower access to paid leave and telework options – and more likely to leave or lose their job as a result.¹⁹³

Availability and cost are especially challenging for parents seeking care for infants and young children in Arizona. For example, a family with one infant and one preschooler can expect to pay about \$1,670 per month for a licensed child care provider.¹⁹⁴ This monthly cost exceeds what many Arizonans pay per month for housing, creating potential financial challenges that are further compounded for families with multiple children under the age of 6.^{xx, 195, 196} The Arizona Department of Economic Security (DES) provides child care assistance to financially eligible families, including specific funding for families involved with the Arizona Department of Child Safety (DCS).¹⁹⁷ However, families that are eligible to receive funding may not have access to child care services in their community that are licensed or that accept assistance payments, leaving them unable to utilize the funding.^{198, 199}

How the East Maricopa Region is faring

- According to the most recent ACS data, in the East Maricopa Region, about half (49%) of children ages 3 and 4 are estimated to be enrolled in preschool^{xxi} or kindergarten, which is a notably higher proportion than across the county (35%) and state (36%) (Figure 34).
- Preschool enrollment in the East Maricopa Region has declined in recent years from 53% to 49%. The county and state saw smaller declines during this time (Figure 34). In 2021, preschool enrollment in Arizona hit a 10-year low,²⁰⁰ suggesting this is a statewide issue.
- Nearly all licensed child care capacity in the region is provided by child care centers (94%), with a small fraction provided by family child care providers (6%). Given there are approximately 49,000 children in East Maricopa, including 32,300 children with all parents in the labor force (see Table 8), an availability of 41,221 child care slots in the region suggests that supply may be close to meeting demand, although factors like hours, specific location and cost may still present barriers (Table 17).
- An area is labeled a child care desert if the ratio of children to child care slots is 3 to 1 or more. Looking collectively across all children birth to age 5, the East Maricopa Region is not considered a desert. However, for infant care, the situation is more dire. There are five times the number of infants in the region as available slots for those children, although this is less of an issue than it is statewide where the ratio of infants to child care slots is 10 to one. About one-third (37%) of licensed providers offer infant care (Table 18, Figure 35 & Table 3).
- The median monthly costs of child care provided by certified family homes in Maricopa County are the lowest priced type of care in the region with an average cost of \$714 per month for

^{xx} In addition to the financial challenges faced by parents paying for child care, the early care and education workforce is one of the most underpaid fields in the country. Nationally, educators working with infants and toddlers are 7.7 times more likely to live in poverty compared to K-8 teachers. The median hourly wage for a child care worker in Arizona (\$11.97) is \$13.19 less per hour than what is considered a living wage for a single parent with 1 child (\$25.16). For more information on early care and education workforce wages visit <https://cscce.berkeley.edu/workforce-index-2020/the-early-educator-workforce/early-educator-pay-economic-insecurity-across-the-states/>

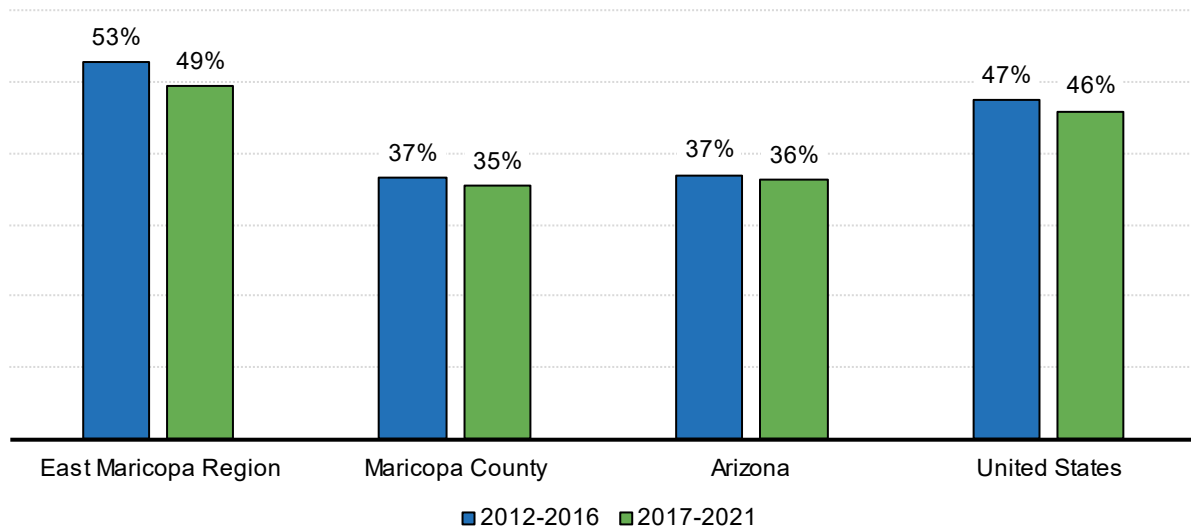
^{xxi} The American Community Survey uses the terms nursery school and preschool interchangeably.

infants and \$630 for children ages 1 to 5 for full-time care. The many--and often large--licensed centers and public schools providing child care in Maricopa County are notably more expensive than home-based care (Figure 36), meaning there are relatively few slots with the more budget-friendly providers.

- Child care costs as a percentage of income are slightly elevated in Maricopa County compared to the state overall. In 2022, sending an infant to a licensed center in Maricopa County cost approximately one-sixth (17%) of a family's income, compared to 15% for families across the state. The percentage of income spent for older children's care is lower in comparison in both the region and state (Figure 37).
- Median child care costs have increased sharply in the region and state since 2018. For example, the cost of care in the most available type of care in the region, licensed centers, increased 20% for one infant, 22% for one 1–2-year-old and 24% for one 3–5-year-old between 2018 and 2022 (Table 19).
- The number of children eligible for and receiving DES child care assistance in the region has generally mirrored the pattern seen across the state in recent years. Both the number of children eligible for and the number of children receiving assistance have increased overall since 2017. The region and the state saw unsurprising drops in participation during the height of the COVID-19 pandemic in 2020. Data from the region and the state for 2021 and 2022 suggest that the number of eligible children is declining (Figure 38 & Figure 39).
- Children are automatically eligible for DES child care assistance when they are involved with DCS.^{xxii} For DCS-involved children, the number of children eligible for assistance in the region has decreased in recent years, from a high of 977 young children in 2019 to 726 in 2022, generally mirroring the pattern seen across the state. Again, like the pattern seen across the state, the receipt of DES assistance among eligible DCS-involved children increased from 2020 to 2021, but then decreased again in 2022 in the region (Figure 40).

^{xxii} Children involved with DCS include children who have been removed by DCS and placed with a foster family or kinship caregiver as well as children who are residing with their own family but receiving services from DCS (such as in-home family support and counseling). Families of these children are not required to pay a co-pay for child care.

Figure 34. School enrollment for children ages 3 to 4, 2012-2016 and 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B14003. U.S. Census Bureau. (2017). American Community Survey 5-year estimates 2012-2016, Table B14003

Note: In this table, “school” may include nursery school, preschool, or kindergarten. Reliable data were not available for Ash Fork, Bagdad, or Cordes Junction due to sample size limitations.

Table 17. Number and Capacity of Early Care & Education Providers active in the National Data System for Child Care, May 2023

Geography	Total ECE Providers		Child care centers		Family child care providers		Nannies or individual providers	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
East Maricopa Region	322	41,221	302	41,073	20	148	0	0
Maricopa County	1,347	146,016	1,195	144,934	149	1,071	3	11
Arizona	2,454	211,860	1,933	208,407	516	3,435	5	18

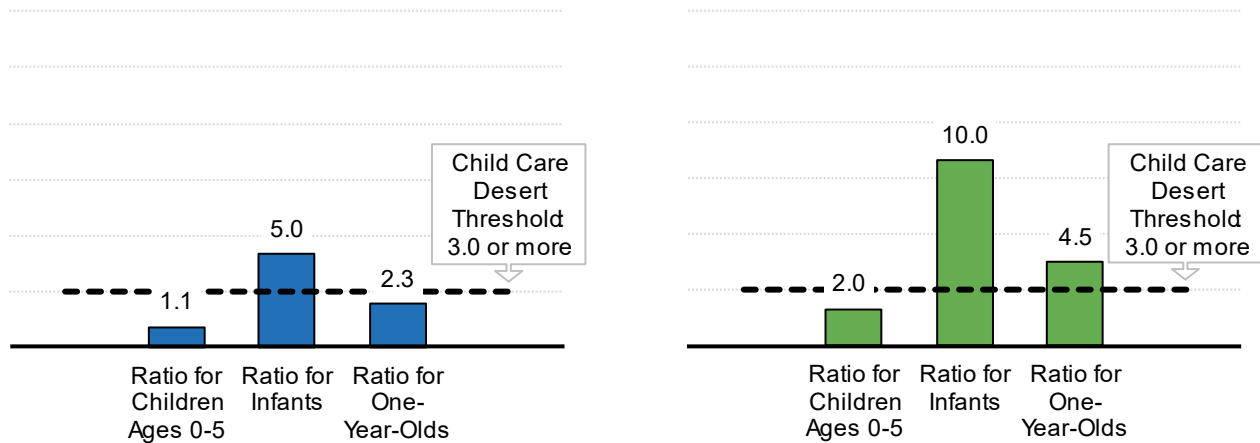
Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Note: Providers in this table are those who were active in the National Data System for Child Care NACCRR Aware database as of May 2023. This database of child care providers includes most state-licensed child care providers in the state of Arizona, but the database does not include informal or unlicensed providers or providers who are licensed through military or tribal authorities. Please also note that not all school-based preschools or Head Start centers participate in this data system (whereas all center-based facilities are required to be licensed and thus will appear in the ADHS licensing dataset in Table 18).

Figure 35. Ratio of children to slots in ADHS-licensed child care facilities, July 2023

East Maricopa Region

Arizona



Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14. ADHS (2023). [Child Care Licensing Database]. Retrieved from <https://www.azdhs.gov/licensing/childcare-facilities/index.php#parents-databases> on 12 July 2023

Note: ADHS licenses most child care centers in the state of Arizona, except for those regulated by military or tribal authorities. While these licensed slots do not account for home-based care, as evidenced in Table 17, the majority of child care capacity in the region is in center-based care. Child care deserts are defined by the Center for American Progress as areas where there are more than three times as many children as available child care slots. To see a nationwide map of childcare supply, visit <https://childcaredeserts.org/>

Table 18. ADHS-licensed child care providers by age of child served, July 2023

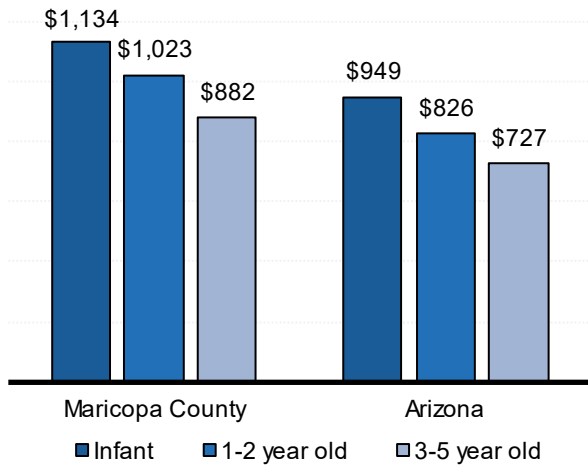
Geography	Licensed Providers		Infants		1-year-olds		Number of providers licensed for 2-year-olds	Number of providers licensed for 3- to 5-year-olds
	Num	Capacity	Num.	Capacity	Num.	Capacity		
East Maricopa Region	324	44,797	120	1,503	172	3,257	197	313
Maricopa County	1,451	180,230	504	5,561	683	12,107	743	1,379
Arizona	2,344	246,369	822	7,474	1,136	17,323	1,217	2,175

Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14. ADHS (2023). [Child Care Licensing Database]. Retrieved from <https://www.azdhs.gov/licensing/childcare-facilities/index.php#parents-databases> on 12 July 2023

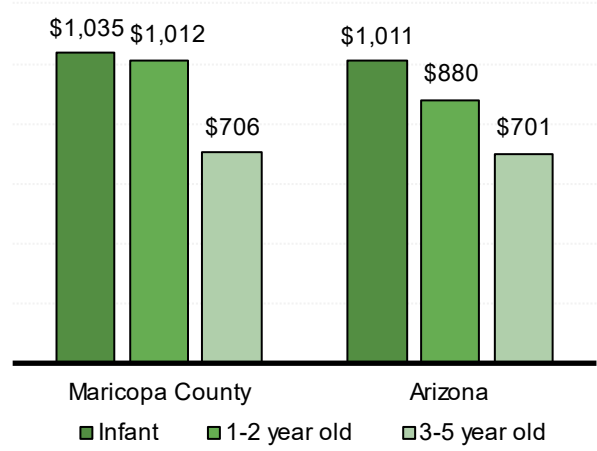
Note: ADHS licenses most child care centers in the state of Arizona, except for those regulated by military or tribal authorities. While these licensed slots do not account for home-based care, as evidenced in Table 17, the majority of child care capacity in the region is in center-based care.

Figure 36. Median monthly charge for full-time child care, 2022

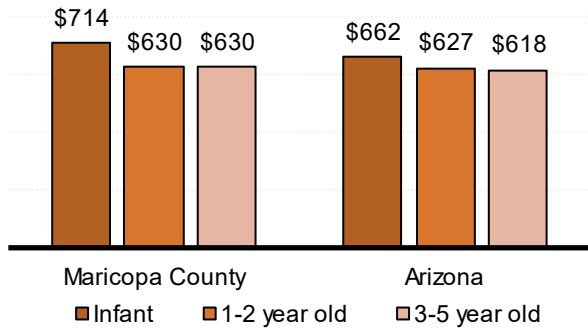
Licensed centers



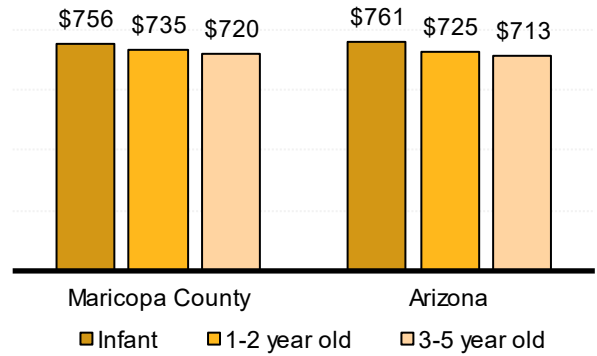
Public schools



Certified family homes



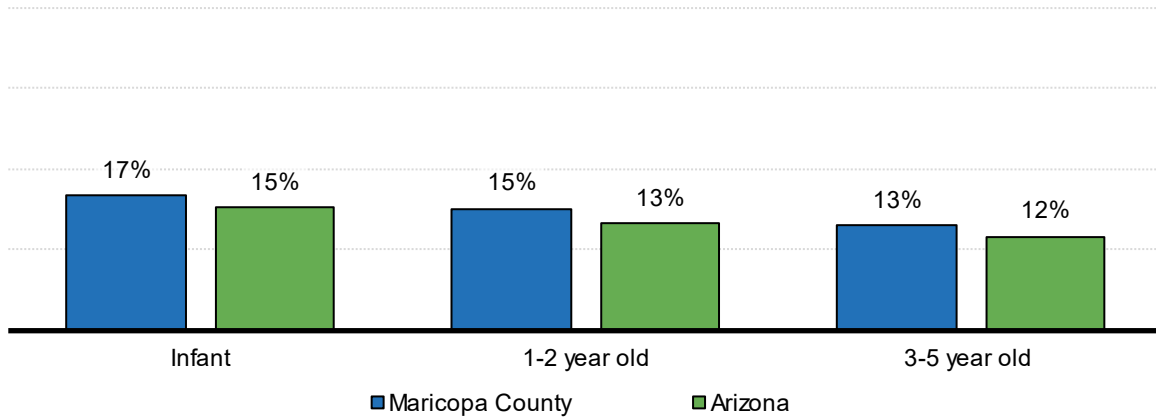
Small group homes



Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540>

Note: Median monthly charges are calculated by multiplying the daily median cost of care by 21 to approximate a full month of care.

Figure 37. Cost of center-based child care for one child, as a percentage of income, 2022



Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540>

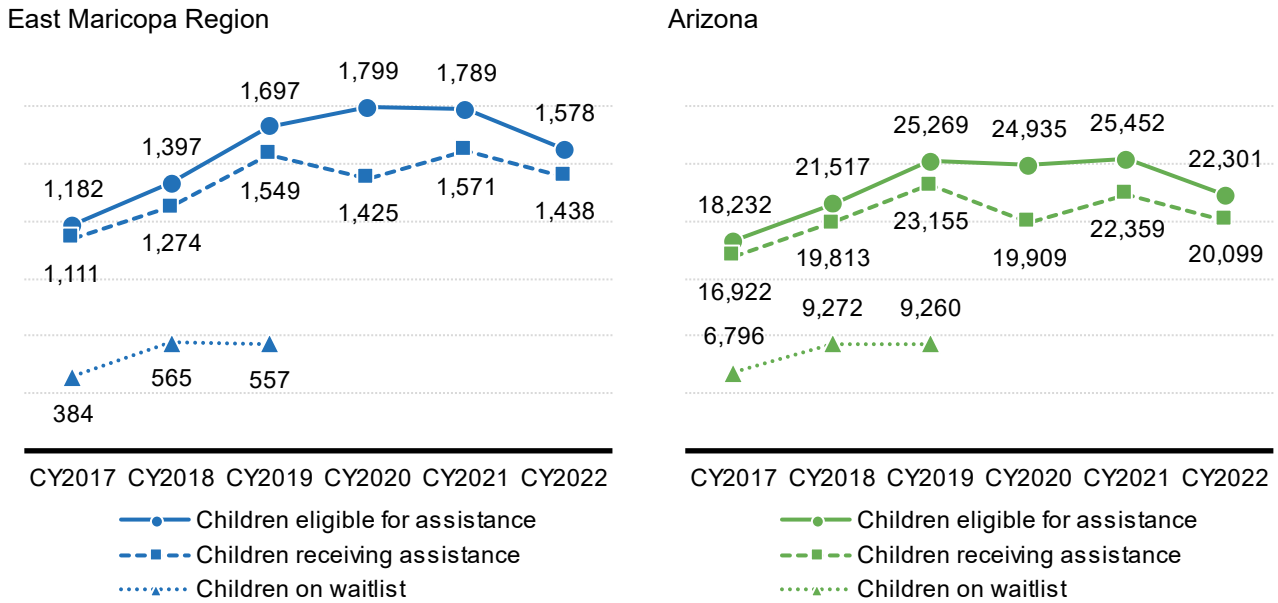
Note: Annual costs of care are calculated by multiplying the median daily cost of care by 252 to approximate a full year of care, then dividing by the median income for families with children under the age of 18 in the region. The U.S. Department of Health and Human Services Child Care and Development Fund (CCDF) Program sets a benchmark for affordable co-payments for child care at 7% of family income.

Table 19. Increase in median child care cost by provider type and child age, 2018 to 2022

Geography	Certified family homes			Small group homes			Licensed centers		
	One infant	One 1 or 2 year old	One 3 to 5 year old	One infant	One 1 or 2 year old	One 3 to 5 year old	One infant	One 1 or 2 year old	One 3 to 5 year old
East Maricopa Region	<i>Regional data not available</i>								
Maricopa County	+41%	+33%	+33%	+20%	+25%	+23%	+20%	+22%	+24%
Arizona	+26%	+23%	+26%	+28%	+28%	+28%	+21%	+19%	+18%

Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540>

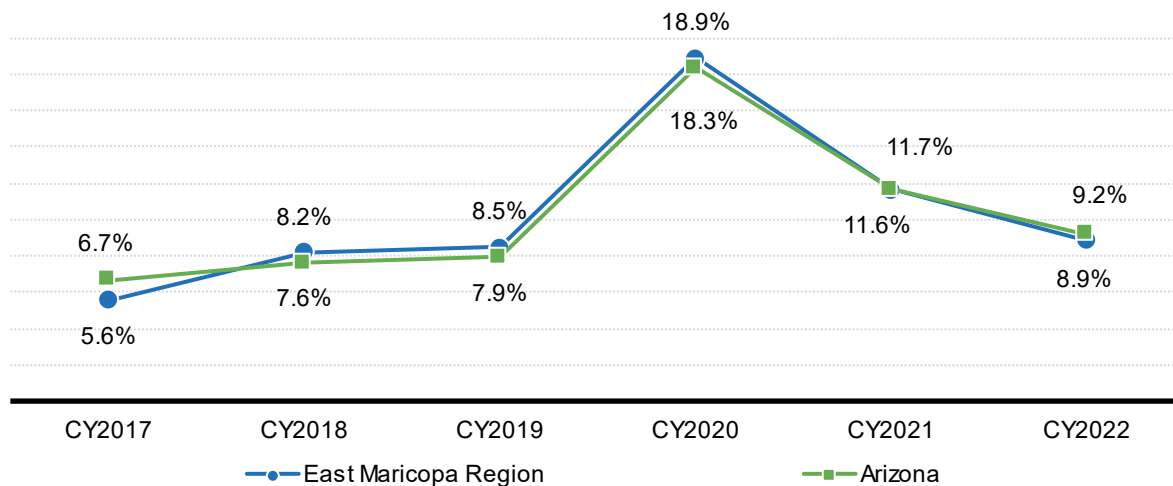
Figure 38. Children birth to age 5 eligible for, receiving, and on waitlist for DES child care assistance, 2017 to 2022



Sources: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

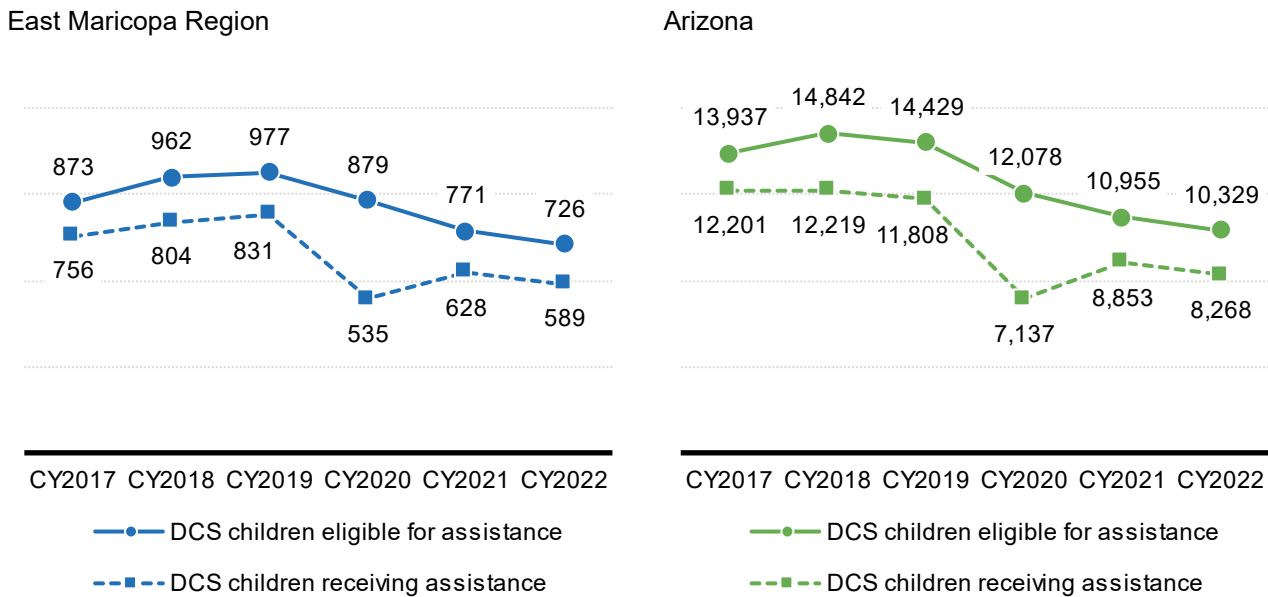
Note: The DES child care waitlist was suspended in June 2019, so there are no waitlist numbers for 2020 or beyond. DES child care assistance amounts vary based on a number of factors including the age of the child, the type of provider and the quality status of the provider. For more information, please see the current DES reimbursement rates for child care at https://des.az.gov/sites/default/files/dl/CCA-1227A_1.pdf?time=1646262773961

Figure 39. Eligible families not using DES child care assistance, 2015 to 2020



Source: Arizona Department of Economic Security (2021). [Child Care Administration dataset]. Unpublished data.

Figure 40. DCS-involved children birth to age 5 eligible for and receiving for DES child care assistance, 2017 to 2022



Sources: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Note: The DES child care waitlist was suspended in June 2019, so there are no waitlist numbers for 2020 or beyond. DES child care assistance amounts vary based on a number of factors including the age of the child, the type of provider and the quality status of the provider. For more information, please see the current DES reimbursement rates for child care at https://des.az.gov/sites/default/files/dl/CCA-1227A_1.pdf?time=1646262773961

High quality early care and education

Children who begin their education in high-quality preschool programs tend to repeat grades less frequently, obtain higher scores on standardized tests, experience fewer behavior problems and are more likely to graduate from high school.²⁰¹ This provides a return on investment to society through increased educational achievement and employment, reductions in crime and better overall health of children as they mature into adults.^{202, 203} The key ingredients in positive early experiences include responsive relationships, core adaptive skills development, reduced sources of stress and appropriate nutrition – all things that quality early care and education are in a unique position to provide at the critical time to encourage optimal learning and well-being for years to come.²⁰⁴ Early care and education shapes far more than a child’s future academic achievement, and an investment in early childhood can be one of the most productive investments a community can make.²⁰⁵

One way that the quality of early child care and education is measured in Arizona is through the Quality First program.²⁰⁶ The program offers training and funding for participating schools and providers to improve the quality of the services they provide. The Quality First program also rates the quality of child care providers and preschools on a scale of one to five stars, with providers considered high quality when they have received a three-star rating or higher.²⁰⁷ Quality First providers are supported by regional funding.

How the East Maricopa Region is faring

- The 174 Quality First child care providers in the East Maricopa Region enrolled 11,209 young children in 2023. Two-thirds (66%) of children in Quality First sites in the region were enrolled at a site with a 3-5-star rating, indicating a high quality provider, though 28% of children were at a site that had yet to receive a rating, rather than a site with only 1-2 stars (Table 20, Table 21 & Figure 41).
- Only about 5% of children enrolled in a Quality First provider site in the region were served by Quality First Scholarships in 2023. Statewide, about 12% of children in Quality First Providers are supported with Quality First Scholarships (Table 21).
- Twenty-eight child care providers in the region are nationally accredited, representing 9% of providers in the region. However, these accredited providers tend to be large, with a collective capacity of 5,708, representing 14% of child care capacity in the region (Table 22).
- DES defines quality environments as child care providers with a 3-, 4-, or 5-star Quality First rating, a national accreditation or a Child Development Associate (CDA) credential for family child care providers. At the regional level in 2022, 68% of non-DCS-involved young children and 72% of DCS-involved young children receiving DES child care assistance were enrolled in quality environments, the same as across the state as a whole (Table 23).

Table 20. Quality First child care providers by funding source, state fiscal year 2023

Geography	Child care providers served	Regional Funding	DES Expansion	Buy-In
East Maricopa Region	174	94	80	0
Maricopa County	<i>County data not available</i>			
Arizona	1,434	1,045	384	5

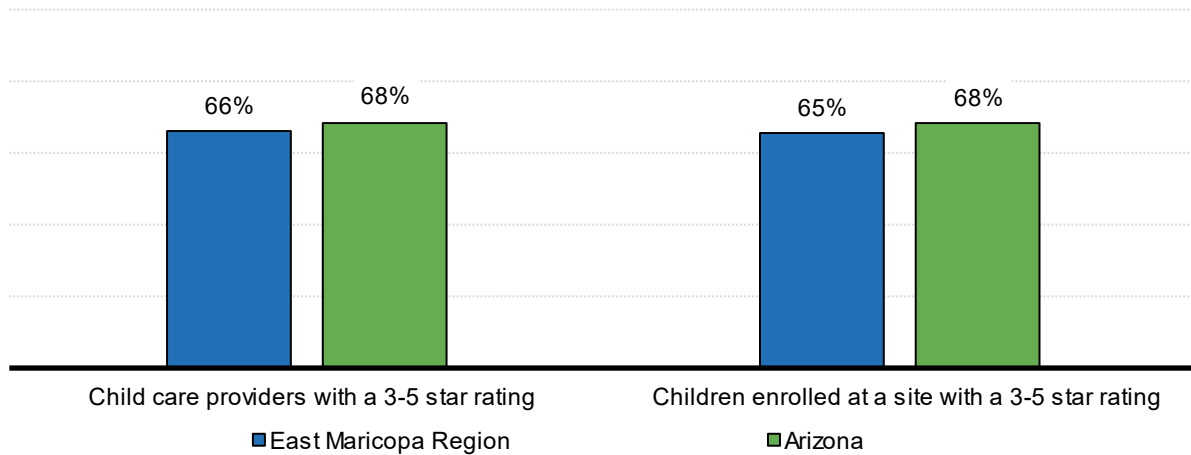
Source: First Things First (2023). Quality First Summary Data. Unpublished data.

Table 21. Children served by Quality First child care providers, state fiscal year 2023

Geography	Children enrolled at a Quality First provider site	Children enrolled at a Quality First provider site with a star rating	Children enrolled at a Quality First provider site with a 3-5 star rating	% of Children in a Quality-Level Setting (3-5 Stars)	Children served by Quality First Scholarships
East Maricopa Region	11,209	8,086	7,332	66%	509
Maricopa County	<i>County data not available</i>				
Arizona	70,837	54,155	48,379	68%	8,262

Source: First Things First (2023). Quality First Summary Data. Unpublished data.

Figure 41. Percent of Quality First programs with a 3-5 star-rating and percent of children enrolled in quality-level programs, state fiscal year 2023



Source: First Things First (2023). Quality First Summary Data. Unpublished data.

Note: Quality First considers providers with a 3-star rating and above to be 'quality level.' Percents are of total Quality First providers and children enrolled in Quality First sites. Please note that 28% of children are enrolled in Quality First sites that do not yet have Quality First Ratings.

Table 22. Number and licensed capacity of accredited child care providers, May 2023

Geography	Number of accredited providers	Percent of providers who are accredited	Capacity in accredited providers	Percent of provider capacity which is with accredited providers
East Maricopa Region	28	9%	5708	14%
Maricopa County	102	8%	17453	12%
Arizona	224	9%	25,486	12%

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Note: This table includes only licensed or registered centers, homes, or individual providers listed in the CCR&R who have a national accreditation, such as NECPA – National Early Childhood Program Accreditation, CDA – Child Development Association, AMI – American Montessori International, or NAEYC – National Association for the Education of Young Children.

Table 23. Children receiving DES child care assistance who are enrolled in quality environments, 2022

Geography	Children ages 0-5 (non-DCS involved)			DCS-involved children ages 0-5		
	Received assistance	Enrolled in quality environment	Percent in quality environment	Received assistance	Enrolled in quality environment	Percent in quality environment
East Maricopa Region	1,438	976	68%	589	423	72%
Maricopa County	12,230	8,749	72%	5,128	3,760	73%
Arizona	20,099	13,619	68%	8,268	5,969	72%

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Note: Quality environments are defined by DES as child care providers with a 3-, 4-, or 5-star Quality First rating, a national accreditation, or a Child Development Associate (CDA) credential for family child care providers. DCS-involved means that DCS is involved with the child or their family. In other words, the child has been reported to DCS and determined to need some level of supervision while in their parents' home, or the child has been removed

Young children with special needs

Timely intervention can improve the language, cognitive and socio-emotional developmental outcomes of young children who have, or are at risk for, developmental delays.^{208, 209} Early intervention also reduces educational costs by decreasing the need for special education.²¹⁰ Ensuring that children have access to timely and adequate screening and intervention services from birth to age 5 can be key for preparing children for kindergarten.

In Arizona, the Arizona Early Intervention Program (AzEIP),^{xxiii} the Division of Developmental Disabilities (DDD),^{xxiv} and the Arizona Department of Education (ADE) Early Childhood Special Education Program are designed to provide services to families with children who have special needs.^{xxv} AzEIP is a program under DES that provides early intervention and a variety of supportive services to Arizona children birth to age 2 with developmental delays or disabilities, as well as their families.²¹¹ The goal of these services is to improve the learning and development of children and inform their family members of how they can best support their child.²¹² DDD is a program under DES that provides supportive services to people of all ages with a qualifying developmental disability, including cerebral palsy, autism spectrum disorder, down syndrome, epilepsy and cognitive disabilities.²¹³ Children under the age of 6 that have been assessed by AzEIP to have a qualifying disability may also receive DDD services. At age 3, children with special needs transition from AzEIP services to their local education agency (LEA), usually a school district. Each Arizona school district is mandated to participate in Child Find^{xxvi} and to provide preschool services to children with special needs either through their own schools or through agreements with other programs such as Head Start.

According to national research, insufficient funding and staffing of these programs are the greatest obstacles to identifying and providing resources for all children who would benefit from early intervention.²¹⁴ Arizona falls in the bottom 10 states in the nation for early intervention service provision.²¹⁵ Fewer children in Arizona are accessing critical early intervention services that can identify disabilities, provide parent-coaching and encourage optimal development at home.²¹⁶ This matters because, while early education discussions often center around pre-kindergarten for 4-year-olds, research continues to point to the impact of experiences during the first three years of life as being just as crucial for healthy brain and body development.²¹⁷ Positively, Arizona has taken steps toward improving funding for early intervention, including being one of 10 states to cross-reference Medicaid and Early Intervention data to maximize federal Medicaid matching of funds.²¹⁸

How the East Maricopa Region is faring

- Parents and families in the East Maricopa Region are consistently more likely to self-refer their children birth to age 2 to AzEIP than parents across the state (e.g., 31% of 2022 referrals in the region were from family, compared to 21% statewide). However, the proportion referred by physicians in both the East Maricopa Region and across the state increased between 2018 and 2021, only to decline slightly in 2022 when there was a jump in “other” referral sources that year (Figure 42).

^{xxiii} For more information on AzEIP (which is a division of the Department of Economic Security), visit <https://www.azdes.gov/azeip/>

^{xxiv} For more information on DDD (which is a division of the Department of Economic Security), visit <https://des.az.gov/services/disabilities/developmental-disabilities>

^{xxv} For more information on ADE’s Early Childhood Special Education program, visit <http://www.azed.gov/ece/early-childhood-special-education/> and <http://www.azed.gov/special-education/az-find/>

^{xxvi} The Arizona Child Find program is a component of the Individuals with Disabilities Education Act (IDEA) that requires states to identify and evaluate all children with disabilities (birth through age 21) to attempt to ensure that they receive the supports and services they need.

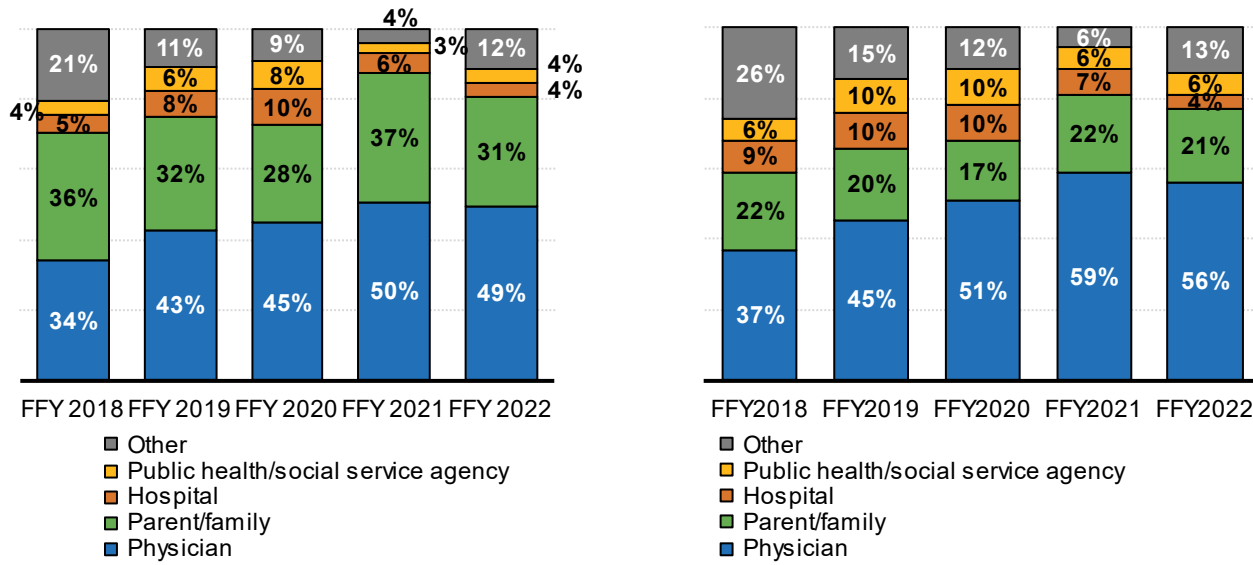
- About 4 in 10 (39%) young children referred to AzEIP in federal fiscal year (FFY) 2022 were found eligible (17%) or received services (22%) in the East Maricopa Region, very similar to the proportions across the county and state (Figure 43).
- In the East Maricopa Region, the number of children birth to age 2 receiving services from AzEIP declined by about 100 children between 2018 and 2022. The pattern in the region follows that in the state – a steady decline from 2018 to 2021 with a slight uptick in 2022 (Figure 44).
- The East Maricopa Region and state also have similar patterns of DDD service provision, with a sharp drop and during the pandemic (SFY 2020 to SFY 2021), along with a previous sharp drop between SFY 2018 and SFY 2019. In SFY 2022, 388 children birth to age 5 received DDD services in the East Maricopa Region (Figure 45).
- Qualifying children may receive services from AzEIP and/or DDD, a number which can be used to estimate the total number of young children receiving early intervention services in a region. The total number of children birth to age 2 receiving AzEIP and/or DDD services^{xxvii} declined overall between SFY 2019 and SFY 2022 in both the region and the state, with the lowest point in SFY 2020. Based on 2020 Census population counts, 2.5% of children birth to age 2 were receiving AzEIP and/or DDD services in the region, similar to the 2.6% across the state in SFY 2022 (Figure 46).
- The number of preschoolers with disabilities served in LEAs has decreased in both the region and the state in recent years. In SFY 2022, 698 preschoolers with disabilities were served in the East Maricopa Region, the lowest number served since SFY 2018. In the region, county and state, the most common type of disability was a developmental delay (43% at all geographies), followed by a speech or language impairment (30% in region and state, 29% in county) (Figure 47 & Figure 48).
- Conversely, the number of kindergarten through 3rd grade students enrolled in special education in public and charter schools between SFY 2018 and SFY 2022 increased for both the region and the state. Enrollments increased slightly in SFY 2022 (n=881) from SFY 2021 (n=848) following a decrease from SFY 2020 (n=928) in the region. In SFY 2022, 38% of the 3,985 students (K-3rd) enrolled in special education in the region were diagnosed with a speech or language impairment, 25% with a developmental delay, 12% with a specific learning disability, and 12% with autism, proportions similar to the county and state (Figure 49 & Figure 50).

^{xxvii} Please note that this is a unique count of children receiving AzEIP services, DDD services, or both AzEIP and DDD.

Figure 42. Children birth to age 2 referred to AzEIP by referral source, federal fiscal years 2018 to 2022

East Maricopa Region

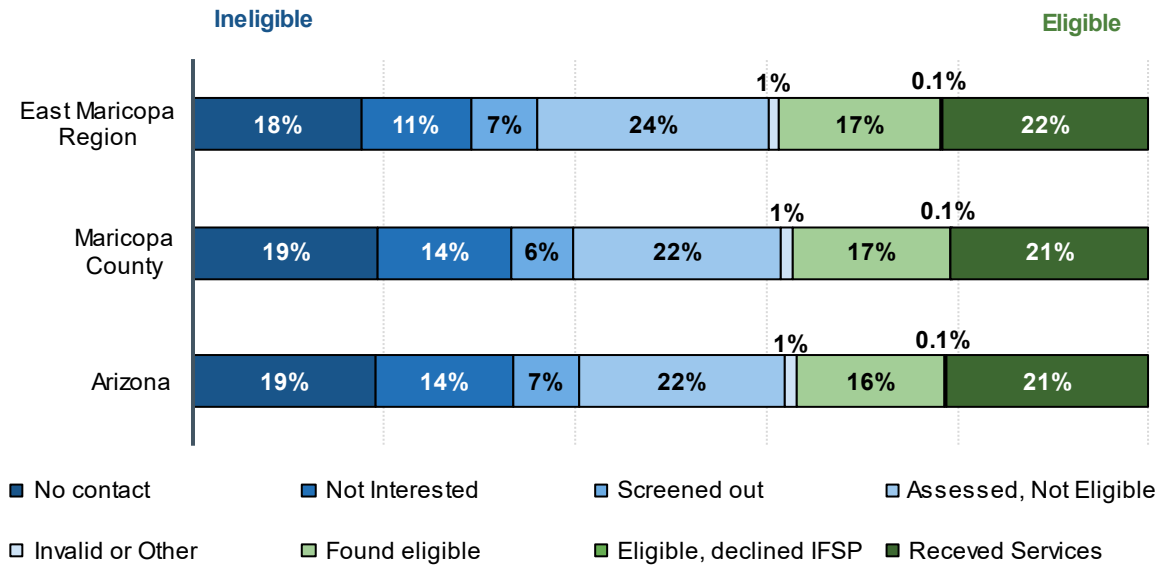
Arizona



Sources: Arizona Department of Economic Security (2023). [Arizona Early Intervention Program dataset]. Unpublished data.

Note: Other referral sources include audiologists, child care or early learning programs, foster care or adoption agencies, homeless shelters or programs, public health facilities, schools, Department of Child Safety, or referrals without a recorded sources. These referrals reflect unique children (duplicates have been removed). The large number of “other” referrals in FFY18 and FFY19 were due to a large number of referrals from a public health facility.

Figure 43. Outcomes for children birth to age 2 referred to AzEIP, federal fiscal year 2022



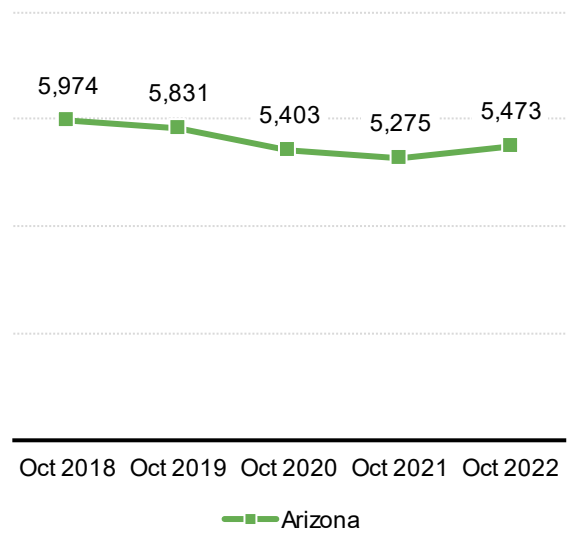
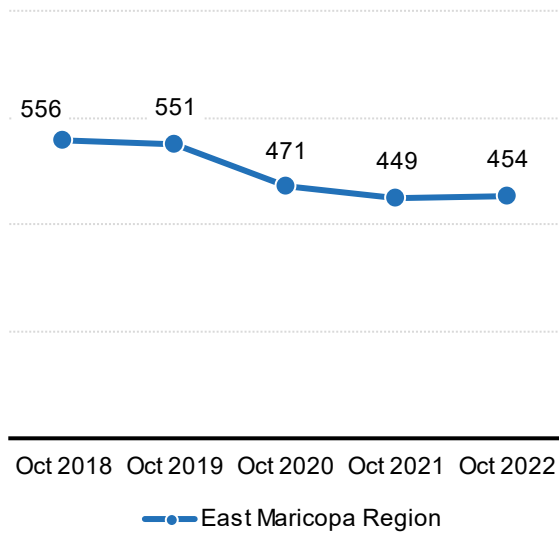
Sources: Arizona Department of Economic Security (2023). [Arizona Early Intervention Program dataset]. Unpublished data.

Note: These referral outcomes are recorded by AzEIP service providers. “No contact” means that a service coordinator made multiple attempts to contact a child’s family but was unsuccessful. “Not interested” indicates that when contacted the family of the child did not proceed with screening for eligibility. Children who are “screened out” were not suspected to have a qualifying developmental delay based on an initial developmental screening with a service coordinator; children who are “assessed, not eligible” are those with a formal evaluation who were found to not have a qualifying developmental delay. “Invalid or Other” refers to cases where the child was over-age (age 3 or older) or residing outside Arizona, the referral was a duplicate, the referral was for information-only, or the outcome was listed as “other.”

Figure 44. Children birth to age 2 receiving services from AzEIP as of October 1, 2018 to 2022

East Maricopa Region

Arizona



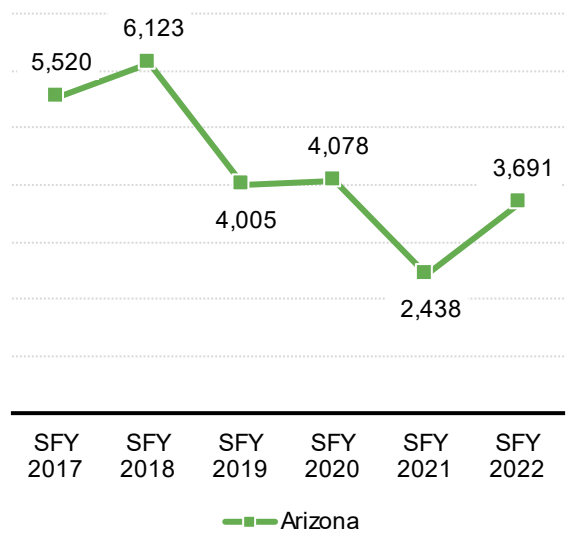
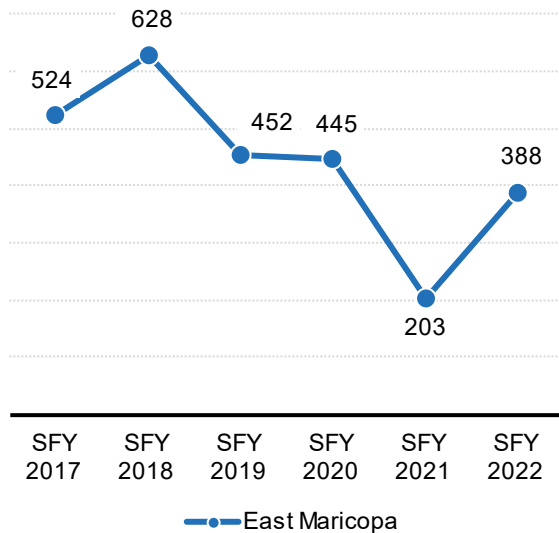
Sources: Arizona Department of Economic Security (2023). [Arizona Early Intervention Program dataset]. Unpublished data.

Note: These data reflect the Oct 1 snapshot of AzEIP services, not a cumulative total throughout the year.

Figure 45. Number of children (birth to age 5) receiving DDD services, state fiscal years 2017 to 2022

East Maricopa Region

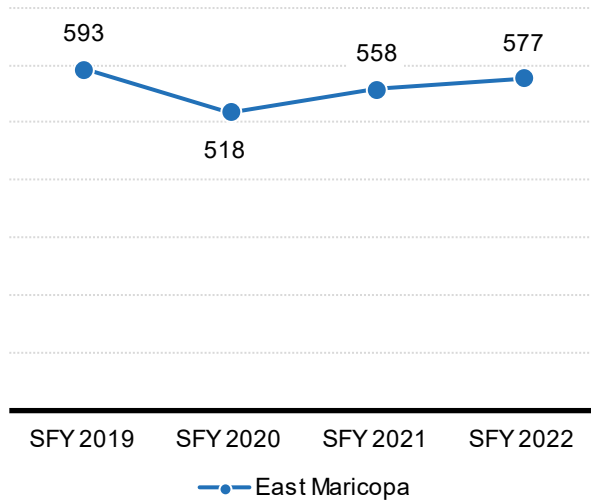
Arizona



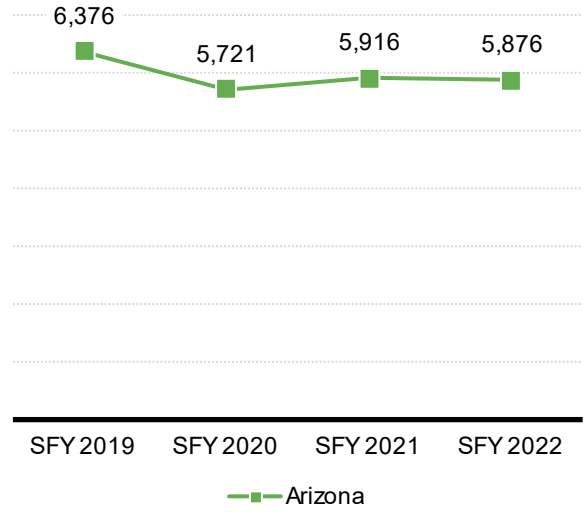
Sources: Arizona Department of Economic Security (2023). [Arizona Early Intervention Program dataset]. Unpublished data.

Figure 46. Number of children (birth to age 2) receiving AzEIP and/or DDD services, state fiscal years 2019 to 2022

East Maricopa Region



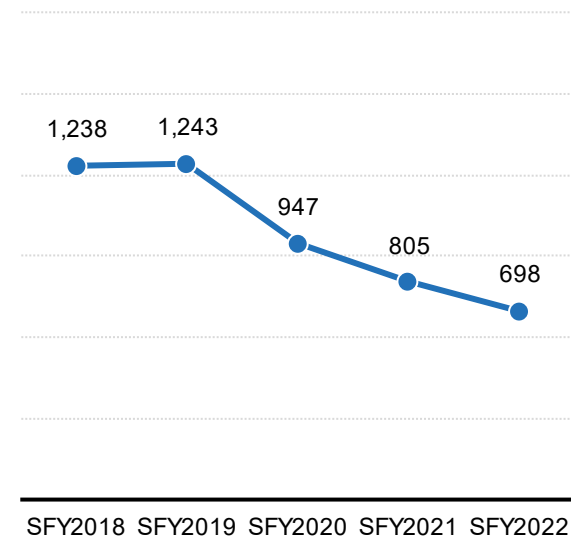
Arizona



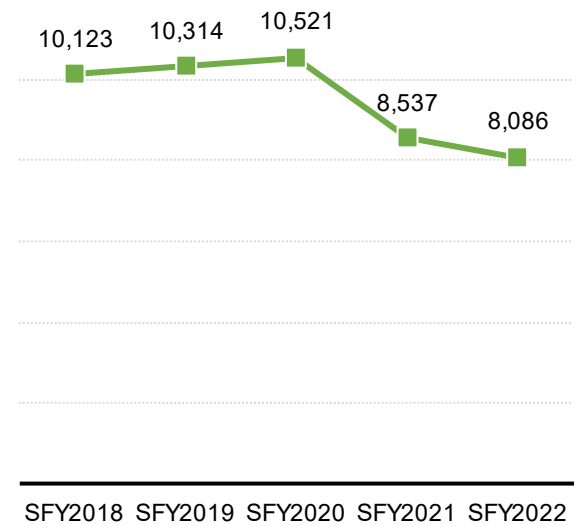
Sources: Arizona Department of Economic Security (2023). [Arizona Early Intervention Program dataset]. Unpublished data.

Figure 47. Trends in preschoolers with disabilities served by LEAs, state fiscal years 2018 to 2022

East Maricopa Region

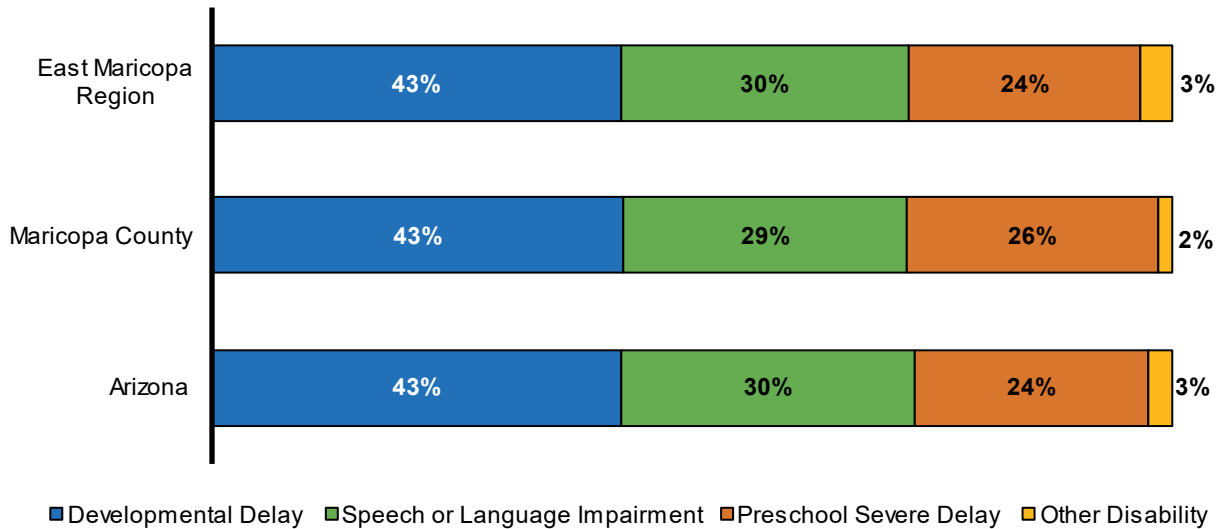


Arizona



Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Figure 48. Preschoolers with disabilities receiving services through LEAs by type of disability, state fiscal year 2022

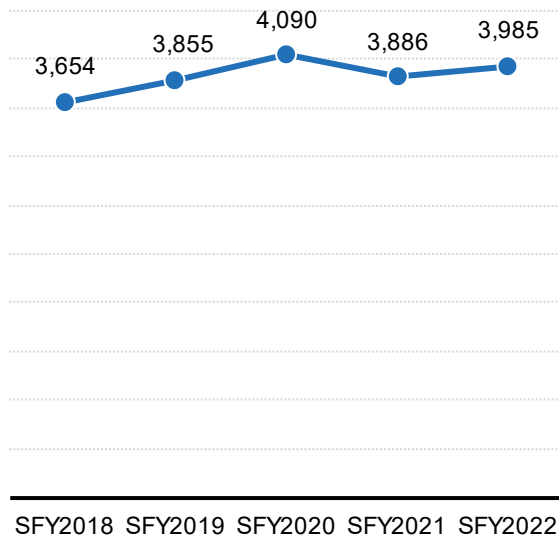


Source: Arizona Department of Education (2021). [Graduation Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

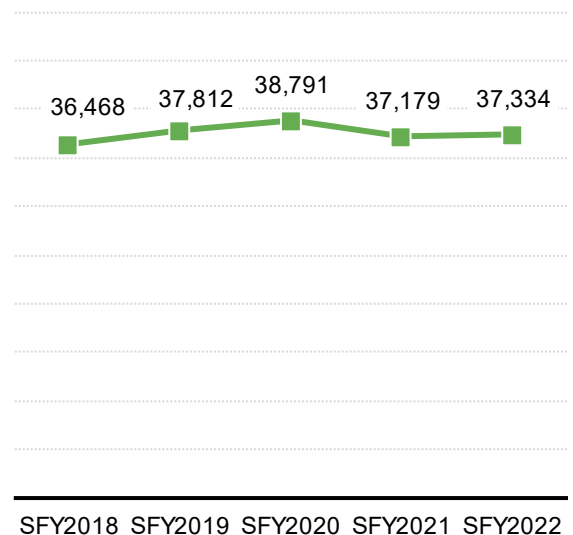
Note: The “Other Disability” includes children with hearing impairment, visual impairment, or deaf-blindness.

Figure 49. Kindergarten to 3rd grade students enrolled in special education in public and charter schools, state fiscal years 2018 to 2022

East Maricopa Region

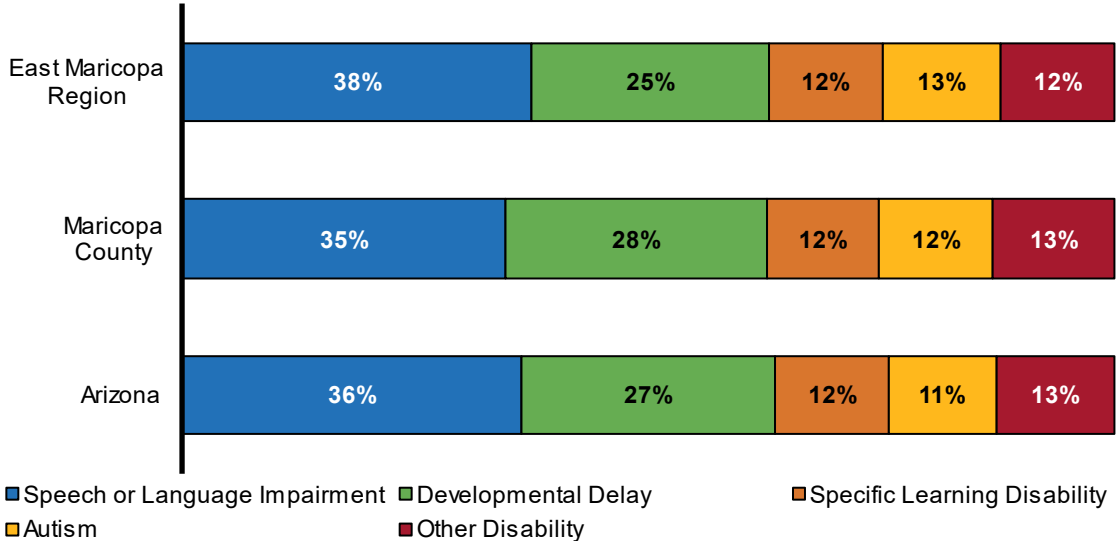


Arizona



Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Figure 50. Kindergarten to 3rd grade students enrolled in special education in public and charter schools by primary disability, state fiscal year 2022



Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: The “Other Disabilities” category includes children with emotional disturbance, deafness, deaf-blindness, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairments such as chronic medical conditions that affect a child’s ability to participate in the educational setting, traumatic brain injury, or visual impairment.

Additional data tables related to *Early Learning* can be found in Appendix 1 of this report.



CHILD HEALTH

CHILD HEALTH

Why it Matters

The physical and mental health of both children and their caregivers are important for optimal child development and well-being. Early childhood health, and even maternal health before pregnancy, has lasting impacts on an individual's quality of life.^{219, 220} Experiences during the prenatal and early childhood periods can result in lifelong impacts on immune functioning, brain development and risk for chronic diseases.^{221, 222} Poor health in childhood can also result in lower educational attainment and socioeconomic status in adolescence, adulthood and even intergenerationally.^{223, 224} Therefore, adequate access to preventive care and treatment services is vital to support a child's long-term health, development and success.^{225, 226, 227}

What the Data Tell Us

Access to health services

Health insurance coverage is an important indicator of whether families can access, afford and utilize medical care. In Arizona, children up to age 19 can enroll in health insurance through the Arizona Health Care Cost Containment System (AHCCCS), Arizona's Medicaid program. Children whose families earn too much for AHCCCS but do not earn enough to afford private health insurance may also be enrolled in KidsCare, Arizona's Children's Health Insurance Program.^{xxviii} During the COVID-19 pandemic, uninsured rates declined due to federal policies prohibiting states from disenrolling people from Medicaid.²²⁸ Despite these efforts, uninsured rates in the overall population are still high.²²⁹ One primary reason for this is perceived cost, with more than two-thirds (69.6%) of uninsured U.S. adults citing their inability to pay for health insurance as the primary reason they were uninsured.²³⁰ Families who qualify for low- or no-cost health insurance may not be aware that they qualify, or they may face administrative barriers to enrolling.²³¹

A variety of health outcomes for both mothers and infants depend on access to quality health care and support before, during and after pregnancy. Early initiation of prenatal care reduces the risk of smoking during pregnancy, pregnancy complications,^{xxix} premature births and maternal and infant mortality.^{232, 233, 234, 235, 236} Poor access to maternal health care (e.g., hospitals with labor and delivery units, birth centers and obstetric health providers) is one factor that can contribute to these outcomes.^{237, 238, 239} Black, Hispanic, American Indian and Alaska Native people experience a disproportionate lack of access to quality health care and support for their pregnancies.^{240, 241} Lack of access to this care has

^{xxviii} For more information on AHCCCS and KidsCare see: <https://www.azahcccs.gov/Members/GetCovered/Categories/KidsCare.html>

^{xxix} One such complication is congenital syphilis, where untreated maternal syphilis is passed to the fetus and can lead to stillbirth or infant death. The number of babies born in Arizona with congenital syphilis increased more than 10-fold in the last 6 years, even though congenital syphilis can be prevented with adequate prenatal care. For more information, see:

<https://www.azdhs.gov/preparedness/epidemiology-disease-control/disease-integration-services/std-control/congenital-syphilis/index.php>

contributed to considerably higher rates of low birth weight births, preterm births and maternal and infant mortality compared to non-Hispanic White Americans.^{242, 243, 244} Efforts to increase the number of women in Arizona with access to early prenatal care, such as expanding access to telehealth care and midwifery care, could improve the health outcomes of the state's mothers and babies, especially in counties with lower access to maternal health care services.²⁴⁵

How the East Maricopa Region is faring

- In the East Maricopa Region, about one in every 14 people (7%) do not have health insurance coverage, a lower proportion than across the county (11%) or state of Arizona overall (11%) (Table 24).
- Health insurance coverage for young children specifically is similar to that of the overall population in the region, with 6% of children birth to age 5 not having health insurance, but this proportion is closer to that seen across the county (7%) and state (7%) and higher than the rate nationally (4%). The proportion of young children without health insurance has slightly decreased in the region, state and across the country in recent years (Table 24 & Figure 51).
- The proportion of births in the region paid for by AHCCCS or the Indian Health Service (IHS, which covers about 1% of births in the East Maricopa Region) has decreased from 29% in 2018 to 25% in 2022. Reflecting the relatively strong economic security among families in the region, this is a much lower proportion than seen in the county or state as a whole (Figure 52).
- Mothers in the East Maricopa Region more consistently began prenatal care in the first trimester than mothers across Arizona as a whole between 2018 and 2022, with 79% in that category in the region in 2022, compared to 71% across the state. The region also had a smaller proportion of births to mothers with inadequate prenatal care over those years, with 1.1% with no prenatal care at all and 3.2% with fewer than five visits if they did have prenatal care in 2022 compared to births across the state (2.3% and 4.7% respectively) (Figure 53 & Figure 54).

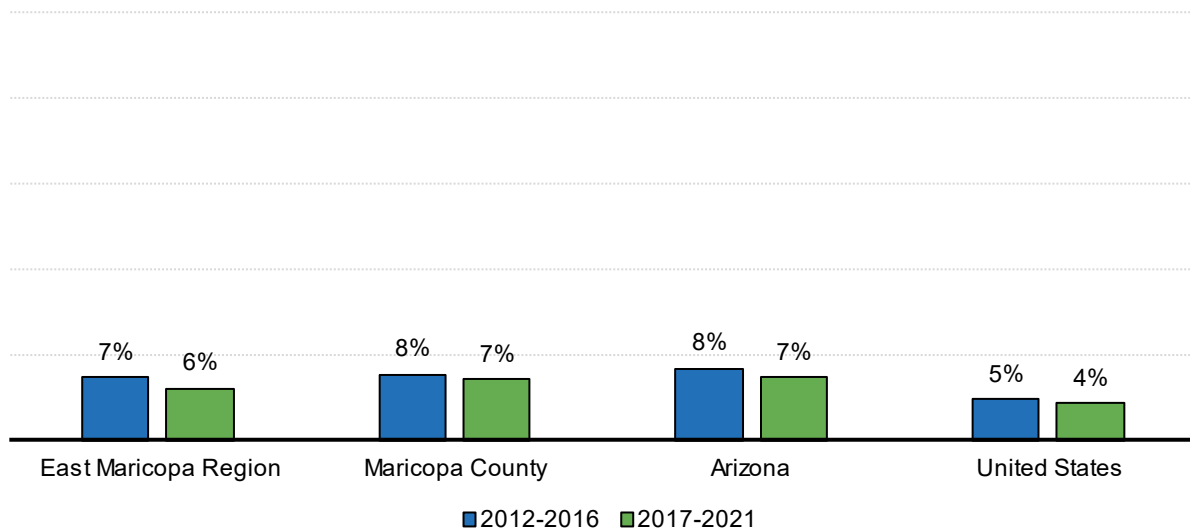
Table 24. Health insurance coverage, 2017-2021 ACS

Geography	Estimated civilian non-institutionalized population (all ages)	Without health insurance (all ages)	Estimated number of children (ages 0-5)	Without health insurance (ages 0-5)
East Maricopa Region	915,504	7%	50,708	6%
Maricopa County	4,335,169	11%	320,252	7%
Arizona	6,976,512	11%	496,410	7%
United States	324,818,565	9%	23,365,564	4%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B27001

Note: This table excludes persons in the military and persons living in institutions such as college dormitories. People whose only health coverage is the Indian Health Service (IHS) are considered "uninsured" by the U.S. Census Bureau.

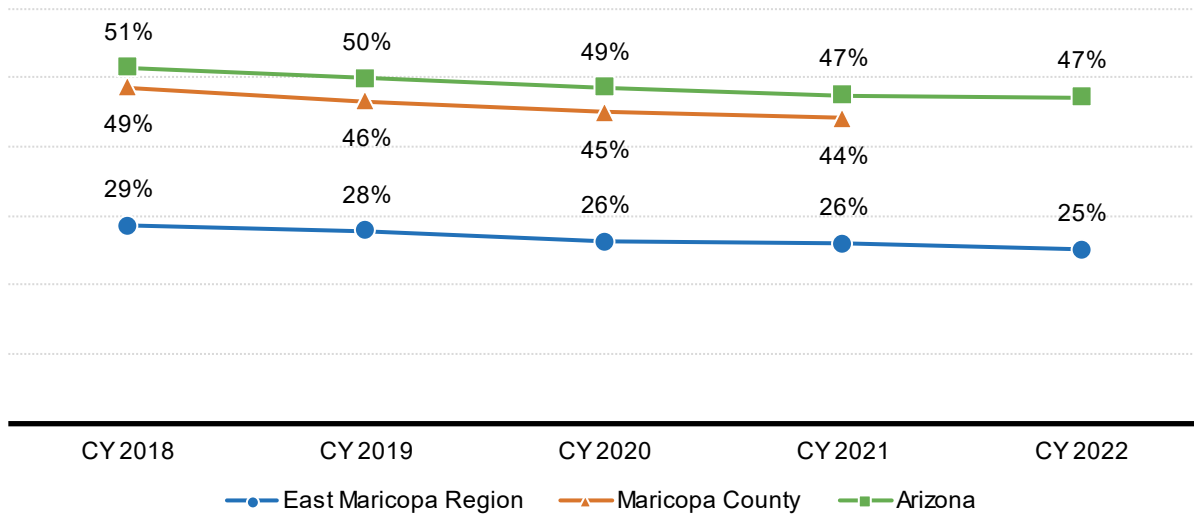
Figure 51. Children birth to age 5 without health insurance, 2012-2016 and 2017-2022 ACS



Source: U.S. Census Bureau. (2021). American Community Survey 5-year estimates 2012-2016 & 2017-2022, Table B27001

Note: This table excludes persons in the military and persons living in institutions such as college dormitories. People whose only health coverage is the Indian Health Service (IHS) are considered "uninsured" by the U.S. Census Bureau.

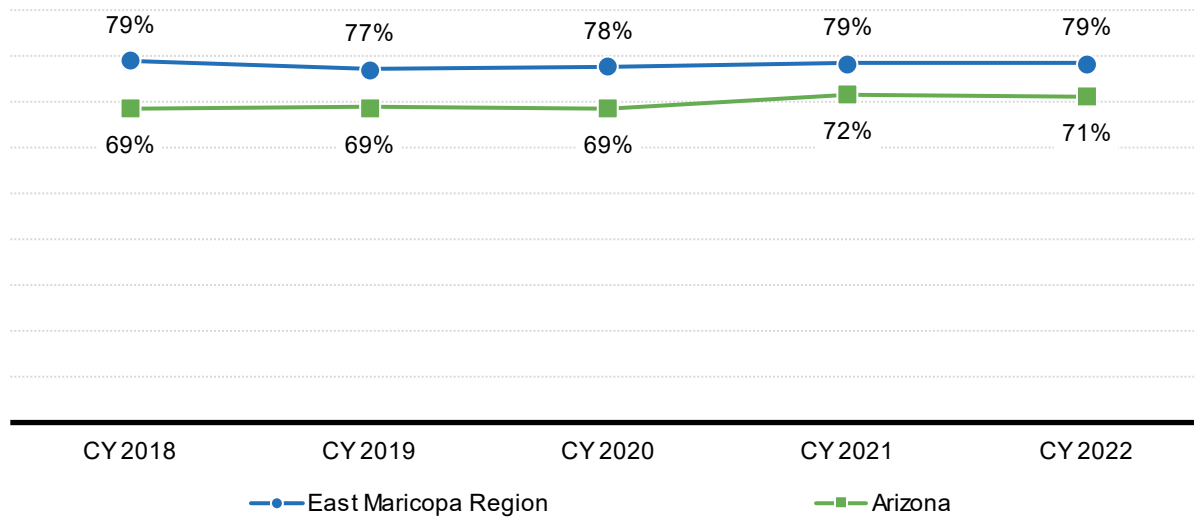
Figure 52. Births paid for by AHCCCS or IHS, 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: In the East Maricopa Region approximately 1% of births per year were paid for by IHS.

Figure 53. Births to mothers who began prenatal care in the first trimester, 2018 to 2022

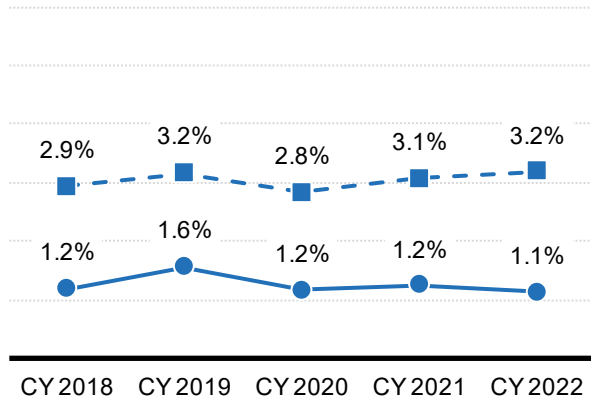


Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

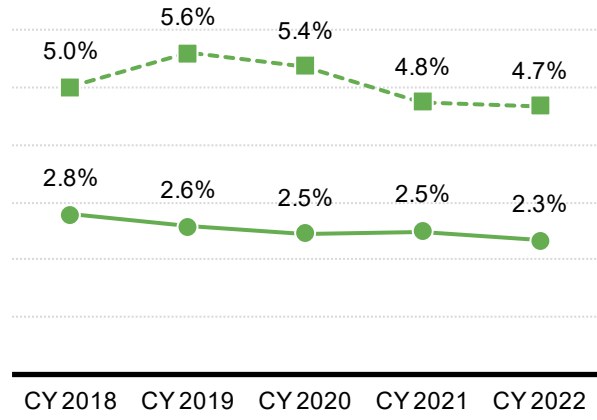
Note: Mothers of twins are counted twice in this figure.

Figure 54. Births to mothers with inadequate prenatal care, 2018 to 2022

East Maricopa Region



Arizona



—●— No prenatal care
 -■- Fewer than 5 prenatal visits

—●— No prenatal care
 -■- Fewer than 5 prenatal visits

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in these figures

Maternal age and substance abuse

Infants' immediate and long-term health can be influenced by maternal characteristics including age and substance use during or after pregnancy. For example, teenage parents often experience increased stress and hardship in comparison to older parents and other non-parent teenagers as they are less likely to complete high school or college and more likely to maintain a lower socioeconomic status and require public assistance to make ends meet.^{246, 247, 248, 249, 250}

The use of substances during pregnancy can cause negative health complications for fetuses and babies. For example, babies born to mothers who smoked cigarettes during pregnancy are more likely to be born preterm, have low birth weight, die from sudden infant death syndrome (SIDS) and have weak lungs.^{251,252} The use of opioids, whether prescribed or illicit, during pregnancy also poses health risks to developing fetuses including preterm birth, stillbirth and birth defects.²⁵³ It may also cause infants to experience withdrawal symptoms after birth, which is referred to as neonatal abstinence syndrome (NAS). Symptoms of NAS include sleep problems, seizures, poor feeding, dehydration, loose stool, sweating, tremors and vomiting. However, suddenly stopping opioid use while pregnant is also dangerous for both mothers and their fetuses, so access to knowledgeable health care providers and appropriate treatment options are vital for protecting both maternal and fetal health.²⁵⁴

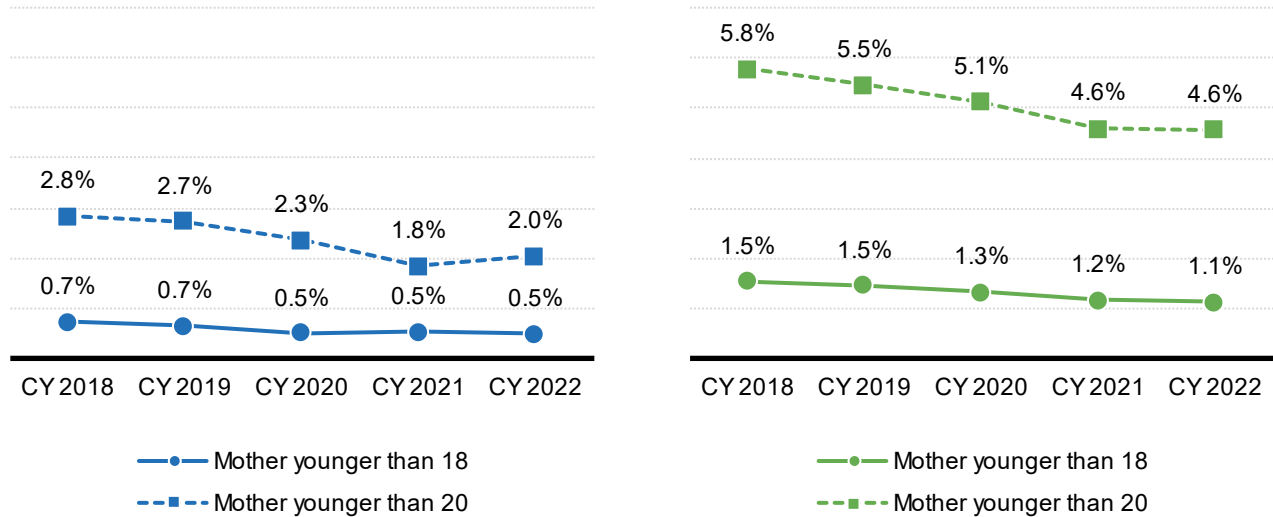
How the East Maricopa Region is faring

- The region generally saw a decrease in the proportion of births to teenaged mothers between 2018 and 2022, a pattern similar to what was seen across the state. The proportion of births to mothers under age 20 in the region fell from 2.8% in 2018 to 1.8% in 2021, rising slightly to 2.0% in 2022. The region consistently had a lower proportion of teenaged mothers than the state as a whole (Figure 55).
- The East Maricopa Region has also had a lower proportion of births to mothers who smoked cigarettes while pregnant than the state as a whole, and the proportion has been declining. In 2022, only about 1.4% of East Maricopa births were to mothers who reported smoking cigarettes while pregnant, and the region did not meet the Healthy People 2030 target of 4.3% or less (Figure 56).
- Between 2018 and 2022, 777 newborns in the region were hospitalized because of maternal drug use during pregnancy, with an average length of stay of 9.9 days (Table 25). This translates to 2.0 per 100 live births compared to 3.3 statewide.

Figure 55. Births to teenaged mothers, 2018 to 2022

East Maricopa Region

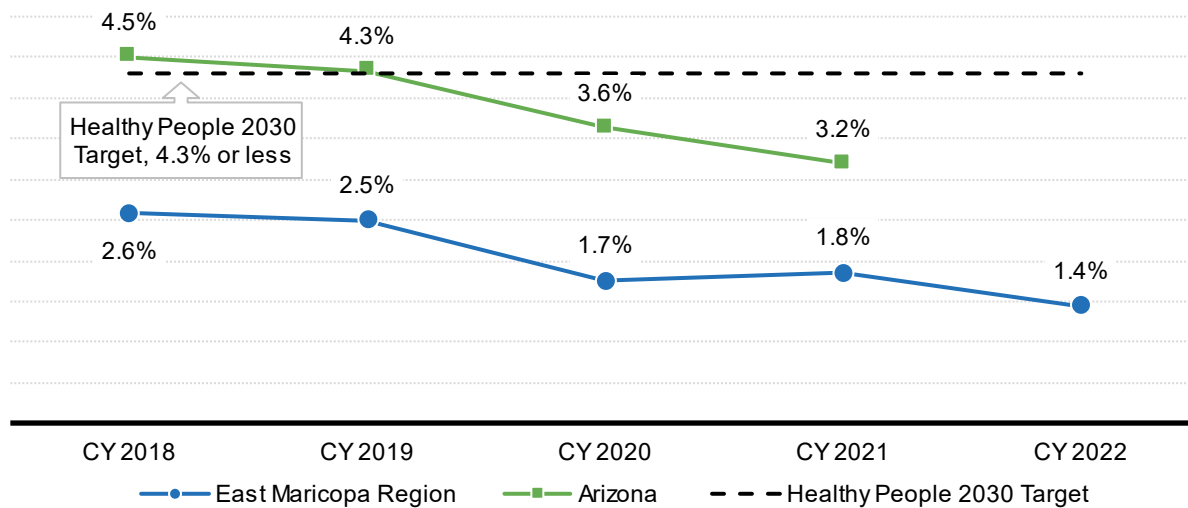
Arizona



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this figure. The Healthy People 2030 target for maternal use of tobacco during pregnancy was increased to 4.3% of females giving birth reporting smoking during pregnancy, or alternatively 95.7% of females reporting abstaining from smoking during pregnancy.

Figure 56. Births to mothers who smoked cigarettes during pregnancy, 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this figure. The Healthy People 2030 target for maternal use of tobacco during pregnancy was increased to 4.3% of females giving birth reporting smoking during pregnancy, or alternatively 95.7% of females reporting abstaining from smoking during pregnancy.

Table 25. Newborns hospitalized because of maternal drug use during pregnancy, 2018-2022 combined

Geography	Newborns hospitalized	Average length of stay (days)
East Maricopa Region	777	9.9
Maricopa County	7,717	10.0
Arizona	12,939	9.5

Source: Arizona Department of Health Services (2023). [Hospital Discharge dataset]. Unpublished data.

Note: Data on newborns hospitalizations were geocoded to FTF regions using the address provided by parents at the time of hospitalization; however, in cases where the address provided was not valid, hospitalizations could not be assigned to a region. County of residence is captured separately from addresses, meaning that counts in the county often exceed those seen in a particular region because they include all newborns regardless of address validity.

Maternal health and well-being

A pregnant woman’s health and well-being are closely linked to infant and child health and development. Gestational diabetes (i.e., diabetes that only presents during the pregnancy) increases the likelihood of an infant having low blood sugar, being born preterm, being larger than average at birth, needing to be delivered through cesarean section and even developing type 2 diabetes and cardiovascular diseases later in life.^{255, 256} Children of mothers categorized as having maternal obesity have increased risk of birth complications, asthma, diabetes, heart disease and neonatal and infant mortality.^{257, 258, 259} A variety of social determinants of health have been linked to the development of diabetes and obesity, including low socioeconomic status, employment struggles, lack of health insurance and living in rural areas with fewer resources.^{260, 261, 262, 263} Risks associated with these conditions can be reduced through increased access to maternal health care before, during and after childbirth as well as planning high-risk deliveries at hospital facilities with more resources and technical expertise.^{264, 265}

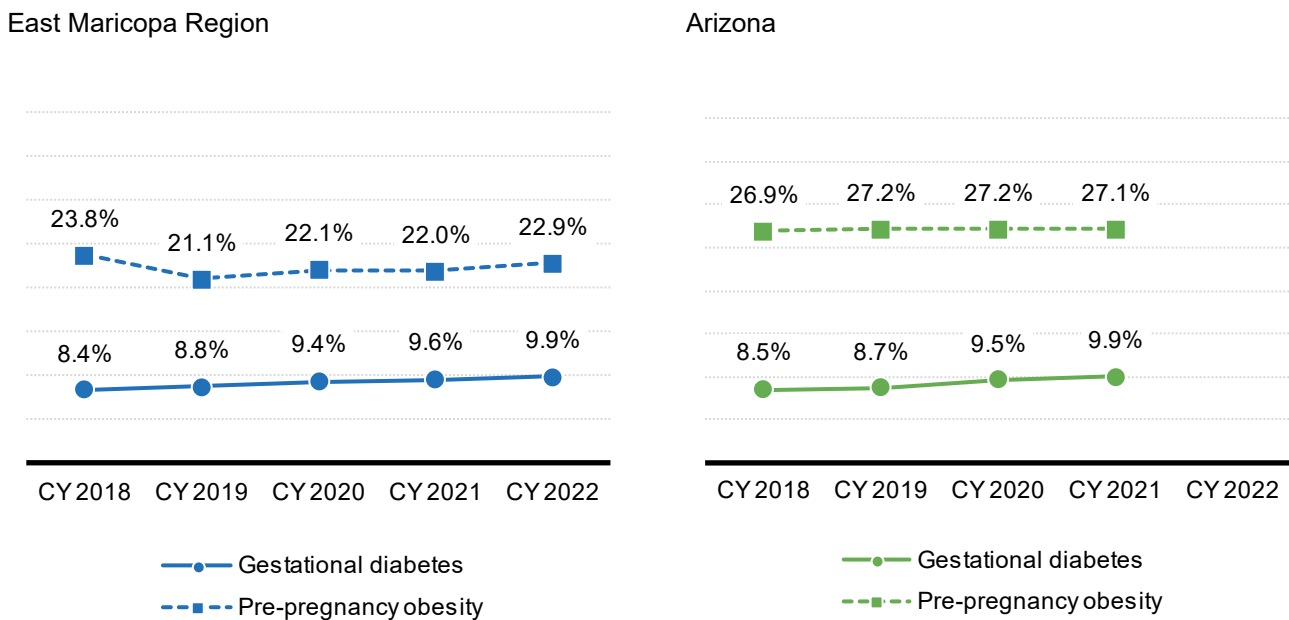
Postpartum depression has a clear link to negative outcomes in infant health and development. Untreated postpartum depression can lead to infant sleeping, eating and behavioral problems, issues with maternal and infant bonding and infant developmental delays.^{266, 267} Groups that have higher rates of postpartum depression include American Indian and Alaska Native mothers, mothers who are under age 19 and mothers who smoked during or after pregnancy.²⁶⁸ The United States Preventive Services Task Force and the American Congress of Obstetricians and Gynecologists recommend assessing mothers’ mental health both during pregnancy and after giving birth to facilitate early identification and intervention.²⁶⁹ In 2022, AHCCCS implemented a policy requiring depression screenings during prenatal and postpartum visits as well as well-child visits within the first 6 months of an infant’s life for all enrolled mothers in Arizona.²⁷⁰ Mothers who screen positively for depression must be referred to a case manager

or treatment services.²⁷¹ These screenings, as well as the ability to bill AHCCCS for the cost of screenings, will hopefully increase the likelihood that mothers experiencing postpartum depression are referred to appropriate mental health services.

How the East Maricopa Region is faring

- More than one in five births in the region and state in recent years were to mothers with pre-pregnancy obesity, with 22.9% in 2022, which is lower than the 27.1% seen statewide. The proportion of births to mothers with gestational diabetes has steadily increased in the region from 8.4% in 2018 to 9.9% in 2022, similar to the proportions across Arizona as a whole (Figure 57).
- More than one in 10 mothers in Arizona (13.7%) reported experiencing postpartum depression in 2020 according to the Pregnancy Risk Assessment Monitoring System.²⁷²

Figure 57. Births to mothers diagnosed with gestational diabetes or pre-pregnancy obesity, 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this figure. Data on gestational diabetes and pre-pregnancy obesity were not available for Arizona in 2022.

Infant health

Infants who are born preterm or at a low birth weight have a higher possibility of short- and long-term health complications. Preterm birth is defined as birth at less than 37 weeks of gestation. Risks related to preterm births include respiratory, immune, neurological, vision, hearing and intestinal developmental issues.²⁷³ Infants born preterm also have increased rates of mortality during their first 28 days to 1 year of life, longer hospitalization after birth, more health care costs and physical impairments.^{274, 275} Preterm

births are more likely among mothers who are under age 20, over the age of 35, low income, experience infections during pregnancy or engage in substance use.²⁷⁶

Low birth weight is defined as weighing less than 5 pounds and 8 ounces (2,500 grams) at birth. Babies born in this condition have a higher risk of infant mortality and long-term health problems such as diabetes, hypertension and cardiac disease.^{277, 278} Low birth weight risk factors include low maternal weight during pregnancy, preterm birth, teen pregnancy, pregnancy over the age of 35, high blood pressure, diabetes, substance use and air pollution.²⁷⁹

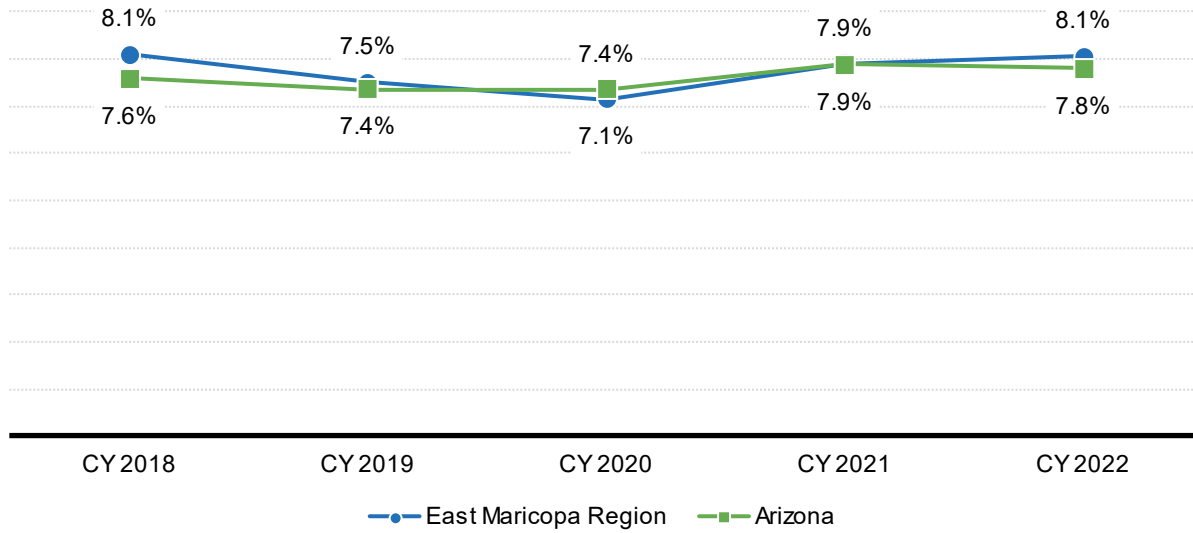
Newborns are admitted into neonatal intensive care units (NICUs) in hospitals for numerous reasons that can vary across medical providers and have implications for the short- and long-term health of babies and families.²⁸⁰ NICU stays can take a large emotional and financial toll on families, especially families living far from the hospital. Although NICU admissions may be an indicator of important health concerns in newborns, including low birth weight, they can also be a site of family-based interventions that can positively impact infant development and parent-child relationships.²⁸¹

For parents who are able to breastfeed, the American Academy of Pediatrics recommends breastfeeding infants exclusively for the first 6 months after birth, followed by a combination of breastfeeding and other foods for up to 2 years or longer.²⁸² Breastfeeding offers a variety of benefits to infants due to the nutrition and antibodies that human breast milk provides. These benefits include lowering an infant's risk of type 1 diabetes, obesity, ear infections, SIDS, asthma and gastrointestinal infections.²⁸³ Robust data on breastfeeding rates are only available for children served through the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program.

How the East Maricopa Region is faring

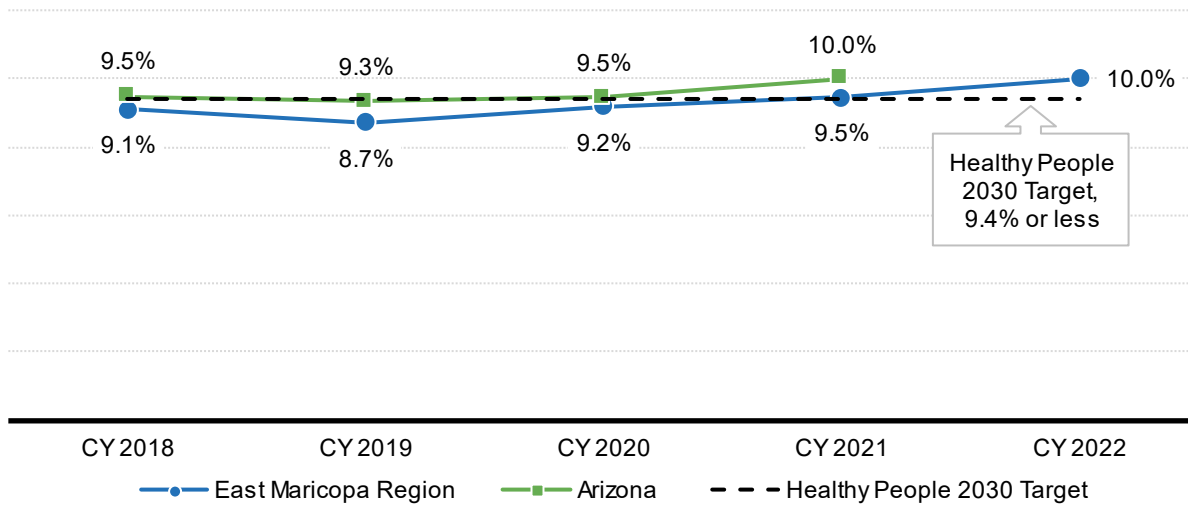
- The proportion of babies born at low birth weight have generally been similar in the region and state, with 8.1% of births considered low birth weight in the East Maricopa Region and 7.8% across Arizona in 2022 (Figure 58).
- The proportion of preterm births (less than 37 weeks gestation) has been slightly lower in the region compared to the state in recent years with the region at 9.5% and the at state 10% in 2021 (the most recent year that both data points are available). However, the proportion of preterm births in the region has been on the rise since 2019 and surpassed the Healthy People 2030 target of 9.4% of births or less in 2021 and 2022, rising to 10.0% in 2022 (Figure 59).
- Despite the increase in preterm births, births with an admission to a NICU in the region have declined over the last 5 years, dropping below the rate seen across the state in 2020. In 2022, 7.1% of births in the region had a NICU admission (Figure 60).
- In the East Maricopa Region, rates of breastfeeding were the same or slightly higher than those across the state from 2018 through 2022. In 2022, 81% of WIC-enrolled infants in the region were ever breastfed, compared to 79% statewide (Figure 61).

Figure 58. Low birth weight births (less than 2,500 grams), 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

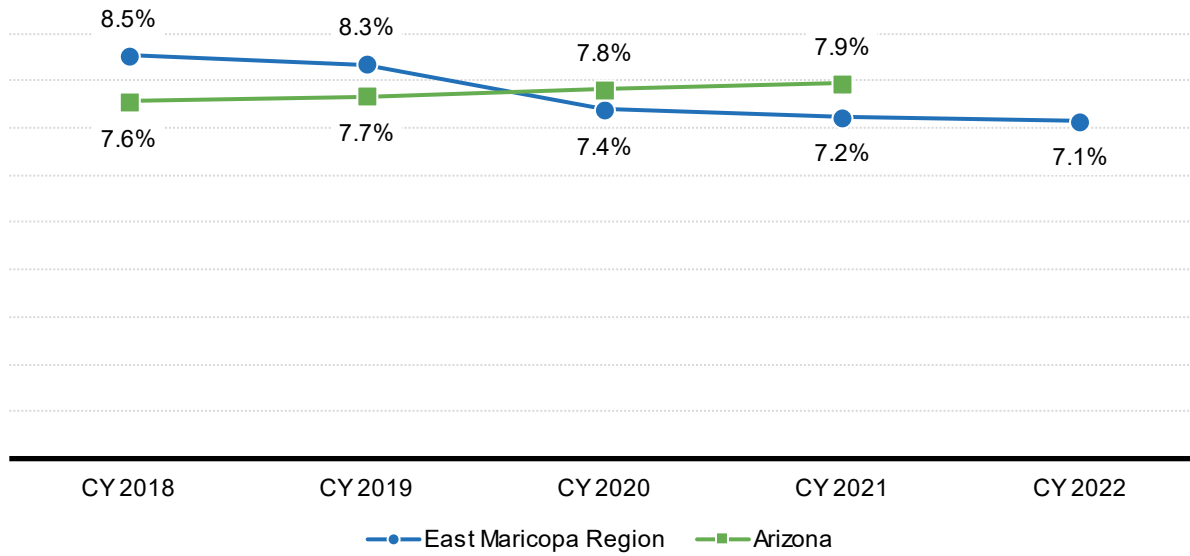
Figure 59. Preterm births (less than 37 weeks gestation), 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Data on preterm births were not available for Arizona in 2022.

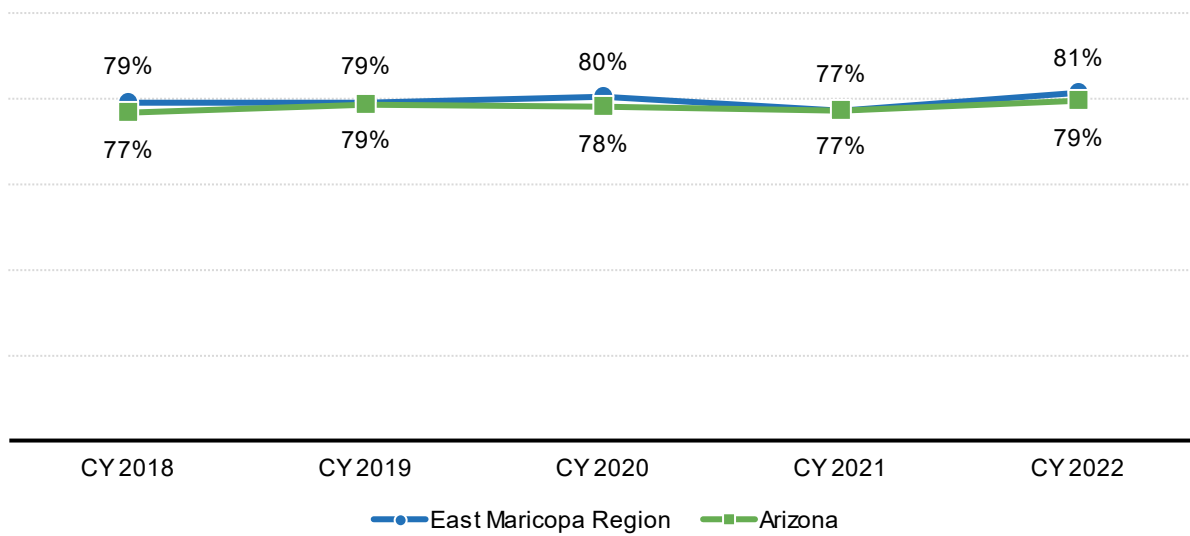
Figure 60. Births with a NICU admission, 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Data on NICU admissions were not available for Arizona in 2022.

Figure 61. Percent of WIC-enrolled infants ever breastfed, 2018 to 2022



Source: Arizona Department of Health Services (2023). [WIC dataset]. Unpublished data.

Childhood infectious disease and immunization

Immunization against preventable diseases protects both children and the surrounding community from potential illness and death. Immunization protects not only the vaccinated person but also individuals who are unable to be vaccinated, through “community immunity.”²⁸⁴ In order to attend state-licensed child care programs and public or charter schools, children are required to receive specific vaccinations or obtain an official exemption, which can be requested for medical, personal or religious reasons.²⁸⁵ Statewide and nationally, childhood immunization rates have been declining in recent years. The COVID-19 pandemic exacerbated disparities in health care access, including routine immunizations, that specifically impacted children who are Black, Hispanic, low-income, live in rural areas or lack health insurance.²⁸⁶ National survey data from the Pew Research Center also show that declining childhood immunization rates, particularly for measles, mumps and rubella (MMR), can be linked to parents' shifting attitudes towards vaccines. While the majority of U.S. parents continue to express confidence in the value of childhood vaccination for MMR, a sizable proportion expressed concerns about the necessity of vaccines and showed declining support for vaccine requirements for children to attend public schools.²⁸⁷

Respiratory syncytial virus (RSV) and influenza (flu) are leading causes of serious illness in young children, and following the start of the COVID-19 pandemic in 2020, recent flu and RSV seasons have been more severe nationwide.^{288, 289} RSV is the most frequent cause of hospitalization in children under 1 year of age.²⁹⁰ In 2023, two new preventative therapies for RSV were approved—a single-dose antibody medication for infants, and an adult immunization for pregnant people administered in the third trimester of pregnancy.^{291, 292} These new treatments have the potential to prevent severe illness in infants and young children, but shortages of the antibody medication have led the Centers for Disease Control and Prevention (CDC) to recommend prioritizing access for the highest-risk infants. This includes infants under 6 months of age, those with underlying health conditions such as lung or heart disease and American Indian or Alaska Native infants under 8 months of age, as well as older American Indian or Alaska Native infants who live in remote areas with limited access to health care facilities.²⁹³ The flu can also cause serious illness in young children under age 5, particularly for children birth to age 2, who are the most likely to be hospitalized with flu complications.²⁹⁴ The American Academy of Pediatrics recommends that all children ages 6 months and older be vaccinated against influenza each year.²⁹⁵

How the East Maricopa Region is faring

- Across all required immunizations, children in child care in the East Maricopa Region had slightly lower vaccination rates (DTaP^{xxx} 88.8%; Polio 90.3%; MMR 91.0%) than the state as a whole (DTaP 90.6%; Polio 92.2%; MMR 93%) in the 2022-23 school year. The East Maricopa Region also failed to meet the Healthy People 2030 DTaP immunization target of 90%, which the state met (Table 26).

^{xxx} The DTaP vaccine immunizes against Diphtheria, Tetanus and Pertussis.

- The proportion of children in child care receiving immunization exemptions has been higher in the region than the state since the 2018-19 school year. In the 2022-23 school year, 4.2% of students in the region in child care were exempt from all immunizations (Figure 62).
- For kindergarteners, vaccination rates are consistently slightly higher in the region than the county or state. Both the region and state however, failed to meet the Healthy People 2030 kindergarten MMR immunization target of 95% (Table 27). These immunization rates may be too low to assure community immunity of preventable infectious diseases. For measles, for example, 95% of children need to be vaccinated to create herd immunity in order to protect communities and achieve and maintain measles elimination.²⁹⁶
- The East Maricopa Region has consistently had higher rates of children in kindergarten receiving personal belief exemptions than the state. During the 2022-23 school year, 8.2% of children in kindergarten received a personal belief exemption in the East Maricopa Region compared to 7.3% of children statewide. However, personal belief exemption rates have steadily climbed in the state since 2020-21, whereas the region seems to have plateaued. In both the state and the region, medical exemptions from immunizations are much less common than personal belief exemptions (Figure 63).
- The pattern of confirmed and probable cases of RSV and influenza in young children birth to age 5 were similar in both the region and state with an increase in RSV cases since 2020, but a marked decrease in influenza in 2021, followed by a steep increase. In 2022, there were 530 cases of RSV and 456 cases of influenza in young children in the region, the highest numbers since 2019 (Figure 64).

Table 26. Children in child care with selected required immunizations, 2022-23

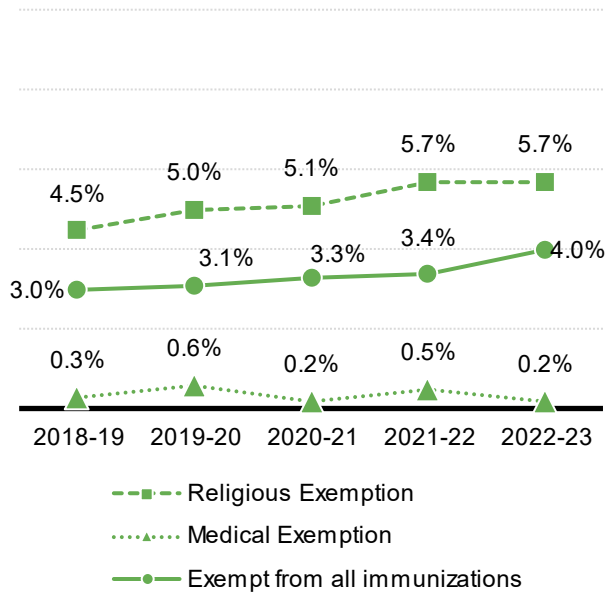
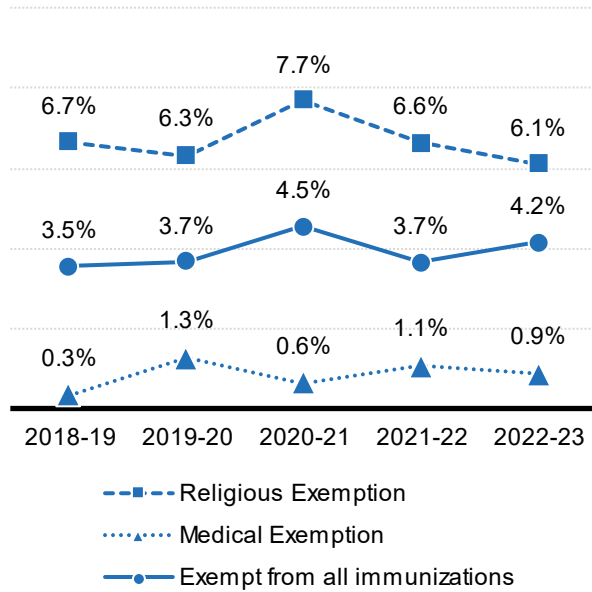
Geography	Number Enrolled	DTaP	Polio	MMR	Religious exemption	Medical exemption	Exempt from every required vaccine
East Maricopa Region	12,346	88.8%	90.3%	91.0%	6.1%	0.9%	4.2%
Maricopa County	47,152	89.6%	91.2%	92.1%	6.5%	0.2%	4.3%
Arizona	70,690	90.6%	92.2%	93.0%	5.7%	0.2%	4.0%
Healthy People 2030 targets		90.0%					

Source: Arizona Department of Health Services (2023). *Childcare Immunization Coverage, 2022-23 School Year*. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). *Childcare Immunization Coverage by County, 2022-23 School Year*. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Figure 62. Child care immunization exemption rates, 2018-19 to 2022-23

East Maricopa Region

Arizona



Source: Arizona Department of Health Services (2023). Childcare Immunization Coverage, 2018-19 to 2022-23 School Years. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). Childcare Immunization Coverage by County, 2018-19 through 2022-23 School Years. Retrieved from: <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Table 27. Kindergarteners with selected required immunizations, 2022-23

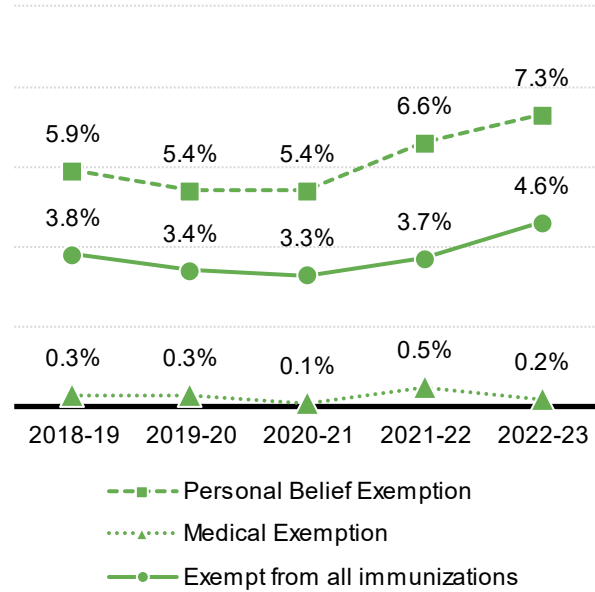
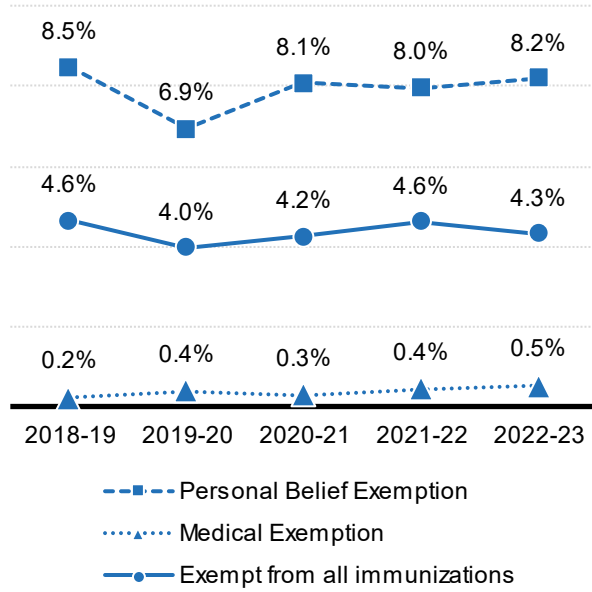
Geography	Number Enrolled	DTaP	Polio	MMR	Personal belief exemption	Medical exemption	Exempt from every required vaccine
East Maricopa Region	8,758	90.5%	90.6%	90.4%	8.2%	0.5%	4.3%
Maricopa County	52,553	89.3%	90.1%	89.8%	8.0%	0.2%	4.8%
Arizona	78,937	89.6%	90.3%	89.9%	7.3%	0.2%	4.6%
Healthy People 2030 targets				95.0%			

Source: Arizona Department of Health Services (2023). Kindergarten Immunization Coverage, 2022-23 School Year. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). Kindergarten Immunization Coverage by County, 2022-23 School Year. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Figure 63. Kindergarten immunization exemption rates, 2018-19 to 2022-23

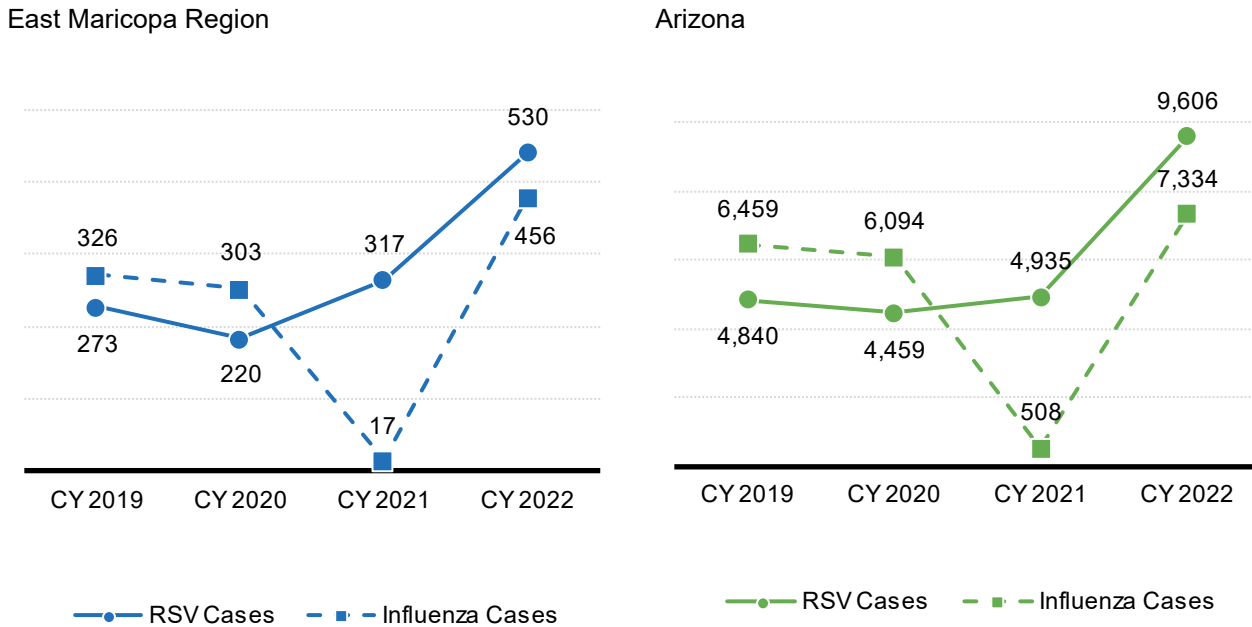
East Maricopa Region

Arizona



Source: Arizona Department of Health Services (2023). Kindergarten Immunization Coverage, 2018-19 to 2022-23 School Years. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). Kindergarten Immunization Coverage by County, 2018-19 through 2022-23 School Years. Retrieved from: <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Figure 64. Confirmed and probable cases of infectious diseases in children birth to age 5, 2019 to 2022



Source: Arizona Department of Health Services (2023). [FTF VPD Flu RSV dataset]. Unpublished data.

Note: In 2022, there were 172 influenza cases and 173 RSV cases

Infant and child hospitalization and mortality

Infant mortality refers to the death of infants under 1 year of age. Some of the most common causes of infant mortality in Arizona and the U.S. include congenital abnormalities, low birth weight, preterm birth, pregnancy complications, SIDS and unintentional injuries.^{297, 298, 299} According to provisional CDC data, infant mortality increased between 2021 and 2022 by 3% nationally, 13% in Arizona for all infants, and 21% for American Indian or Alaska Native infants nationwide, the highest increase seen for any group.³⁰⁰ In addition to increasing, the infant mortality rates for American Indian or Alaska Native (9.1 deaths per 1,000 live births) and Black infants (10.9) were also notably higher than White (4.5) or Hispanic (4.9) infants in 2022, racial disparities that have been linked to maternal care deserts, which are particularly prevalent on tribal lands.³⁰¹ This indicates a serious need to increase access to timely prenatal care, newborn screening and home visiting programs in rural and tribal areas to begin to reduce infant mortality rates.³⁰²

The leading cause of death for children birth to age 17 in the United States is unintentional injuries.³⁰³ The most prevalent accidental injuries are car crashes, drowning, falls, suffocation, fires and poisoning.³⁰⁴ Death from unintentional injuries is more common in children living in rural areas, as well as among American Indian and Alaska Native children.^{305, 306} Increased awareness and safety precautions have helped reduce childhood deaths in the last decade, including child swimming lessons,

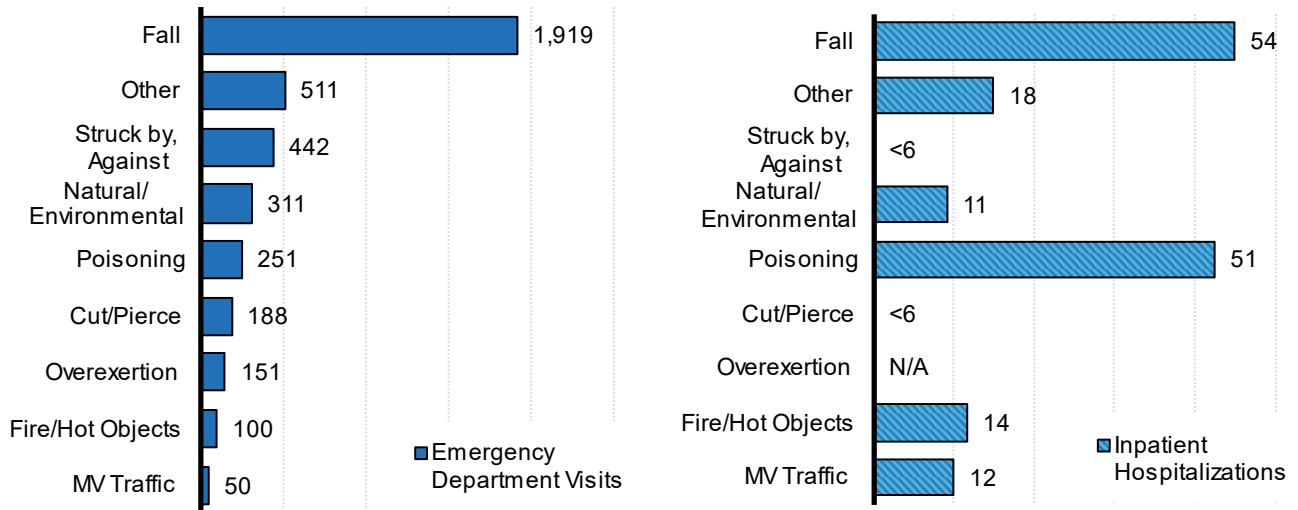
proper infant sleeping position, installing smoke detectors, keeping medications out of reach, practicing gun safety and utilizing seatbelts and helmets.³⁰⁷

How the East Maricopa Region is faring

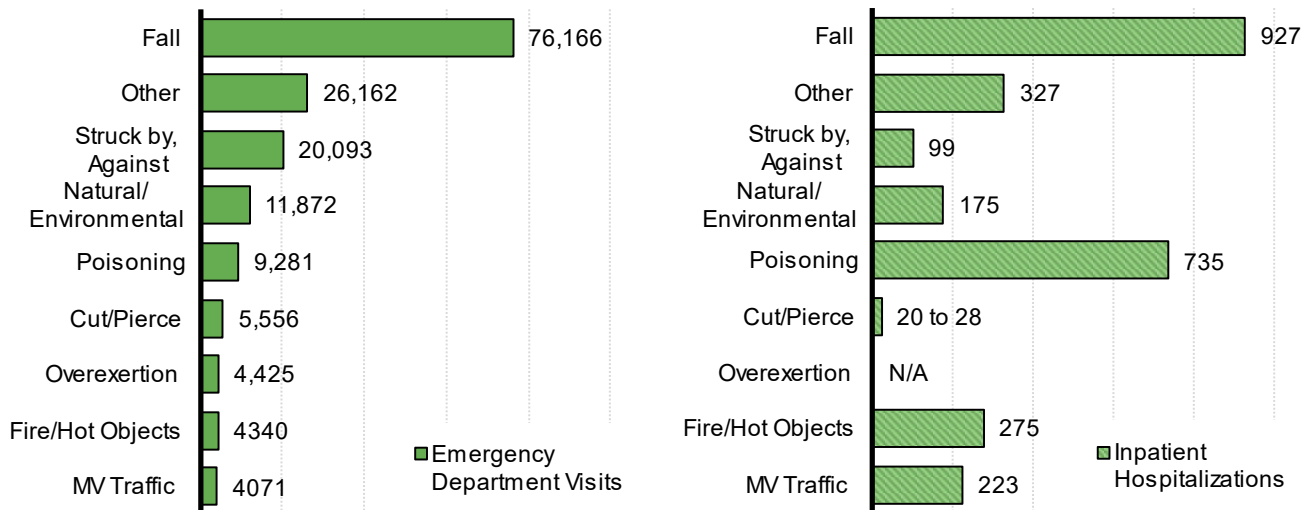
- Falls were the most common unintentional injuries that led to emergency department visits for children under 5 in both the region and the state between 2016 and 2020, followed by ‘other’ injuries or being ‘struck by or against’ an object or person. During those years, there were 1,919 emergency department visits due to falls in the region, 511 for other reasons, and 442 due to being struck. The pattern of injuries prompting inpatient hospitalizations was also generally similar between the region and state, with falls being most common followed by poisonings. Between 2016 and 2020, 54 young children in the region were hospitalized due to a fall and 51 due to poisoning (Figure 65).
- Between 2019 and 2021, the infant mortality rate was lower in the East Maricopa Region (4.5 deaths per 1,000 live births), than across the state (5.4); the region met the Healthy People 2030 target of 5.0 or less (Figure 66).
- Between 2018 and 2021, 255 children birth to age 17 died in the East Maricopa Region. One in five deaths (20%) were due to congenital malformations, with accidents being the second most common cause of death (16%). Across the state, these two causes of death were also the two leading causes of death of children under 18, but in reverse (15% and 20%, respectively). The third leading cause of death in the region was low birth weight (10%), followed by intentional harm or suicide accounting for 6% of deaths (Figure 67).

Figure 65. Non-fatal hospitalizations and emergency department visits due to unintentional injuries for children birth to age 4 by selected mechanism of injury, 2016-2020 combined

East Maricopa Region

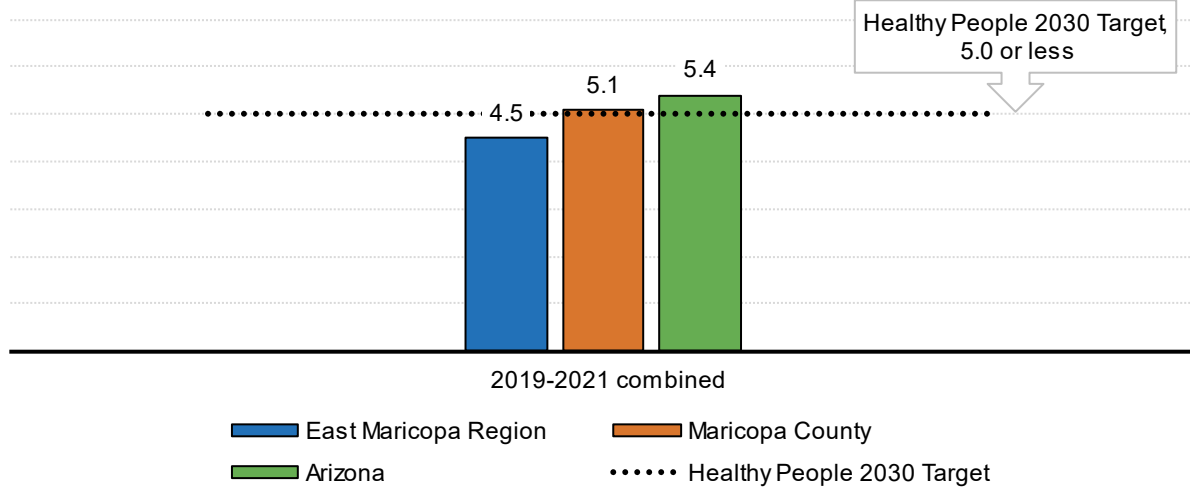


Arizona



Source: Arizona Department of Health Services (2023). [Hospital Discharge dataset]. Unpublished data.

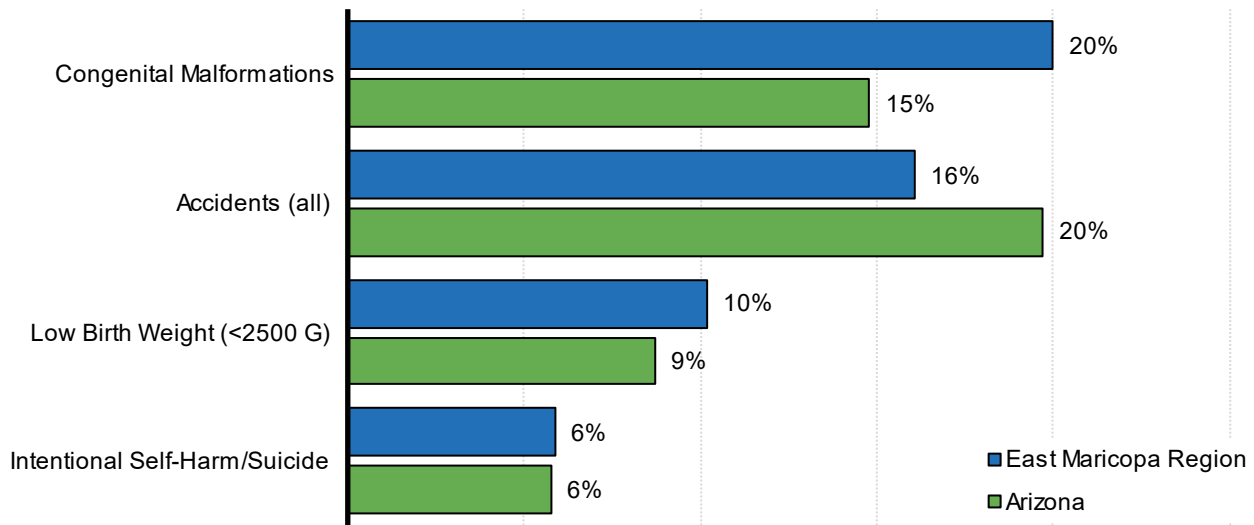
Figure 66. Infant mortality rates, 2019-2021 combined



Source: Arizona Department of Health Services (2023). [Vital Statistics Mortality Report dataset]. Unpublished data.

Note: The infant mortality rate is the number of infant (under age 1) deaths per 1,000 live births.

Figure 67. Leading causes of death for children birth to age 17, 2018-2021 combined



Source: Arizona Department of Health Services (2023). [Vital Statistics Mortality Report dataset]. Unpublished data.

Note: The leading causes of child death in Arizona are accidents (20%), congenital malformations (15%), low birthweight (9%), intentional self-harm/suicide (6%), and cancer/malignant neoplasms (5%). Causes of death in this figure are ordered by the leading causes of death in the region. No other cause of death caused more than 5 child deaths between 2018 and 2021.

Additional data tables related to *Child Health* can be found in Appendix 1 of this report.



FAMILY SUPPORT AND LITERACY

FAMILY SUPPORT AND LITERACY

Why it Matters

Children’s long-term well-being and success is tied to their relationships and experiences with their caregivers. Adverse childhood experiences (ACEs) refer to childhood experiences of abuse, neglect and other life events that can negatively impact children’s immediate and long-term well-being.^{xxxii,308} ACEs have been associated with negative effects on development, educational achievement, future employment, mental health, drug and alcohol use and overall increased health care utilization.^{309, 310, 311} ACEs are more prevalent among Arizona children with special health care needs and children living in poverty.³¹²

Social, physical, academic and economic outcomes are positively influenced by healthy relationships and interactions with family members and caregivers during childhood.^{313, 314, 315, 316, 317} An understanding of, and ability to utilize, positive parenting skills is an important protective factor that reduces the likelihood of abuse and neglect, leading to better childhood and long-term outcomes.³¹⁸ Positive Childhood Experiences (PCEs), including positive parent-child relationships and feelings of safety and support, have been shown to have positive long term impacts on mental and relational health.³¹⁹ Even if children have experienced multiple ACEs, if their families show high levels of resilience and connection (e.g., working together to solve problems, staying hopeful in difficult times and talking together about things that matter to their family) they show higher rates of flourishing, characterized by healthy social and emotional development and an open and engaged approach to learning.³²⁰ These higher flourishing scores coupled with higher ACE scores point to the reality that childhood flourishing can, and does, exist amid adverse experiences and can potentially help mitigate their negative health effects.³²¹ Supporting families with the knowledge and skills to promote resilience and connection can therefore be critical for ensuring children’s long-term well-being.

What the Data Tell Us

Early literacy

Parents and families can play an important role in promoting early academic skills. When families read, sing and tell stories together, it can help young children develop reading and writing fluency as well as their capacity for reading comprehension.^{322, 323, 324} Literacy practices at home have also been found to increase children’s motivation to learn.³²⁵ These early literacy skills are important because they are linked to durable outcomes including elementary school performance and overall educational achievement.³²⁶

^{xxxii} ACEs include eight categories of traumatic or stressful life events experienced before the age of 18 years. The eight ACE categories are sexual abuse, physical abuse, emotional abuse, household adult mental illness, household substance abuse, domestic violence in the household, incarceration of a household member, and parental divorce or separation.

Some families may face challenges to implementing literacy practices with their young children, especially when they are low-resourced. Barriers include being unfamiliar with child development benchmarks, having limited free time to spend with children and lower access to books in the home.³²⁷ Community programs, family resource centers, home visitation and larger-scale initiatives can help caregivers implement home-based literacy practices to improve children’s reading scores. Recognizing the influence caregivers can have, the American Academy of Pediatrics suggests that pediatricians provide information to families about the benefits of early literacy practices. Doctor’s offices and other community locations are also places where initiatives like Read on Arizona and Reach Out & Read may provide books and other materials that families can bring home.³²⁸

Substance use disorders

Parental substance use has major implications for children’s health and well-being. Children of parents with substance use disorders are frequently referred to child welfare services due to neglect or abuse and face a higher risk of later mental health and behavioral health issues, including developing substance use disorders themselves.^{329, 330} Access to treatment for substance use disorders and supports for parents and families grappling with these issues can help ameliorate the short and long-term impacts on young children.^{331, 332}

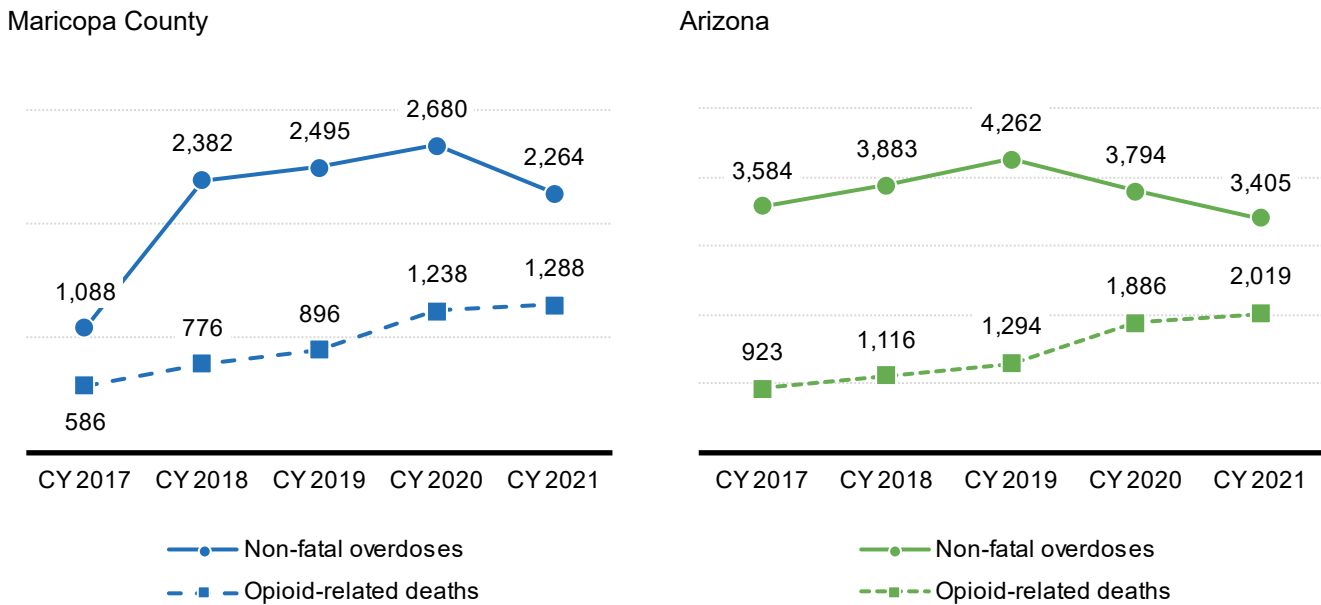
How the East Maricopa Region is faring

- The number of opioid-related deaths has risen steadily across the county and state in recent years. In Maricopa County, deaths more than doubled, from 586 in 2017 to 1,288 in 2021, the most recent year of data. The county also had thousands of non-fatal overdoses each year, climbing from 1,088 in 2017 to 2,264 in 2021 (Figure 68). To help address opioid addiction, the state of Arizona has made three resources available in recent years; the Opioid Assistance and Referral^{xxxii} line launched in 2018, no cost availability of naloxone (also called Narcan, a medication that rapidly reverses opioid overdose) to many organizations across the state through the Arizona Department of Health Services (ADHS) and access to naloxone without a prescription at pharmacies.

^{xxxii} For more information, please see <https://www.azdhs.gov/oarline/>

^{xxxiii} For more information, please see <https://www.azdhs.gov/opioid/index.php#naloxone>

Figure 68. Number of non-fatal overdoses with opioids or opiates contributing to the overdose and opioid-related deaths, 2017 to 2021



Source: Arizona Department of Health Services (2021). [Opioid-related vital statistics dataset]. Unpublished data.

Child removals

In situations where the harm in remaining with their family is determined to be too great to a child, they may be removed from their home, either temporarily or permanently. Since 2014, the number of children removed from their home by the Arizona Department of Child Safety (DCS) was nearly cut in half, from 12,162 children (birth to age 17) in 2014 to 6,689 in 2022.^{333, 334, 335} This major reduction in removals is tied to multiple intentional efforts by DCS over the past decade to improve Arizona’s child welfare system and safely reduce the number of children in foster care.^{336, 337, 338}

One notable effort was the work to better define instances of neglect and reduce unnecessary investigations of families. After a 2015 review found that DCS hotline staff lacked clear guidelines for determining cases of neglect, DCS provided coaching for hotline staff and developed an improved decision-making protocol with clearer guidance. This resulted in screened-in cases declining from 70% to 55%.³³⁹

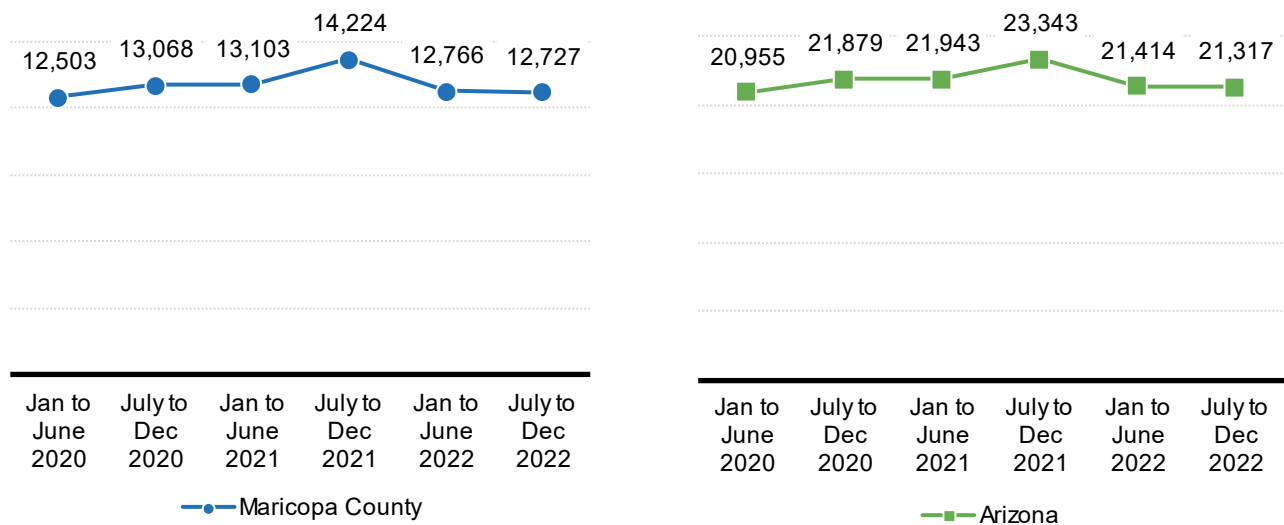
In March 2022, Arizona also passed legislation (SB 1050) which created a stricter definition of ‘neglect,’ reducing the risk that children are separated from their families simply for living in poverty.^{340, 341} Despite removals declining, Black and American Indian children continue to be overrepresented in the DCS system. Addressing this disproportionality of Black and American Indian children in the DCS system is another area of targeted effort by the agency. In June 2023, Mathematica published the Arizona Department of Child Safety Next Event Study, which aimed to identify disparities in DCS engagement and provide recommendations to further reduce unnecessary investigations and

removals.³⁴² DCS has developed several strategic initiatives to reduce these disparities, including implementing standardized training for staff and increasing involvement of family and community members in decision-making processes.³⁴³

How the East Maricopa Region is faring

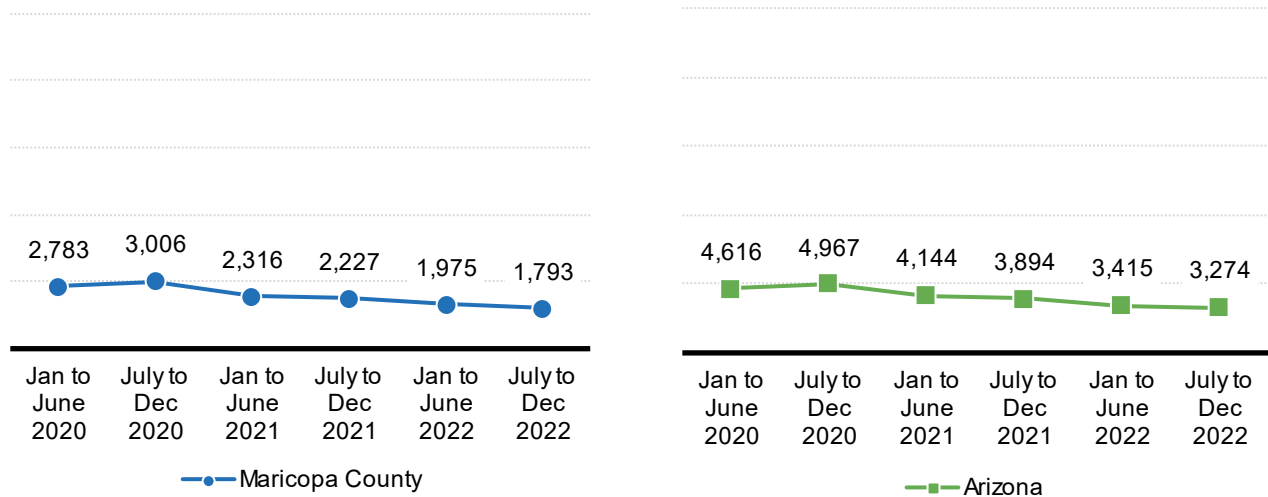
- In Maricopa County, the number of child abuse and neglect reports assigned for investigation by DCS has been around 13,000, going from a low of 12,503 in the first half of 2020 to a high of 14,224 in the second half of 2021 (Figure 69).
- The number of children under 18 removed by DCS decreased overall in the region and across the state between January 2020 and December 2022. Nonetheless, 1,793 children were removed by DCS in Maricopa County in the last six months of 2022. Neglect was the most common type of substantiated maltreatment during this period in both the region (67%) and state (71%), followed by physical abuse (26% and 24% respectively) (Figure 70 & Figure 71).

Figure 69. Child abuse and neglect reports (for children birth to age 17) assigned for investigation by DCS, Jan 2020 to Dec 2022



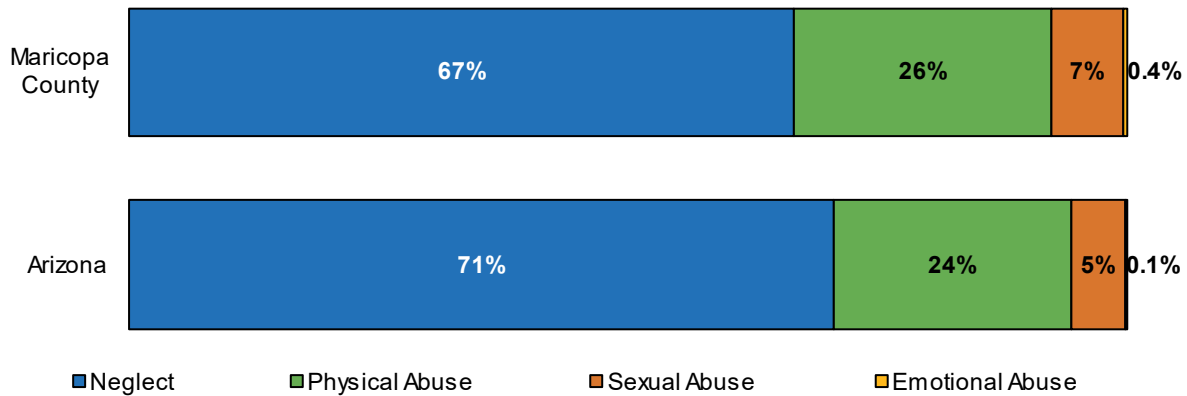
Source: Department of Child Safety (2023). *Semiannual child welfare reports, Sept 2020 to March 2023*. Retrieved from <https://dcs.az.gov/reports>

Figure 70. Children birth to age 17 removed by DCS, Jan 2020 to Dec 2022



Source: Department of Child Safety (2023). Semiannual child welfare report, March 2023. Retrieved from <https://dcs.az.gov/reports>

Figure 71. Substantiated maltreatment reports by type for children birth to age 17, July-Dec 2022



Source: Department of Child Safety (2023). Semiannual child welfare report, March 2023. Retrieved from <https://dcs.az.gov/reports>

Note: Statewide, 0.1% of substantiated maltreatment reports (fewer than 5 in the given time period) were due to emotional abuse.

Foster care

The Family First Prevention Services Act, signed into federal law on February 9, 2018, aims to ensure children are placed in the least restrictive, most family-like setting appropriate to their unique needs when foster care is needed. One effect of the Family First Prevention Services Act has been an increased focus on kinship placements, which are placements of children with relatives or close family friends.³⁴⁴

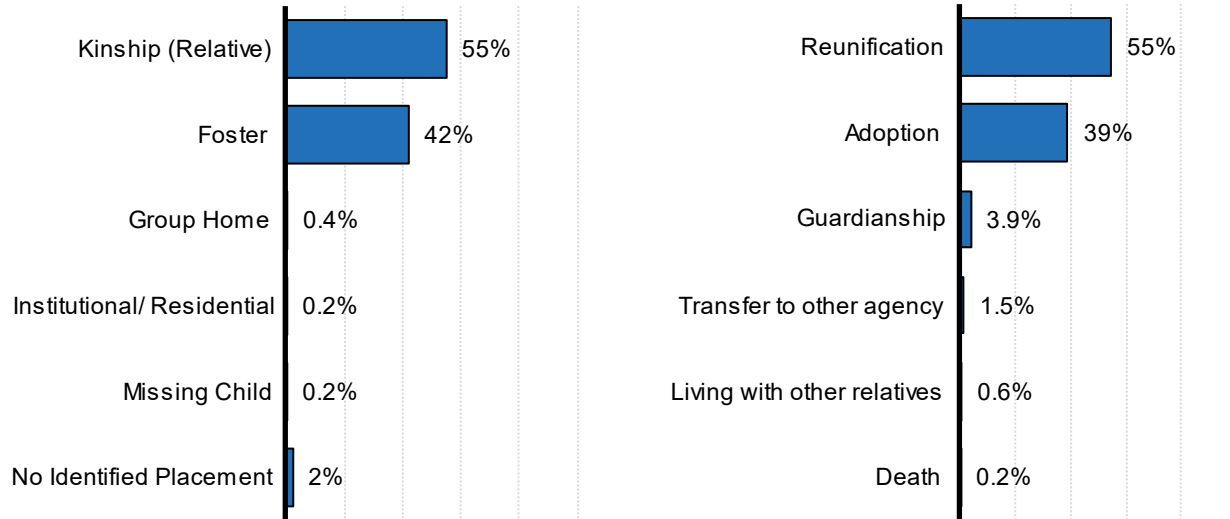
In recent years, the number of unlicensed kinship homes has even exceeded the number of foster homes in the state. This increase is likely related to several changes at DCS, including efforts to reduce barriers to licensure (e.g., waiving some fingerprint clearance card requirements) and funds to assist kinship caregivers with meeting licensing requirements (e.g., purchasing car seats). Additionally, an increase in the monthly kinship stipend (from \$75/month to \$300/month) for unlicensed kinship homes can help support relatives, such as grandparents, who are caring for children even if they are not currently able to pursue becoming a licensed foster home.³⁴⁵

How Arizona is faring

- In the last six months of 2022, more than half (55%) of young children birth to age 5 placed in out-of-home care by DCS across Arizona were able to remain with family through a kinship placement. Children in DCS custody most often exited out-of-home care to be reunified with their parents (55%) or adopted (39%) (Figure 72).
- The number of licensed kinship foster homes in Arizona steadily declined between 2018 and June 2022, though there was an uptick again in the later half of 2022. Generally, fewer than one in five kinship homes are licensed, and the number of unlicensed kinship homes increased slightly overall during the same period and overtook the number of community foster homes during the pandemic (Figure 73).

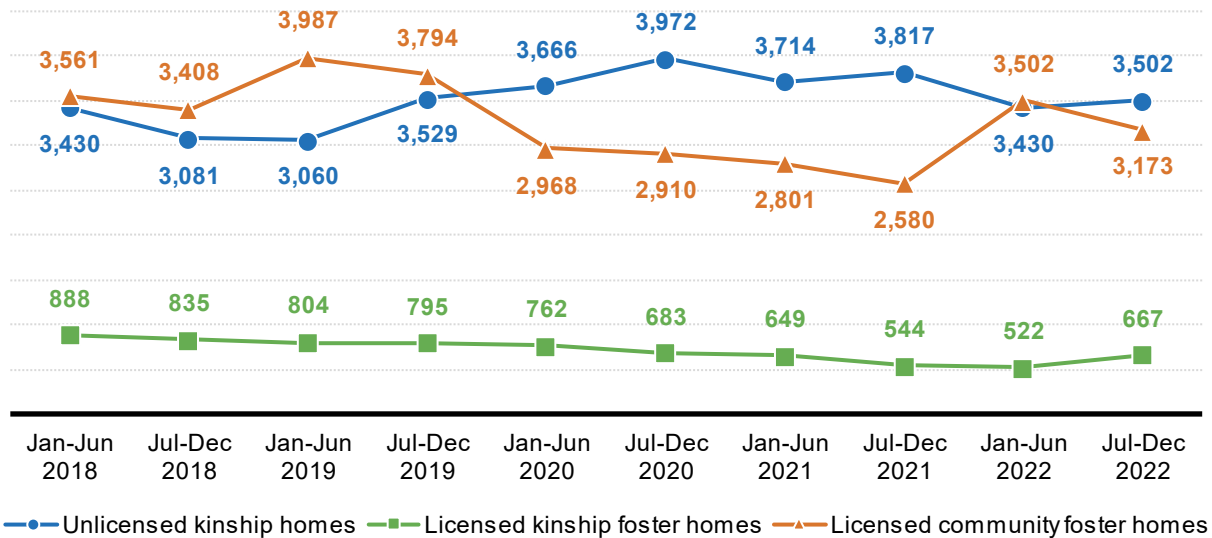
Figure 72. Types of placement and outcomes for children birth to age 5 in DCS custody in Arizona, July-Dec 2022

Placement type for children ages 0-5 in DCS custody Case outcome for children 0-5 exiting out-of-home care



Source: Department of Child Safety (2023). Semiannual child welfare report, March 2023. Retrieved from <https://dcs.az.gov/reports>

Figure 73. Licensed foster homes and unlicensed kinship homes in Arizona, Jan 2018 to Dec 2022



Source: Department of Child Safety (2023). Semiannual child welfare reports, Sept 2018 to March 2023. Retrieved from <https://dcs.az.gov/reports>

Additional data tables related to *Family Support and Literacy* can be found in Appendix 1 of this report.

APPENDIX 1: ADDITIONAL DATA TABLES

Population Characteristics

Table 28. Population projections for children birth to age 4, 2030 to 2060

Geography	Population ages 0-4, 2020 Census	Population ages 0-4, 2030 (projected)	Population ages 0-4, 2040 (projected)	Population ages 0-4, 2050 (projected)	Population ages 0-4, 2060 (projected)
East Maricopa Region	39,776	N/A	N/A	N/A	N/A
Maricopa County	253,703	294,755	317,156	309,904	319,927
Arizona	392,370	459,822	499,925	497,031	525,849

Source: Arizona Office of Economic Opportunity (2022). Arizona Population Projections: 2022 to 2060, Medium Series

Table 29. Race and ethnicity of the population of all ages, 2020 Census

Geography	Estimated population (all ages)	Hispanic or Latino	White, not Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Two or more races
East Maricopa Region	930,475	16%	69%	6%	4%	10%	11%
Maricopa County	4,420,568	31%	57%	8%	4%	7%	14%
Arizona	7,151,502	31%	57%	6%	6%	5%	14%
United States	331,449,281	19%	62%	14%	3%	8%	10%

Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), P6, P7, P8, P9, P12, P12A-W.

Note: The six percentages in each row may sum to more or less than 100% because (a) persons reporting Hispanic ethnicity are counted twice if their race is Black, American Indian, Asian, Pacific Islander, or any combination of two or more races, (b) persons reporting any other race are not counted here unless they have Hispanic ethnicity, and (c) rounding.

Table 30. Race and ethnicity of children birth to age 4

Geography	Estimated number of children (birth to 4 years old)	Hispanic or Latino	White, not Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Two or more races
East Maricopa Region	39,776	27%	55%	10%	6%	16%	20%
Maricopa County	253,703	43%	43%	12%	5%	9%	21%
Arizona	392,370	44%	42%	10%	8%	7%	21%
United States	18,400,235	25%	54%	18%	4%	9%	16%

Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), P6, P7, P8, P9, P12, P12A-W.

Note: The six percentages in each row may sum to more or less than 100% because (a) children reporting Hispanic ethnicity are counted twice if their race is Black, American Indian, Asian, Pacific Islander, or any combination of two or more races, (b) children reporting any other race are not counted here unless they have Hispanic ethnicity, and (c) rounding.

Table 31. Race and ethnicity for the mothers of babies born in 2020 and 2021

Geography	Calendar year	Number of births	Mother was non-Hispanic White	Mother was Hispanic or Latina	Mother was Black or African American	Mother was American Indian or Alaska Native	Mother was Asian or Pacific Islander
East Maricopa Region	2020	7,447	56%	23%	7%	4%	10%
	2021	7,624	57%	24%	6%	4%	9%
Maricopa County	2020	49,191	44%	41%	8%	3%	5%
	2021	50,245	44%	41%	8%	2%	5%
Arizona	2020	76,781	43%	41%	6%	5%	4%
	2021	77,857	43%	41%	6%	5%	4%

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: The five percentages in each row should sum to 100%, but may not because of rounding. Mothers who report more than one race or ethnicity are assigned to the one which is smaller. Mothers of twins are counted twice in this table.

Table 32. Children birth to age 5 living with parents who are foreign-born, 2017-2021 ACS

Geography	Estimated number of children (birth to 5 years old) living with one or two parents	Number and percent living with one or two foreign-born parents	
East Maricopa Region	48,987	12,265	25%
Maricopa County	307,353	85,793	28%
Arizona	473,732	115,267	24%
United States	22,399,131	5,504,770	25%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B05009

Note: The term "parent" here includes stepparents.

Table 33. Language spoken at home (by persons ages 5 and older), 2017-2021 ACS

Geography	Estimated population (age 5 and older)	Speak only English at home	Speak Spanish at home	Speak languages other than English or Spanish at home
East Maricopa Region	875,117	82%	9%	9%
Maricopa County	4,101,545	74%	20%	6%
Arizona	6,666,597	73%	20%	6%
United States	310,302,360	78%	13%	8%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table C16001

Note: The three percentages in each row may not sum to 100% because of rounding. The American Community Survey (ACS) no longer specifies the proportion of the population who speak Native North American languages for geographies smaller than the state. In Arizona, Navajo and other Native American languages (including Apache, Hopi, and O'odham) are the most commonly spoken (2%), following English (73%) and Spanish (20%).

Table 34. English-language proficiency (for persons ages 5 and older), 2017-2021 ACS

Geography	Estimated population (age 5 and older)	Speak only English at home	Speak another language at home, and speak English very well	Speak another language at home, and do not speak English very well
East Maricopa Region	875,117	82%	14%	5%
Maricopa County	4,101,545	74%	18%	8%
Arizona	6,666,597	73%	18%	8%
United States	310,302,360	78%	13%	8%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table C16001

Note: The three percentages in each row should sum to 100%, but may not because of rounding.

Table 35. Limited-English-speaking households, 2017-2021 ACS

Geography	Estimated number of households	Number and percent of limited-English-speaking households	
East Maricopa Region	386,370	7,888	2%
Maricopa County	1,632,151	55,110	3%
Arizona	2,683,557	99,159	4%
United States	124,010,992	5,241,326	4%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table C16002

Note: A "limited-English-speaking" household is one in which no one over the age of 13 speaks English very well.

Table 36. Grandchildren birth to age 5 living in a grandparent's household, 2020 Census

Geography	Estimated number of children (birth to 5 years old) living in households	Number and percent living in their grandparent's household	
East Maricopa Region	48,741	3,985	8%
Maricopa County	310,813	37,279	12%
Arizona	480,744	64,792	13%
United States	22,401,565	2,520,305	11%

Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P14, PCT11.

Note: This table includes all children (under 6 years old) living in a household headed by a grandparent, regardless of whether the grandparent is responsible for them, or whether the child's parent lives in the same household.

Economic Circumstances

Table 37. Median annual family income, 2017-2021 ACS

Geography	Median annual income for all families	Median annual income for all families with children under 18 years old	Median annual income for married-couple families with children under 18 years old	Median annual income for single-male-headed families with children under 18 years old	Median annual income for single-female-headed families with children under 18 years old
Maricopa County	\$85,900	\$81,300	\$106,700	\$54,200	\$38,300
Arizona	\$78,800	\$75,100	\$100,000	\$49,100	\$35,000
United States	\$85,000	\$82,800	\$110,000	\$50,900	\$32,600

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B19126

Note: Half of the families in the population are estimated to have incomes above the median value, and the other half have incomes below the median.

Table 38. Children birth to age 5 living at selected poverty thresholds, 2017-2021 ACS

Geography	Estimated number of children (birth to 5 years old) who live with parents or other relatives	Percent of children under 50% of the poverty level	Percent of children between 50% and 99% of the poverty level	Percent of children between 100% and 184% of the poverty level	Percent of children at or above 185% of the poverty level
East Maricopa Region	49,540	5%	7%	10%	78%
Maricopa County	314,410	7%	11%	17%	65%
Arizona	486,513	9%	11%	19%	61%
United States	22,940,195	9%	10%	16%	65%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B17024

Note: The four percentages in each row should sum to 100%, but may not because of rounding. In 2021, the poverty threshold for a family of two adults and two children was \$27,479; for a single parent with one child, it was \$18,677. The 185% thresholds are \$50,836 and \$34,552, respectively.

Table 39. Families with children birth to age 5 receiving TANF, state fiscal years 2018 to 2022

Geography	Households with one or more children (ages 0-5)	Number of families with children (ages 0-5) participating in TANF					Percent of households with young children (ages 0-5) participating in TANF in SFY 2022
		SFY 2018	SFY 2019	SFY 2020	SFY 2021	SFY 2022	
East Maricopa Region	36,486	473	454	535	557	512	1%
Maricopa County	222,016	5,745	5,063	5,300	5,207	5,304	2%
Arizona	345,601	10,538	9,360	9,947	9,881	9,884	3%

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

Table 40. Children birth to age 5 receiving TANF, state fiscal years 2018 to 2022

Geography	Number of young children (ages 0-5) in the population	Number of young children (ages 0-5) participating in TANF					Percent of young children (ages 0-5) participating in TANF in SFY 2022
		SFY 2018	SFY 2019	SFY 2020	SFY 2021	SFY 2022	
East Maricopa Region	48,741	655	634	722	752	682	1%
Maricopa County	310,813	8,017	7,103	7,452	7,338	7,395	2%
Arizona	480,744	14,659	13,029	13,747	13,654	13,592	3%

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

Table 41. Families participating in SNAP, state fiscal years 2018 to 2022

Geography	Households with one or more children (ages 0-5)	Number of families participating in SNAP					Percent of households with young children (0-5) participating in SNAP in SFY 2022
		SFY 2018	SFY 2019	SFY 2020	SFY 2021	SFY 2022	
East Maricopa Region	36,486	7,603	6,982	6,779	6,902	6,731	18%
Maricopa County	222,016	86,352	78,980	74,572	74,450	73,375	33%
Arizona	345,601	151,816	140,056	132,466	131,063	128,460	37%

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

Table 42. Children participating in SNAP, state fiscal years 2018 to 2022

Geography	Number of young children (ages 0-5) in the population	Number of children (0-5) participating in SNAP					Percent of young children (0-5) participating in SNAP in SFY 2022
		SFY 2016	SFY 2017	SFY 2018	SFY 2019	SFY 2020	
East Maricopa Region	48,741	11,221	10,298	9,926	9,951	9,915	20%
Maricopa County	310,813	131,473	120,427	113,174	111,568	109,794	35%
Arizona	480,744	229,275	211,814	198,961	194,771	190,968	40%

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

Table 43. Women enrolled in WIC, 2018 to 2022

Geography	Enrolled Women, 2018	Enrolled Women, 2019	Enrolled Women, 2020	Enrolled Women, 2021	Enrolled Women, 2022
East Maricopa Region	3,809	3,571	3,252	3,111	3,209
Maricopa County	44,409	41,745	38,545	36,717	37,689
Arizona	72,098	68,312	63,111	59,588	60,866

Source: Arizona Department of Health Services (2023). [WIC Dataset]. Unpublished data.

Note: Enrolled women include both pregnant and breastfeeding women.

Table 44. Women participating in WIC, 2018 to 2022

Geography	Participating Women, 2018	Participating Women, 2019	Participating Women, 2020	Participating Women, 2021	Participating Women, 2022
East Maricopa Region	3,531	3,348	3,050	2,977	3,078
Maricopa County	41,720	39,217	36,325	35,072	36,171
Arizona	67,687	64,225	59,477	56,953	58,456

Source: Arizona Department of Health Services (2023). [WIC Dataset]. Unpublished data.

Note: Participating women include both pregnant and breastfeeding women. Women are counted as 'participating' if they received benefits during the time period in question.

Table 45. Children birth to age 4 enrolled in WIC, 2018 to 2022

Geography	Enrolled infants and children, 2018	Enrolled infants and children, 2019	Enrolled infants and children, 2020	Enrolled infants and children, 2021	Enrolled infants and children, 2022
East Maricopa Region	4,155	3,965	3,593	3,398	3,400
Maricopa County	48,516	46,032	43,050	40,662	40,326
Arizona	187,737	178,300	167,186	162,360	163,893

Source: Arizona Department of Health Services (2021). [WIC Dataset]. Unpublished data.

Table 46. Children birth to age 4 participating in WIC, 2018 to 2022

Geography	Participating infants and children, 2018	Participating infants and children, 2019	Participating infants and children, 2020	Participating infants and children, 2021	Participating infants and children, 2022
East Maricopa Region	3,931	3,799	3,462	3,327	3,328
Maricopa County	46,258	43,961	41,362	39,644	39,424
Arizona	169,372	161,287	154,501	153,835	155,856

Source: Arizona Department of Health Services (2021). [WIC Dataset]. Unpublished data.

Note: Children are counted as 'participating' if they received benefits during the time period in question.

Table 47. Persons of all ages in households with and without computers and internet connectivity, 2017-2021 ACS

Geography	Estimated number of persons (all ages) living in households	Have a computer and internet	Have a computer but no internet	Do not have a computer
East Maricopa Region	902,980	95%	3%	2%
Maricopa County	4,312,788	92%	5%	3%
Arizona	6,930,677	90%	6%	4%
United States	321,899,278	90%	6%	4%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B28005

Note: The three percentages in each row should sum to 100%, but may not because of rounding.

Table 48. Children birth to age 17 in households with and without computers and internet connectivity, 2017-2021

Geography	Estimated number of children (ages 0-17) living in households	Have a computer and internet	Have a computer but no internet	Do not have a computer
East Maricopa Region	169,521	97%	2%	1%
Maricopa County	1,035,307	93%	6%	2%
Arizona	1,611,069	92%	6%	2%
United States	74,041,861	93%	5%	2%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B28005

Note: The three percentages in each row should sum to 100%, but may not because of rounding.

Educational Indicators

Table 49. Migrant students (grades K-12) enrolled in public and charter schools, 2019-20 to 2021-22

Geography	Number of migrant students			Percent of students who were migrant students		
	2019-20	2020-21	2021-22	2019-20	2020-21	2021-22
East Maricopa Region Schools	<i>Regional data not available</i>					
Maricopa County	158	306	661	0%	<2%	<2%
Arizona	4,498	3,598	6,280	0%	<2%	<2%

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Migrant students are those students participating in the Arizona Migrant Education Program, a federally-funded, state-run program that provides supplemental services to the children of migrant farmworkers.

Table 50. Kindergarten to 3rd grade students with chronic absences, 2019-20 to 2021-22

Geography	Number of K-3 students with chronic absences			Percent of K-3 students with chronic absences		
	2019-20	2020-21	2021-22	2019-20	2020-21	2021-22
East Maricopa Region Schools	N/A	3,476	7,979	N/A	11%	26%
Maricopa County	14,738	35,285	63,746	7%	19%	33%
Arizona	25,382	56,547	100,955	8%	21%	34%

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Students are considered chronically absent if they miss more than 10% of the school days in a school year. This table includes children who are absent due to chronic illness.

Table 51. 4-year and 5-year graduation rates, 2022

Geography	4-Year senior cohort (2022)	4-Year graduates (2022)	4-Year graduation rate (2022)	5-Year graduates (2022)	5-Year graduation rate (2022)
East Maricopa Region	13,915	9,861	71%	N/A	N/A
Maricopa County	61,564	47,232	77%	49,316	80%
Arizona	90,880	69,623	77%	73,320	80%

Source: Arizona Department of Education (2023). [Graduation Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: The 2022 4-year senior cohort is the number of students who are expected to graduate in 2022 given the number of students who entered school 4 years prior. At the time data for this report were accessed from ADE, 2022 5-year graduation rates had not yet been released, so no regional estimates are available.

Early Learning

Table 52. School enrollment for children ages 3 to 4, 2017-2021 ACS

Geography	Estimated number of children (3 or 4 years old)	Number and percent enrolled in school	
		Number	Percent
East Maricopa Region	18,558	9,181	49%
Maricopa County	114,005	40,426	35%
Arizona	176,033	63,974	36%
United States	8,100,136	3,719,992	46%

Source: U.S. Census Bureau. (2023). American Community Survey 5-year estimates 2017-2021, Table B14003

Note: In this table, "school" may include nursery school, preschool, or kindergarten.

Table 53. Quality First Programs, state fiscal year 2023

Geography	Child care providers served	Child care providers with a 3-5 star rating	Percent of child care providers with a 3-5 star rating
East Maricopa Region	174	94	80
Maricopa County	County data not available		
Arizona	1,434	982	68%

Source: First Things First (2023). Quality First Summary Data. Unpublished data.

Table 54. Median monthly charge for full-time center-based child care, 2022

Geography	Licensed centers			Public schools		
	One infant	One 1 or 2 year old	One 3 to 5 year old	One infant	One 1 or 2 year old	One 3 to 5 year old
East Maricopa Region	Regional data not available					
Maricopa County	\$1,134	\$1,023	\$882	\$1,035	\$1,012	\$706
Arizona	\$949	\$826	\$727	\$1,011	\$880	\$701

Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540>

Table 55. Median monthly charge for full-time home-based child care, 2022

Geography	Certified family homes			Small group homes		
	One infant	One 1 or 2 year old	One 3 to 5 year old	One infant	One 1 or 2 year old	One 3 to 5 year old
East Maricopa Region	Regional data not available					
Maricopa County	\$714	\$630	\$630	\$756	\$735	\$720
Arizona	\$662	\$627	\$618	\$761	\$725	\$713

Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540>

Table 56. Cost of center-based child care as a percentage of income, 2022

Geography	Median family income	Cost for an infant	Cost for a 1 to 2 year old child	Cost for a 3 to 5 year old child
East Maricopa Region	Regional data not available			
Maricopa County	\$81,300	17%	15%	13%
Arizona	\$75,000	15%	13%	12%

Sources: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540> & U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B19126.

Note: Annual costs of care are calculated by multiplying the median daily cost of care by 252 to approximate a full year of care.

Table 57. Children receiving DES child care assistance, 2017 to 2022

Geography	Number of children receiving assistance						Percent of eligible children receiving assistance					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022
East Maricopa Region	1,111	1,274	1,549	1,425	1,571	1,438	94%	91%	91%	79%	88%	91%
Maricopa County	10,420	12,264	14,355	12,391	13,847	12,230	92%	92%	91%	79%	87%	90%
Arizona	16,922	19,813	23,155	19,909	22,359	20,099	93%	92%	92%	80%	88%	90%

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Table 58. DCS-involved children receiving DES child care assistance, 2017 to 2022

Geography	Number of DCS children receiving assistance						Percent of DCS eligible children receiving assistance					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022
East Maricopa Region	756	804	831	535	628	589	87%	84%	85%	61%	81%	81%
Maricopa County	7,796	7,773	7,516	4,572	5,470	5,128	87%	81%	81%	59%	80%	79%
Arizona	12,201	12,219	11,808	7,137	8,853	8,268	88%	82%	82%	59%	81%	80%

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Table 59. Eligible families not using DES child care assistance, 2017 to 2022

Geography	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022
East Maricopa Region	5.6%	8.2%	8.5%	18.9%	11.6%	8.9%
Maricopa County	7.2%	8.0%	8.5%	19.3%	12.4%	9.7%
Arizona	6.7%	7.6%	7.9%	18.3%	11.7%	9.2%

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Table 60. Number of children birth to age 5 receiving DDD services, state fiscal years 2019 to 2022

Geography	SFY 2019	SFY 2020	SFY 2021	SFY 2022	Percent change from 2019 to 2022
East Maricopa Region	452	445	203	388	-14%
Maricopa County	2,926	3,003	1,575	2,649	-9%
Arizona	4,005	4,078	2,438	3,691	-8%

Source: Arizona Department of Economic Security (2023). [Division of Developmental Disabilities dataset]. Unpublished data.

Table 61. Number of children birth to age 2 receiving AzEIP and/or DDD services, state fiscal years 2019 to 2022

Geography	Number of children ages 0-2 receiving services from AzEIP and/or DDD				Population ages 0-2 (Census 2020)	Estimated percent of children (ages 0-2) receiving AzEIP and/or DDD services, SFY 2022
	FY 2018	FY 2019	FY 2020	FY 2021		
East Maricopa	593	518	558	577	22,979	2.5%
Maricopa County	4,153	3,697	4,052	4,083	146,147	2.8%
Arizona	6,376	5,721	5,916	5,876	225,737	2.6%

Source: Arizona Department of Economic Security (2023). [AzEIP dataset]. Unpublished data.

Table 62. Preschoolers with disabilities receiving services through LEAs, state fiscal years 2018 to 2022

Geography	Preschoolers enrolled in special education				
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
East Maricopa Region	1,238	1,243	947	805	698
Maricopa County	6,444	6,599	6,702	5,590	5,099
Arizona	10,123	10,314	10,521	8,537	8,086

Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Table 63. Preschoolers with disabilities receiving services through LEAs by type of disability, 2019-20

Geography	Total Preschoolers	Developmental Delay	Speech or Language Impairment	Preschool Severe Delay	Other Disability
East Maricopa Region	698	43%	30%	24%	3%
Maricopa County	5,099	43%	29%	26%	2%
Arizona	8,086	43%	30%	24%	3%

Source: Arizona Department of Education (2021). [Graduation Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Table 64. Kindergarten to 3rd grade students enrolled in special education in public and charter schools, state fiscal years 2018 to 2022

Geography	K-3rd grade students enrolled in special education				
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
East Maricopa Region	3,654	3,855	4,090	3,886	3,985
Maricopa County	22,753	23,809	24,485	23,693	23,645
Arizona	36,468	37,812	38,791	37,179	37,334

Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Table 65. Kindergarten to 3rd grade students enrolled in special education in public and charter schools by primary disability, state fiscal year 2022

Geography	Total K-3rd grade students	Speech or Language Impairment	Developmental Delay	Specific Learning Disability	Autism	Other Disability
East Maricopa Region Schools	3,985	38%	25%	12%	13%	12%
East Maricopa County Schools	23,645	35%	28%	12%	12%	13%
Arizona Schools	37,334	36%	27%	12%	11%	13%

Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: The “Other Disabilities” category includes children with emotional disturbance, deafness, deaf-blindness, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairments such as chronic medical conditions that affect a child’s ability to participate in the educational setting, traumatic brain injury, or visual impairment.

Child Health

Table 66. Prenatal care for the mothers of babies born in 2020 and 2021

Geography	Calendar year	Number of births	Mother had no prenatal care	Mother had fewer than five prenatal visits	Mother began prenatal care in the first trimester
East Maricopa Region	2020	7,447	1%	3%	77.9%
	2021	7,624	1%	3%	78.6%
Maricopa County	2020	49,191	2%	4%	71.9%
	2021	50,245	2%	4%	74.0%
Arizona	2020	76,781	2%	5%	69%
	2021	77,857	2%	5%	72%

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this table.

Table 67. Selected characteristics of mothers giving birth, 2020 to 2021

Geography	Calendar year	Number of births	Mother was younger than 18	Mother was younger than 20	Mother smoked cigarettes during pregnancy
East Maricopa Region	2020	7,447	1%	2%	1.7%
	2021	7,624	1%	2%	1.8%
Maricopa County	2020	49,191	1%	5%	2.6%
	2021	50,245	1%	4%	2.3%
Arizona	2020	76,781	1.3%	5.1%	3.6%
	2021	77,857	1.2%	4.6%	3.2%
Healthy People 2030 target					4.3%

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this table. The Healthy People 2030 target for maternal use of tobacco during pregnancy is 95.7% of females reporting abstaining from smoking during pregnancy.

Table 68. Births to mothers with gestational diabetes or pre-pregnancy obesity, 2020 to 2021

Geography	Calendar year	Number of births	Mother had gestational diabetes	Mother had pre-pregnancy obesity
East Maricopa Region	2020	7,447	9.4%	22%
	2021	7,624	9.6%	22%
Maricopa County	2020	49,191	9.3%	27%
	2021	50,245	9.6%	27%
Arizona	2020	76,781	9.5%	27%
	2021	77,857	9.9%	27%

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this table.

Table 69. Selected birth outcomes, 2020 to 2021

Geography	Calendar year	Number of births	Baby weighed less than 2500 grams	Baby was preterm (less than 37 weeks)	Baby was admitted to a NICU
East Maricopa Region	2020	7,447	7.1%	9.2%	7%
	2021	7,624	7.9%	9.5%	7%
Maricopa County	2020	49,191	7.3%	9.5%	7%
	2021	50,245	7.8%	10.1%	7%
Arizona	2020	76,781	7.4%	9.5%	7.8%
	2021	77,857	7.9%	10.0%	7.9%
Healthy People 2030 targets			9.4%		

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Table 70. WIC-enrolled infants ever breastfed, 2022

Geography	Infants for whom breastfeeding status is determined	Infants ever breastfed	Percent of infants ever breastfed
East Maricopa Region	1,612	1,308	81%
Maricopa County	19,770	15,386	78%
Arizona	31,612	25,103	79%

Source: Arizona Department of Health Services (2023). [WIC dataset]. Unpublished data.

Table 71. Percent of WIC-enrolled infants ever breastfed, 2018 to 2022

Geography	Breastfeeding rate, 2018	Breastfeeding rate, 2019	Breastfeeding rate, 2020	Breastfeeding rate, 2021	Breastfeeding rate, 2022
East Maricopa Region	79%	79%	80%	77%	81%
Maricopa County	76%	78%	78%	77%	78%
Arizona	77%	79%	78%	77%	79%

Source: Arizona Department of Health Services (2023). [WIC Dataset]. Unpublished data.

Table 72. Child care immunization exemption rates, 2018-19 to 2022-23

Geography	Children in child care with religious exemptions					Children in child care exempt from all vaccines				
	2018-19	2019-20	2020-21	2021-22	2022-23	2018-19	2019-20	2020-21	2021-22	2022-23
East Maricopa Region	6.7%	6.3%	7.7%	6.6%	6.1%	3.5%	3.7%	4.5%	3.7%	4.2%
Maricopa County	5.2%	5.8%	5.9%	6.5%	6.5%	3.3%	3.5%	3.7%	3.6%	4.3%
Arizona	4.5%	5.0%	5.1%	5.7%	5.7%	3.0%	3.1%	3.3%	3.4%	4.0%

Source: Arizona Department of Health Services (2023). *Childcare Immunization Coverage, 2018-19 to 2022-23 School Years*. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). *Childcare Immunization Coverage by County, 2018-19 through 2022-23 School Years*. Retrieved from: <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Table 73. Kindergarten immunization exemption rates, 2018-19 to 2022-23

Geography	Kindergarteners with personal belief exemptions					Kindergarteners exempt from all vaccines				
	2018-19	2019-20	2020-21	2021-22	2022-23	2018-19	2019-20	2020-21	2021-22	2022-23
East Maricopa Region	8.5%	6.9%	8.1%	8.0%	8.2%	4.6%	4.0%	4.2%	4.6%	4.3%
Maricopa County	6.5%	5.9%	5.9%	7.0%	8.0%	4.0%	3.7%	3.6%	3.9%	4.8%
Arizona	5.9%	5.4%	5.4%	6.6%	7.3%	3.8%	3.4%	3.3%	3.7%	4.6%

Source: Arizona Department of Health Services (2023). *Childcare Immunization Coverage, 2018-19 to 2022-23 School Years*. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). *Childcare Immunization Coverage by County, 2018-19 through 2022-23 School Years*. Retrieved from: <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Table 74. Non-fatal hospitalizations and emergency department visits due to unintentional injuries for children birth to age 5, 2018-2022 combined

Geography	Non-fatal inpatient hospitalizations for unintentional injuries	Non-fatal emergency department visits for unintentional injuries
East Maricopa Region	174	13,914
Maricopa County	1,692	111,707
Arizona	2,811	160,742

Source: Arizona Department of Health Services (2023). [Hospital Discharge dataset]. Unpublished data.

Note: Data on hospitalizations were geocoded to FTF regions using the address provided by parents or caregivers at the time of hospitalization; however, in cases where the address provided was not valid, hospitalizations could not be assigned to a region. County of residence is captured separately from addresses, meaning that counts in the county often exceed those seen in a particular region because they include all hospitalizations regardless of address validity.

Family Support & Literacy

Table 75. Number of deaths with opiates or opioids contributing, 2018-2021 combined

Geography	Number of deaths with opiates or opioids contributing, 2018-2021
East Maricopa Region	624
Maricopa County	4,193
Arizona	6,315

Source: Arizona Department of Health Services (2023). [Vital Statistics dataset]. Unpublished data.

Note: About 35% of overdose deaths statewide were missing address information and thus could not be geocoded to an FTF region, but county assignments were available from death certificates.

Table 76. Substantiated maltreatment reports by type for children birth to age 17, July-Dec 2022

Geography	Total substantiated maltreatment reports	Neglect	Physical abuse	Sexual abuse	Emotional abuse
East Maricopa Region	<i>Regional data not available</i>				
Maricopa County	237	67%	26%	7%	0%
Arizona	676	71%	24%	5%	0%

Source: Department of Child Safety (2023). Semiannual child welfare report, March 2023. Retrieved from <https://dcs.az.gov/reports>

Table 77. Children birth to age 17 removed by the Department of Child Services (DCS), Jan 2020 to Dec 2022

Geography	Children removed (Jan 2020-Jun 2020)	Children removed (Jul 2020- Dec 2020)	Children removed (Jan 2021-Jun 2021)	Children removed (Jul 2021-Dec 2021)	Children removed (Jan 2022- Jun 2022)	Children removed (Jul 2022-Dec 2022)
East Maricopa Region	<i>Regional data not available</i>					
Maricopa County	2,783	3,006	2,316	2,227	1,975	1,793
Arizona	4,616	4,967	4,144	3,894	3,415	3,274

Source: Department of Child Safety (2023). Semiannual child welfare report, September 2023. Retrieved from <https://dcs.az.gov/reports>

APPENDIX 2: METHODS AND DATA SOURCES

U.S. Census and American Community Survey Data. The U.S. Census³⁴⁶ is an enumeration of the population of the United States. It is conducted every ten years, and includes information about housing, race, and ethnicity. The 2020 U.S. Census data are available by census block. There are about 108,000 inhabited blocks in Arizona, with an average population of 66 people each. The Census data for the East Maricopa Region presented in this report were calculated for most indicators by identifying each block in the region and aggregating the data across all of those blocks. With the implementation of new privacy measures by the U.S. Census, some data previously available at the block level, such as grandchildren living in a grandparent's households or counts of households with children birth to age 5, are now only published at the block group or tract level. Regional estimates for these indicators were calculated by aggregating data over the census tracts which are wholly or partially contained in the region. Data from partial census tracts were apportioned according to the percentage of the 2020 Census population in that tract living inside the region.

The American Community Survey (ACS)³⁴⁷ is a survey conducted by the U.S. Census Bureau each month by mail, telephone, and face-to-face interviews. It covers many different topics, including income, language, education, employment, and housing. ACS data are available by census tract. Arizona is divided into about 1,750 census tracts, with an average of about 3,900 people in each. The ACS data for the East Maricopa Region were calculated by aggregating over the census tracts which are wholly or partially contained in the region. The data from partial census tracts were apportioned according to the percentage of the 2020 Census population in that tract living inside the region. The most recent and most reliable ACS data are averaged over the past five years; those are the data included in this report. They are based on surveys conducted from 2017 to 2021. In general, the reliability of ACS estimates is greater for more populated areas. Statewide estimates, for example, are more reliable than county-level estimates.

Education Data from ADE. Education data from the Arizona Department of Education (ADE) included in this report were obtained through a custom tabulation of unredacted data files conducted by the vendor on a secure ADE computer terminal in the fall of 2023. The vendor worked with the regional director to create a list of all public and charter schools in the region based on the school's physical location within the region as well as local knowledge as to whether any schools located outside the region served a substantial number of children living within the region. This list was used to assign schools and districts to the region as well to aggregate school-level data to the region-level. This methodology differs slightly from the methods that ADE uses to allocate school-level data to counties, so county and region totals may vary in some tables. Data were presented over time where available; however, due to changes in the ADE data system as well as the effects of the COVID-19 pandemic on data collection and definitions over the past three years, some indicators could not be presented as a time series.

Child Care Capacity Calculations. Lists of child care providers are maintained by multiple state agencies in Arizona, including the Arizona Department of Health Services, Arizona Department of Education, which licenses child care centers; the Arizona Department of Economic Security (DES), which maintains the Child Care Resource and Referral (CCR&R) list; and First Things First (FTF),

which administers the Quality First program. The ADHS child care licensing database was used as the primary source for child care capacity calculations in this report, as analyses of both statewide and region-level data showed that most child care slots in regulated providers in the region are provided by centers. Centers that only serve children ages 5-12 were removed from child care capacity calculations, as these are typically before- & after-school programs that only serve school-age children. For all tables, providers were geocoded to regions using addresses or coordinates provided in the state agency datasets to assign them to regions. Comparisons of child care capacity to the young child population are meant to provide a relative assessment of the abundance or scarcity of child care supply relative to potential demand. The child care tables in this report do not reflect the capacity of unlicensed, unregulated or informal child care providers in the region. The estimated supply may also over-estimate availability in regulated care as it did not account for child care providers that operate under licensed capacity by choice or children who enroll in multiple facilities (e.g., a child who attends part-day Head Start or school-based preschool in the morning and a child care center in the afternoon).

Change Calculations. Unless otherwise specified, changes in counts of data over time (i.e., percent increase or decrease) are calculated by subtracting the earlier number (e.g., a 2010 count) from the later number (e.g. the 2020 count) and dividing the result by the earlier number (e.g. the 2010 count). This calculation provides the percent change between the most recent count and the prior count, relative to the prior count.

Data Availability. State agency data in this report were provided to FTF by agency staff through a data request process initiated in May 2023 and extending to January 2024. Wherever possible, data were requested for multiple years to allow for the visualization of trends as well as for the most recent year available. However, due to both the constraints of agency staff and agency-maintained datasets as well as the timing of requests, not all data were available on the same time and geographic scales. This report attempts to include the most recent and complete data available, with notes indicating where data were not available for particular time periods or geographies.

Data Suppression. To protect the confidentiality of program participants, the FTF Data Dissemination and Suppression Guidelines preclude our reporting of social service and early education programming data if the count is less than 10 and preclude our reporting data related to health or developmental delay if the count is less than 6. In addition, some data received from state agencies are suppressed according to their own guidelines. ADHS does not report counts between 1 and 5; DES does not report counts between 1 and 9; ADE does not report counts less than 11. Additionally, both ADE and DES require suppression of the second-smallest value or the denominator in tables where a reader might be able to use the numbers provided to calculate a suppressed value. Throughout this report, information which is not available because of suppression guidelines is indicated by entries of “1-5” or “1-9” or “<11” for counts, or “DS” (data suppressed) for percentages. Data are sometimes not available for particular regions, either because a program did not operate in the region or because data are only available at the county level. Cases where data are not available will be indicated by an entry of “N/A” or a table row note that states “regional data not available.”

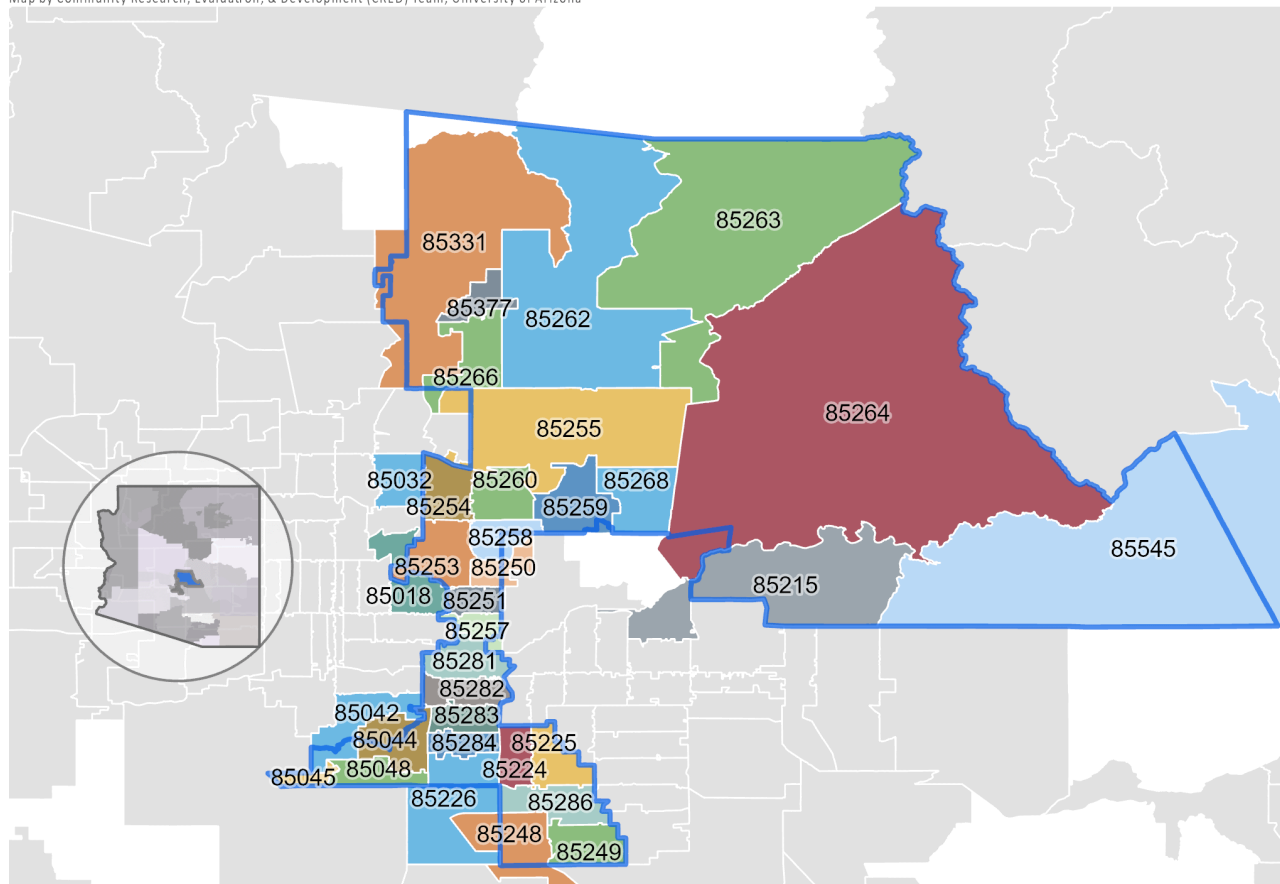
For some data, an exact number was not available because it was the sum of several numbers provided by a state agency, and some numbers were suppressed in accordance with agency guidelines or because the number was suppressed as a second-smallest value that could be used to calculate a suppressed

value. In these cases, a range of possible numbers is provided, where the true number lies within that range. For example, for data from the sum of a suppressed number of children enrolled in Child-only Temporary Assistance for Needy Families (TANF) and 12 children enrolled in a household with TANF, the entry in the table would read “13 to 21.” This is because the suppressed number of children in Child-only TANF is between 1 and 9, so the possible range of values is the sum of the known number (12) and 1 on the lower bound to the sum of the known number (12) plus 9 on the upper bound. Ranges that include numbers below the suppression threshold of less than 6 or 10 may still be included if the upper limit of the range is above 6 or 10. Since a range is provided rather than an exact number, the confidentiality of program participants is preserved.

APPENDIX 3: ZIP CODES OF THE EAST MARICOPA REGION

Figure 74. Zip Code Tabulation Areas (ZCTAs) in the East Maricopa Region

Map by Community Research, Evaluation, & Development (CRED) Team, University of Arizona



Source: Custom map by the Community Research, Evaluation, & Development (CRED) Team using shapefiles obtained from First Things First and the U.S. Census Bureau 2020 TIGER/Line Shapefiles (<https://www.census.gov/cgi-bin/geo/shapefiles/index.php>)

Table 78. Zip Code Tabulation Areas (ZCTAs) in the East Maricopa Region

Zip Code Tabulation Area (ZCTA)	Population (all ages)	Percent of this ZCTA's total population living in the East Maricopa Region	This ZCTA is shared with
East Maricopa Region	930,475		
85018	3	0.0%	Phoenix North, Phoenix South
85032	234	0.3%	Phoenix North
85042	56	0.1%	Phoenix South
85224	46,919	100%	
85225	73,427	100%	
85226	40,646	100%	
85248	37,759	98%	
85249	47,414	100%	
85250	16,483	100%	
85251	40,073	100%	
85044	39,518	99.9%	Phoenix South
85254	46,352	100%	
85045	8,090	100%	
85258	25,192	100%	
85259	22,452	100%	
85260	37,967	100%	
85262	13,366	100%	
85263	3,382	100%	
85264	1,421	100%	
85266	11,971	100%	
85268	24,031	100%	
85281	69,218	100%	
85282	52,351	100%	
85283	45,736	100%	
85284	18,638	100%	
85286	49,407	100%	
85331	30,593	99%	
85377	3,515	100%	
85048	34,524	100%	
85215	16	0.1%	Salt River Pima-Maricopa Indian Community, Southeast Maricopa
85253	17,250	99%	Phoenix North

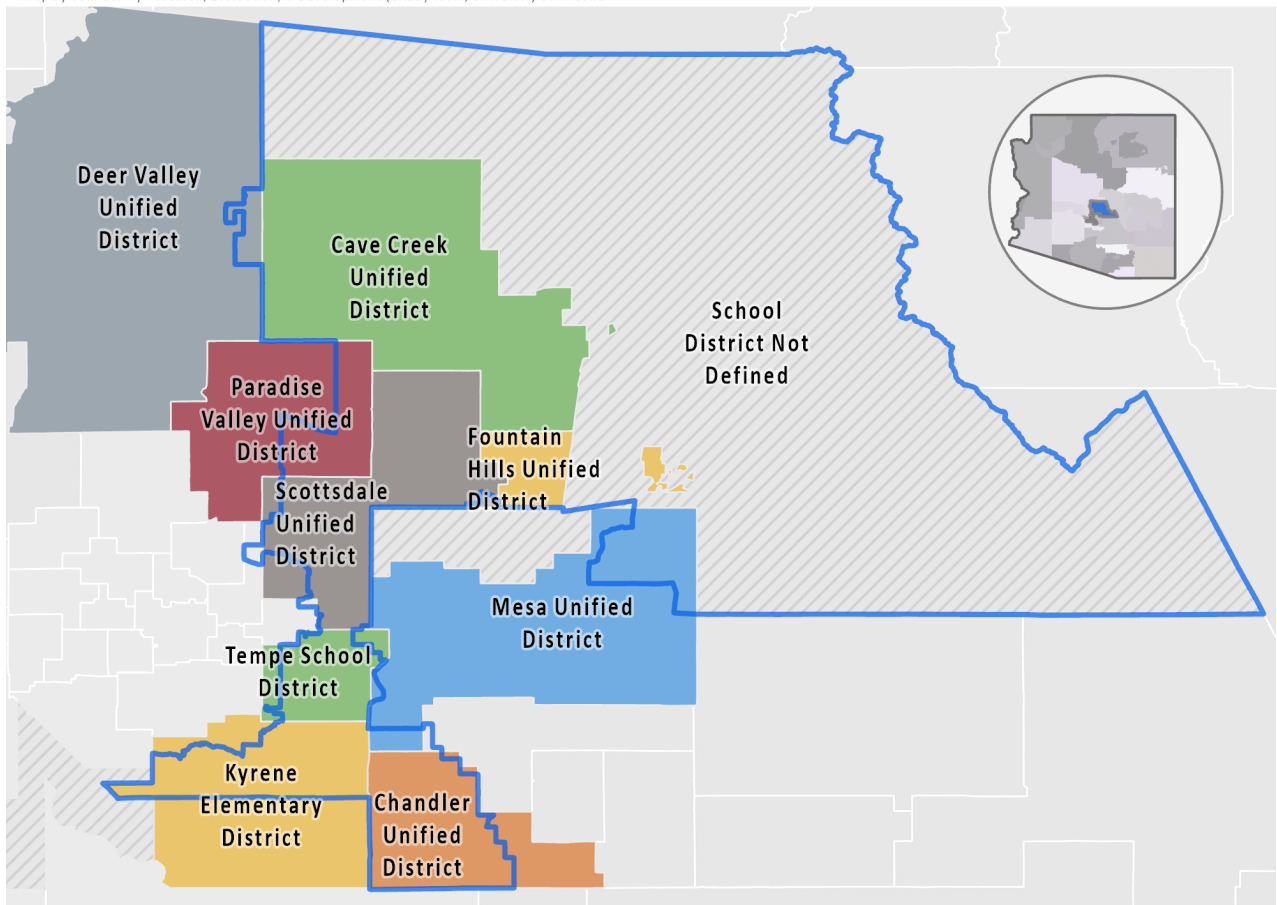
Source: U.S. Census Bureau (2020). 2020 Decennial Census, Demographic and Housing Characteristics, Table P1

Note: With the implementation of differential privacy in the 2020 Census, small area estimates now have injected 'noise' (error) to prevent accidental disclosure of Census responses. Geographies that are not primary census geographies, like ZCTAs, have noisier (or less accurate) estimates than primary geographies, like tracts. ZCTAs 85008, 85028, 85034, 85054, 85202, 85295, and 85298 overlap the East Maricopa Region, but the portions of the ZCTAs in the region are unpopulated.

APPENDIX 4: SCHOOL DISTRICTS OF THE EAST MARICOPA REGION

Figure 75. School Districts in the East Maricopa Region

Map by Community Research, Evaluation, & Development (CRED) Team, University of Arizona



Source: Custom map by the Community Research, Evaluation, & Development (CRED) Team using shapefiles obtained from First Things First and the U.S. Census Bureau 2020 TIGER/Line Shapefiles (<https://www.census.gov/cgi-bin/geo/shapefiles/index.php>)

Table 79. School Districts and Local Education Agencies (LEAs) in the East Maricopa Region

Name of district or Local Education Agency (LEA)	Number of schools	Grades served
East Maricopa Region	254	PS-12
Cave Creek Unified District	13	K-12
Chandler Unified District #80	51	PS-12
Fountain Hills Unified District	4	PS-12
Kyrene Elementary District	26	PS-8
Maricopa County Regional District	1	K-8
Mesa Unified District*	4	PS-8
Paradise Valley Unified District	12	PS-12
Scottsdale Unified District	29	PS-12
Tempe School District	24	PS-8
Tempe Union High School District	8	9-12
East Valley Institute of Technology	18	9-12
Allen-Cochran Enterprises, Inc. (Center for Educational Excellence)	1	K-8
American Virtual Academy (Primavera)	1	K-12
Archway Classical Academy	3	K-12
ASU Preparatory Academy	1	9-12
ASU Preparatory Academy Digital	1	K-12
AZ Compass Schools, Inc.	1	7-12
Ball Charter Schools (Dobson)	1	K-8
BASIS Charter Schools, Inc.	7	K-12
Bright Beginnings School, Inc.	1	K-6
Candeo Schools, Inc.	1	K-8
Chandler Preparatory Academy	1	K-12
Cicero Preparatory Academy	1	6-12
Daisy Education Corporation (Paragon Science Academy)	1	K-12
Fit Kids, Inc. (Champion Schools)	1	K-8
Foothills Academy	2	K-12
Fountain Hills Charter School	1	K-8
GAR, LLC (Student Choice High School)	1	9-12
Hirsch Academy A Challenge Foundation	1	K-6
Horizon Community Learning Center, Inc.	2	K-12

Name of district or Local Education Agency (LEA)	Number of schools	Grades served
Humanities and Sciences Academy of the United States, Inc.	2	9-12
Imagine Elementary at Tempe, Inc.	1	K-8
Integrity Education Incorporated	1	K-12
James Madison Preparatory School	1	6-12
Kaizen Education Foundation	2	K-12
Kestrel Schools, Inc.	1	9-12
Keystone Montessori Charter School, Inc.	1	1-9
Legacy Traditional School	3	K-8
Lincoln Preparatory Academy	1	6-12
Little Lamb Community School	1	K-8
Montessori Academy, Inc.	1	K-8
Montessori Day Public Schools Chartered, Inc.	1	K-8
New Horizon High School, Inc.	1	9-12
New School For The Arts	2	6-12
Noah Webster Schools-Pima	1	K-6
Ombudsman Educational Services, Ltd.	1	9-12
Pathways KM Charter Schools, Inc	1	6-8
Pinnacle Education-Tempe, Inc. (Tempe)	4	9-12
PLC Arts Academy at Scottsdale, Inc.	1	K-6
SC Jensen Corporation, Inc. dba Intelli-School	1	9-12
Scottsdale Country Day School	1	K-7
Scottsdale Preparatory Academy	1	5-12
Skyline Schools, Inc.	1	9-12
Tempe Preparatory Academy	1	6-12
The French American School of Arizona	1	K-5
Vector School District, Inc.	1	K-6
West-MEC - Western Maricopa Education Center	1	9-12

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

APPENDIX 5: DATA SOURCES

Arizona Department of Child Safety (2023). Semi-Annual Child Welfare Reports. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Arizona Department of Economic Security. (2023). 2022 Child Care Market Rate Survey Report. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf>

Arizona Department of Economic Security. (2023). [Child Care Market Rate Survey 2022, raw data]. Data received from the First Things First State Agency Data Request.

Arizona Department of Economic Security. (2023). [AzEIP Data]. Unpublished raw data received through the First Things First State Agency Data Request.

Arizona Department of Economic Security. (2023). [Child Care Assistance Data]. Unpublished raw data received through the First Things First State Agency Data Request.

Arizona Department of Economic Security. (2023). [DDD Data]. Unpublished raw data received through the First Things First State Agency Data Request.

Arizona Department of Economic Security. (2023). [Division of Benefits and Medical Eligibility data set]. Unpublished raw data received from the First Things First State Agency Data Request.

Arizona Department of Education (2023). [AzMERIT dataset]. Custom tabulation of unpublished data.

Arizona Department of Education. (2023). [Chronic absence dataset]. Custom tabulation of unpublished data.

Arizona Department of Education. (2023). [Graduation & dropout dataset]. Custom tabulation of unpublished data.

Arizona Department of Education. (2023). [Health & Nutrition dataset]. Custom tabulation of unpublished data.

Arizona Department of Education (2023). [Oct 1 enrollment dataset]. Custom tabulation of unpublished data.

Arizona Department of Education (2023). [Special Education dataset]. Custom tabulation of unpublished data.

Arizona Department of Health Services (2023). [Child unintentional injuries dataset]. Unpublished data received by request.

Arizona Department of Health Services (2023). [Child care licensing dataset]. Retrieved from <https://www.azdhs.gov/licensing/index.php#databases>

Arizona Department of Health Services. (2023). [Immunizations dataset]. Unpublished raw data received from the First Things First State Agency Data Request.

Arizona Department of Health Services. (2023). [Infectious disease dataset]. Unpublished raw data received from the First Things First State Agency Data Request.

Arizona Department of Health Services (2023). [Opioid and Neonatal Abstinence Syndrome dataset]. Unpublished data received by request.

Arizona Department of Health Services (2023). [WIC dataset]. Unpublished data received by request.

Arizona Department of Health Services, Bureau of Public Health Statistics. (2023). [Vital Statistics Dataset]. Unpublished data received from the First Things First State Agency Data Request.

Arizona Department of Health Services, Office of Disease Prevention and Health Promotion. (2020). Arizona Health Status and Vital Statistics, 2016-2021 Annual Reports. Retrieved from <https://pub.azdhs.gov/health-stats/report/ahs/index.php>

Arizona Office of Economic Opportunity. (2023). Arizona Population Projections: 2022 to 2055, Medium Series. Retrieved from <https://www.azcommerce.com/oeo/population/population-projections/>

Arizona Office of Economic Opportunity. (2023). Local area unemployment statistics (LAUS). Retrieved from <https://www.azcommerce.com/oeo/labor-market/>

First Things First (2023). Quality First, a Signature Program of First Thing First. Unpublished data received by request

Recht, H. (2023). censusapi: Retrieve Data from the Census APIs. R package version 0.8.0, <https://github.com/hrecht/censusapi>, <https://www.hrecht.com/censusapi/>.

Walker, K., Herman, M. (2023). tidy census: Load US Census Boundary and Attribute Data as 'tidyverse' and 'sf'-Ready Data Frames. R package version 1.5, <https://walker-data.com/tidycensus/>.

U.S. Census Bureau. (2012). 2010 Decennial Census, Tables P1, P14, P20. Accessed via API using the TidyCensus and CensusAPI packages.

U.S. Census Bureau. (2023). 2020 Decennial Census, Tables P1, P4, P11, P12A, P12B, P12C, P12D, P12E, P12F, P12G, P12H, P14, P20, P32, P41. Retrieved from <https://data.census.gov/cedsci/>

U.S. Census Bureau. (2023). American Community Survey 5-Year Estimates, 2014-2019, Table B05009, B09001, B10002, B14003, B15002, B16001, B16002, B16005, B17001, B17002, B17006, B17022, B19126, B23008, B23025, B25002, B25106, B27001, B28005, B28008, B28010. Accessed via API using the TidyCensus and CensusAPI packages.

U.S. Census Bureau. (2023). 2022, 2020, & 2010 Tiger/Line Shapefiles prepared by the U.S. Census. Retrieved from <http://www.census.gov/geo/maps-data/data/tiger-line.html>

REFERENCES

- ¹ U.S. Centers for Disease Control and Prevention (2022). Selected 2016 Through 2020 Maternal and Child Health (MCH) Indicators. Retrieved from <https://www.cdc.gov/prams/prams-data/selected-mch-indicators.html>
- ² Braveman, P., Egerter, S., & Williams, D. R. (2011). The social determinants of health: Coming of age. *Annual review of public health*, 32, 381-398.
- ³ Ibid
- ⁴ Maggi, S., Irwin, L. J., Siddiqi, A., & Hertzman, C. (2010). The social determinants of early child development: An overview. *Journal of paediatrics and child health*, 46(11), 627-635.
- ⁵ Braveman, P., Egerter, S., & Williams, D. R. (2011). The social determinants of health: coming of age. *Annual review of public health*, 32, 381-398.
- ⁶ Hertzman, C. (1999). The biological embedding of early experience and its effects on health in adulthood. *Annals of the New York Academy of Sciences*, 896(1), 85-95.
- ⁷ Karoly, L. A., Kilburn, M. R., & Cannon, J. S. (2006). *Early childhood interventions: Proven results, future promise*. Rand Corporation.
- ⁸ World Health Organization. (2010). A conceptual framework for action on the social determinants of health. <https://www.who.int/publications/i/item/9789241500852>
- ⁹ Lynch, E. E., Malcoe, L. H., Laurent, S. E., Richardson, J., Mitchell, B. C., & Meier, H. C. (2021). The legacy of structural racism: Associations between historic redlining, current mortgage lending, and health. *SSM-population health*, 14, 100793.
- ¹⁰ Walters, Beltran, R., Huh, D., & Evans-Campbell, T. (2010). Dis-placement and Dis-ease: Land, Place, and Health Among American Indians and Alaska Natives. In *Communities, Neighborhoods, and Health* (pp. 163–199). Springer New York. https://doi.org/10.1007/978-1-4419-7482-2_10
- ¹¹ Gracey, M., and King, M. 2009. “Indigenous health: Determinants and disease patterns.” *Lancet*, 374: 65–75.
- ¹² Keller, S., Lancaster, V., & Shipp, S. (2017). Building capacity for data-driven governance: Creating a new foundation for democracy. *Statistics and Public Policy*, 4(1), 1-11. <https://doi.org/10.1080/2330443X.2017.1374897>
- ¹³ Capacity Building Center for States. (2019). *A data-driven approach to service array guide [revised]*. Washington, DC: Children’s Bureau, Administration for Children and Families, U.S. Department of Health and Human Services. Retrieved August 11, 2023 from https://capacity.childwelfare.gov/sites/default/files/media_pdf/data-driven-approach-cp-00016.pdf
- ¹⁴ Kingsley, G. T., Coulton, C. J., & Pettit, K. L. (2014). *Strengthening communities with neighborhood data*. Washington, DC: Urban Institute. Retrieved August 2, 2023 from https://www.neighborhoodindicators.org/sites/default/files/publications/13805-urban_kingsley.pdf
- ¹⁵ Ravaghi, H., Guisset, A. L., Elfeky, S., Nasir, N., Khani, S., Ahmadnezhad, E., & Abdi, Z. (2023). A scoping review of community health needs and assets assessment: Concepts, rationale, tools and uses. *BMC Health Services Research*, 23(1), 44. <https://doi.org/10.1186/s12913-022-08983-3>
- ¹⁶ Hong, K., Dragan, K., & Glied, S. (2019). Seeing and hearing: The impacts of New York City’s universal pre-kindergarten program on the health of low-income children. *Journal of Health Economics*, 64, 93-107. <https://doi.org/10.1016/j.jhealeco.2019.01.004>
- ¹⁷ Bakken, L., Brown, N., & Downing, B. (2017). Early childhood education: The long-term benefits. *Journal of Research in Childhood Education*, 31(2), 255-269. <https://doi.org/10.1080/02568543.2016.1273285>

-
- ¹⁸ National Congress of American Indians. (2022, March 10). *American Indians and Alaska natives living on reservations have the highest 2020 census undercount*. Retrieved August 7, 2023 from <https://www.ncai.org/news/articles/2022/03/10/american-indians-and-alaska-natives-living-on-reservations-have-the-highest-2020-census-undercount>
- ¹⁹ Associated Press & Schneider, M. (2020, September 30). *Census takers: We're being told to finish early, cut corners*. WHYY. <https://whyy.org/articles/census-takers-were-being-told-to-finish-early-cut-corners/>
- ²⁰ Del Real, J. A. (2020, December 18). *When it comes to the census, the damage among immigrants is already done*. The New York Times. Retrieved August 7, 2023 from <https://www.nytimes.com/2019/06/27/us/supreme-court-citizenship-census-immigrants.html>
- ²¹ Cohn, D., & Passel, J. S. (2022, June 8). *2020 census quality: Key facts*. Pew Research Center. Retrieved August 7, 2023 from <https://www.pewresearch.org/short-reads/2022/06/08/key-facts-about-the-quality-of-the-2020-census/>
- ²² Schneider, M., & Fonseca, F. (2022, March 9). *Native Americans fret as report card released on 2020 census*. Associated Press News. Retrieved August 7, 2023 from <https://apnews.com/article/covid-health-race-and-ethnicity-racial-injustice-native-americans-3f68d4d1e2b6c70223e99452a1a43be1>
- ²³ Khubba, S., Heim, K., & Hong, J. (2022, March 10). *National census coverage estimates for people in the United States by demographic characteristics*. United States Census Bureau. Retrieved August 9, 2023 from <https://www2.census.gov/programs-surveys/decennial/coverage-measurement/pes/national-census-coverage-estimates-by-demographic-characteristics.pdf>
- ²⁴ United States Census Bureau. (2022, March 10). *Census Bureau releases estimates of undercount and overcount in the 2020 census*. Census.gov. Retrieved August 9, 2023 from <https://www.census.gov/newsroom/press-releases/2022/2020-census-estimates-of-undercount-and-overcount.html>
- ²⁵ United States Census Bureau. (2021, November 23). *Why we conduct the decennial census of population and housing*. Census.gov. Retrieved August 7, 2023 from <https://www.census.gov/programs-surveys/decennial-census/about/why.html>
- ²⁶ Dillingham, S. (2022b, March 22). *2020 census and tribal communities*. United States Census Bureau. Retrieved August 7, 2023 from https://www.census.gov/newsroom/blogs/director/2020/09/2020_census_and_trib.html
- ²⁷ Knudsen, E. I., Heckman, J. J., Cameron, J. L., & Shonkoff, J. P. (2006). Economic, neurobiological, and behavioral perspectives on building America's future workforce. *Proceedings of the National Academy of Sciences - PNAS*, 103(27), 10155–10162. <https://doi.org/10.1073/pnas.0600888103>
- ²⁸ Heckman, J. J. & Mosso, S. (2014). The Economics of Human Development and Social Mobility. *Annual Review of Economics*, 6(1), 689-733. <https://doi.org/10.1146/annurev-economics-080213-040753>
- ²⁹ Centers of Disease Control and Prevention. (2023, September 18). *Minority health: Racism and health*. Retrieved September 21, 2023 from <https://www.cdc.gov/minorityhealth/racism-disparities/index.html>
- ³⁰ Williams, D. R., & Cooper, L. A. (2019). Reducing racial inequities in health: Using what we already know to take action. *International Journal of Environmental Research and Public Health*, 16(4), 606. <https://doi.org/10.3390/ijerph16040606>
- ³¹ Olivet, J., Wilkey, C., Richard, M., Dones, M., Tripp, J., Beit-Arie, M., Yampolskaya, S., & Cannon, R. (2021). Racial inequality and homelessness: Findings from the SPARC study. *The ANNALS of the American Academy of Political and Social Science*, 693(1), 82-100. <https://doi.org/10.1177/0002716221991040>
- ³² Dean, J., & Cornell Chronicle. (2023, February 16). *'Staggering' disparities: Homelessness risk varies across race*. Cornell University News. Retrieved September 21, 2023 from <https://news.cornell.edu/stories/2023/02/staggering-disparities-homelessness-risk-varies-across-race>
- ³³ Centers for Disease Control and Prevention. (2023, June 27). *Health Equity: Prioritizing minority mental health*. Retrieved September 21, 2023 from <https://www.cdc.gov/healthequity/features/minority-mental-health/index.html>

-
- ³⁴ Tai, D. B. G., Shah, A., Doubeni, C. A., Sia, I. G., & Wieland, M. L. (2020). The disproportionate impact of COVID-19 on racial and ethnic minorities in the United States. *Clinical Infectious Diseases*, 72(4), 703–706. <https://doi.org/10.1093/cid/ciaa815>
- ³⁵ Federal Interagency Forum on Child and Family Statistics. (n.d.). *Table FAM4 Children of at least one foreign-born parent: Percentage of children ages 0–17 by nativity of child and parents, parent's education, poverty status, and other characteristics, selected years 1994–2020*. Retrieved February 21, 2024 from <https://www.childstats.gov/americaschildren/tables/fam4.asp>
- ³⁶ Fortuny, K., Hernandez, D.J., & Chaudry, A. (2010, August 31). *Young children of immigrants: The leading edge of America's future*. Urban Institute. Retrieved September 21, 2023 from <https://www.urban.org/research/publication/young-children-immigrants-leading-edge-americas-future>
- ³⁷ Hofstetter, J., and McHugh, M. (2021). Arizona's immigrant and U.S.-born parents of young and elementary-school-age children: Key sociodemographic characteristics. Migration Policy Institute. Retrieved August 19, 2023 from https://www.migrationpolicy.org/sites/default/files/publications/mpi_nciip_parents-children-0-4-and-5-10-az-2021_final.pdf
- ³⁸ Urban Institute. (2019). *Part of us: A data-driven look at children of immigrants*. Retrieved August 12, 2023 from <https://www.urban.org/features/part-us-data-driven-look-children-immigrants>
- ³⁹ Fortuny, K., Hernandez, D.J., & Chaudry, A. (2010). *Young children of immigrants: The leading edge of America's future*. Urban Institute. Retrieved September 14, 2021 from <https://www.urban.org/research/publication/young-children-immigrants-leading-edge-americas-future>
- ⁴⁰ Androff, D. K., Ayon, C., Becerra, D., & Gurrola, M. (2011). U.S. immigration policy and immigrant children's well-being: The impact of policy shifts. *Journal of Sociology & Social Welfare*, 38(1), 77. <https://doi.org/10.15453/0191-5096.3585>
- ⁴¹ Pedraza, F. I., Nichols, V. C., & LeBrón, A. M. (2017). Cautious citizenship: The deterring effect of immigration issue salience on health care use and bureaucratic interactions among Latino US citizens. *Journal of Health Politics, Policy and Law*, 42(5), 925-960. [https://doi.org/10.1215/03616878-3940486Heckman & Mosso, S. \(2014\)](https://doi.org/10.1215/03616878-3940486Heckman & Mosso, S. (2014))
- ⁴² Bernstein, H., Gonzalez, D., Karpman, M., & Zuckerman, S. (2019, May 22). One in seven adults in immigrant families reported avoiding public benefit programs in 2018. *Urban Institute*. Retrieved August 16, 2021 from <https://www.urban.org/research/publication/one-seven-adults-immigrant-families-reported-avoiding-public-benefit-programs-2018>
- ⁴³ Artiga, S., & Ubri, P. (2017, December 13). *Living in an immigrant family in America: How fear and toxic stress are affecting daily life, well-being, & health*. Kaiser Family Foundation. Retrieved August 16, 2021 from <https://www.kff.org/report-section/living-in-an-immigrant-family-in-america-issue-brief/>
- ⁴⁴ Perreira, K. M., Crosnoe, R., Fortuny, K., Pedroza, J., Ulvestad, K., Weiland, C., Yoshikawa, H., & Chaudry, A. (2012, May 24). *ASPE Issue Brief: Barriers to immigrants' access to health and human services programs*. Office of the Assistant Secretary for Planning and Evaluation. Retrieved August 16, 2021 from <http://webarchive.urban.org/UploadedPDF/413260-Barriers-to-Immigrants-Access-to-Health-and-Human-Services-Programs.pdf>
- ⁴⁵ Bernstein, H., McTarnaghan, S., & Gonzalez, D. (2019, August). *Safety net access in the context of the public charge rule: Voices of immigrant families*. Urban Institute. Retrieved August 16, 2021 from https://www.urban.org/sites/default/files/publication/100754/safety_net_access_in_the_context_of_the_public_charge_rule_1.pdf
- ⁴⁶ Ku, L. (2019, October 9). *New evidence demonstrates that the public charge rule will harm immigrant families and others*. Health Affairs. Retrieved September 14, 2021 from <https://www.healthaffairs.org/doi/10.1377/hblog20191008.70483/full/>
- ⁴⁷ The National Academies of Science, Engineering, and Medicine. (2016). *Parenting matters: Supporting parents of children ages 0-8* (V. L. Gadsden, M. Ford, & H. Breiner, Eds.). Washington, DC: The National Academies Press. <https://doi.org/10.17226/21868>

-
- ⁴⁸ McCarty, T.L. (2021) The holistic benefits of education for Indigenous language revitalisation and reclamation (ELR²). *Journal of Multilingual and Multicultural Development*, 42(10), 927-940. <https://doi.org/10.1080/01434632.2020.1827647>
- ⁴⁹ U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. (n.d.). The benefits of bilingualism. Retrieved from <https://web.archive.org/web/20130228031031/https://eclkc.ohs.acf.hhs.gov/hslc/tta-system/cultural-linguistic/docs/benefits-of-being-bilingual.pdf>
- ⁵⁰ National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24677>
- ⁵¹ Grote, K. S., Scott, R. M., & Gilger, J. (2021). Bilingual advantages in executive functioning: Evidence from a low-income sample. *First Language*, 41(6), 677–700. <https://doi.org/10.1177/01427237211024220>
- ⁵² van den Noort, M., Struys, E., Bosch, P., Jaswetz, L., Perriard, B., Yeo, S., Barisch, P., Vermeire, K., Lee, S., & Lim, S. (2019). Does the bilingual advantage in cognitive control exist and if so, what are its modulating factors? A systematic review. *Behavioral Sciences*, 9(3), 27. <http://dx.doi.org/10.3390/bs9030027>
- ⁵³ Antoniou, M. (2019). The advantages of bilingualism debate. *Annual Review of Linguistics*, 5(1), 395–415. <https://doi.org/10.1146/annurev-linguistics-011718-011820>
- ⁵⁴ Administration for Children & Families. (2016, June 29). *Promoting the development of dual language learners: Helping all children succeed*. U.S. Department of Health and Human Services. Retrieved September 21, 2023 from <https://www.acf.hhs.gov/archive/blog/2016/06/promoting-development-dual-language-learners>
- ⁵⁵ Robbins, T., Stagman, S., & Smith, S. (2012, October). *Young children at risk: National and state prevalence of risk factors*. National Center for Children in Poverty. Retrieved September 21, 2023 from <http://www.nccp.org/publication/young-children-at-risk/>
- ⁵⁶ The National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures* (R. Takanishi, & L. Menestrel, Eds.). Washington, DC: The National Academies Press. <https://doi.org/10.17226/24677>
- ⁵⁷ Administration for Children & Families. (2016, June 29). *Promoting the development of dual language learners: Helping all children succeed*. U.S. Department of Health and Human Services. Retrieved September 21, 2023 from <https://www.acf.hhs.gov/archive/blog/2016/06/promoting-development-dual-language-learners>
- ⁵⁸ Redd, Z., Sanchez Karver, T., Murphey, D., Anderson Moore, K., Knewstub, D., & ChildTrends. (2011, November 1). Two Generations in Poverty: Status and Trends among Parents and Children in the United States, 2000-2010 - Child Trends. Retrieved January 17, 2024, from <https://www.childtrends.org/publications/two-generations-in-poverty-status-and-trends-among-parents-and-children-in-the-united-states-2000-2010-2>
- ⁵⁹ Waldfogel, J., Craigie, T., & Brooks-Gunn, J. (2010). Fragile families and child wellbeing. *The Future of Children*, 20(2), 87–112. <https://doi.org/10.1353/foc.2010.0002>
- ⁶⁰ Musick, K., & Meier, A. (2010). Are both parents always better than one? Parental conflict and young adult well-being. *Social Science Research*, 39(5), 814–830. <https://doi.org/10.1016/j.ssresearch.2010.03.002>
- ⁶¹ Liu, S. H., & Heiland, F. (2012). Should We Get Married? The Effect Of Parents' Marriage On Out-Of-Wedlock Children. *Economic Inquiry*, 50(1), 17–38. <https://doi.org/10.1111/j.1465-7295.2010.00248.x>
- ⁶² Amato, P. R. (2005). The impact of family formation change on the cognitive, social, and emotional well-being of the next generation. *The Future of Children*, 15(2), 75-96. <https://www.jstor.org/stable/3556564>
- ⁶³ Irvin, K., Fahim, F., Alshehri, S., & Kitsantas, P. (2018). Family structure and children's unmet health-care needs. *Journal of Child Health Care*, 22(1), 57-67. <https://doi.org/10.1177/1367493517748372>

-
- ⁶⁴ Grafova, I. B., Monheit, A. C., & Kumar, R. (2022). Income shocks and out-of-pocket health care spending: Implications for single-mother families. *Journal of Family and Economic Issues*, 43(3), 489-500. <https://doi.org/10.1007/s10834-021-09780-6>
- ⁶⁵ Taylor, Z. E., & Conger, R. D. (2014). Risk and resilience processes in single-mother families: An interactionist perspective. In Sloboda, Z. & Petras, H. (Eds.), *Defining prevention science* (pp. 195-217). Springer, Boston, MA. https://doi.org/10.1007/978-1-4899-7424-2_9
- ⁶⁶ Cabrera, N. J., Volling, B. L., & Barr, R. (2018). Fathers are parents, too! Widening the lens on parenting for children's development. *Child Development Perspectives*, 12(3), 152-157. <https://doi.org/10.1111/cdep.12275>
- ⁶⁷ Coles, R. L. (2015). Single-father families: A review of the literature. *Journal of Family Theory & Review*, 7(2), 144-166. <https://doi.org/10.1111/jftr.12069>
- ⁶⁸ Ellis, R. R., & Simmons, T. (2014). Coresident grandparents and their grandchildren: 2012. *Current Population Reports*, pp. 20-576. U.S. Census Bureau: Washington, DC. Retrieved August 29, 2023 from <https://www.census.gov/library/publications/2014/demo/p20-576.html>
- ⁶⁹ Pilkauskas, N. V., Amorim, M., & Dunifon, R. E. (2020). Historical trends in children living in multigenerational households in the United States: 1870–2018. *Demography*, 57(6), 2269-2296. <https://doi.org/10.1007/s13524-020-00920-5>
- ⁷⁰ Amorim, M., Dunifon, R., & Pilkauskas, N. (2017). The magnitude and timing of grandparental coresidence during childhood in the United States. *Demographic Research*, 37, 1695–1706. <https://doi.org/10.4054/DemRes.2017.37.52>
- ⁷¹ Cohn, D., & Passel, J. S. (2018, April 5). *Record 64 million Americans live in multigenerational households*. Pew Research Center. Retrieved August 16, 2023 from <https://www.pewresearch.org/short-reads/2018/04/05/a-record-64-million-americans-live-in-multigenerational-households/>
- ⁷² Cohn, D., Horowitz, J. M., Minkin, R., Fry, R., & Hurst, K. (2022, March 24). *Financial issues top the list of reasons U.S. adults live in multigenerational homes*. Pew Research Center. Retrieved August 16, 2023 from <https://www.pewresearch.org/social-trends/2022/03/24/financial-issues-top-the-list-of-reasons-u-s-adults-live-in-multigenerational-homes/>
- ⁷³ Mustillo, S., Li, M., & Wang, W. (2021). Parent work-to-family conflict and child psychological well-being: Moderating role of grandparent coresidence. *Journal of Marriage and Family*, 83(1), 27-39. <https://doi.org/10.1111/jomf.12703>
- ⁷⁴ Barnett, M. A., Yancura, L., Wilmoth, J., & Sano, Y. (2016). Wellbeing among rural grandfamilies in two multigenerational household structures. *GrandFamilies: The Contemporary Journal of Research, Practice and Policy*, 3(1). Retrieved August 16, 2021 from <http://scholarworks.wmich.edu/grandfamilies/vol3/iss1/4>
- ⁷⁵ Harvey, H., & Dunifon, R. (2023). Why mothers double up: The role of demographic, economic, and family characteristics. *Journal of Marriage and Family*, 85(3), 845-868. <https://doi.org/10.1111/jomf.12903>
- ⁷⁶ Augustine, J. M., & Raley, R. K. (2013). Multigenerational households and the school readiness of children born to unmarried mothers. *Journal of Family Issues*, 34(4), 431–459. <https://doi.org/10.1177/0192513X12439177>
- ⁷⁷ Pilkauskas, N. V., Amorim, M., & Dunifon, R. E. (2020). Historical trends in children living in multigenerational households in the United States: 1870–2018. *Demography*, 57(6), 2269-2296. <https://doi.org/10.1007/s13524-020-00920-5>
- ⁷⁸ Livingston, G. (2018). *The changing profile of unmarried parents*. Pew Research Center. Retrieved August 16, 2021 from <https://www.pewsocialtrends.org/2018/04/25/the-changing-profile-of-unmarried-parents/>
- ⁷⁹ Vandivere, S., Yrausquin, A., Allen, T., Malm, K., & McKlinton, A. (2012, November 30). *Children in nonparental care: A review of the literature and analysis of data gaps*. Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Retrieved August 16, 2021 from <http://aspe.hhs.gov/basic-report/children-nonparental-care-review-literature-and-analysis-data-gaps>
- ⁸⁰ Rubin, D., Springer, S. H., Zlotnik, S., Kang-Yi, C. D., Szilagyi, M., Forkey, H., Harmon, D., Jandes, P., Jones, V. F., Lee, P., Nalven, L., Sagor, L., Schulte, E., & Zetlev, L. W. (2017). Needs of Kinship care families and pediatric practice. *Pediatrics (Evanston)*, 139(4). <https://doi.org/10.1542/peds.2017-0099>

-
- ⁸¹ Dolbin-MacNab, M. L., & Stucki, B. D. (2015). *Grandparents raising grandchildren*. American Association for Marriage and Family Therapy. Retrieved August 29, 2023 from https://www.aamft.org/Consumer_Updates/grandparents.aspx
- ⁸² Ellis, R., & Simmons, T. (2014, October 22). *Co-resident grandparents and their grandchildren: 2012*. United States Census Bureau. Retrieved August 29, 2023 from <https://www.census.gov/library/publications/2014/demo/p20-576.html>
- ⁸³ Baker, L. A., Silverstein, M., & Putney, N. M. (2008). Grandparents raising grandchildren in the United States: Changing family forms, stagnant social policies. *Journal of Societal & Social Policy*, 7, 53. Retrieved August 29, 2023 from <https://pubmed.ncbi.nlm.nih.gov/20585408/>
- ⁸⁴ Chan, K.L., Chen, M., Lo, K.M.C, Chen, Q., Kelley, S., & Ip, P. (2019). The effectiveness of Interventions for grandparents raising grandchildren: A meta-analysis. *Research on Social Work Practice*, 29(6), 607-617. <https://doi.org/10.1177/1049731518798470>
- ⁸⁵ Taylor, Z. E., & Conger, R. D. (2017). Promoting strengths and resilience in single-mother families. *Child Development*, 88(2), 350-358. <https://doi.org/10.1111/cdev.12741>
- ⁸⁶ Pilkauskas, N. V., Amorim, M., & Dunifon, R. E. (2020). Historical trends in children living in multigenerational households in the United States: 1870–2018. *Demography*, 57(6), 2269-2296. <https://doi.org/10.1007/s13524-020-00920-5>
- ⁸⁷ Gentles-Gibbs, N., & Zema, J. (2020). It's not about them without them: Kinship grandparents' perspectives on family empowerment in public child welfare. *Children and Youth Services Review*, 108, 104650. <https://doi.org/10.1016/j.childyouth.2019.104650>
- ⁸⁸ National Academies of Sciences, Engineering, and Medicine. (2019). *A Roadmap to Reducing Child Poverty*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25246>
- ⁸⁹ Ratcliffe, C., & McKernan, S. (2012). *Child poverty and its lasting consequences*. *Low-Income Working Families Series*. The Urban Institute. Retrieved August 17, 2023 from <https://www.urban.org/sites/default/files/publication/32756/412659-Child-Poverty-and-Its-Lasting-Consequence.PDF>
- ⁹⁰ Duncan, G., Ziol-Guest, K., & Kalil, A. (2010). Early-childhood poverty and adult attainment, behavior, and health. *Child Development*, 81(1), 306-325. Retrieved August 22, 2023 from <https://doi.org/10.1111/j.1467-8624.2009.01396.x>
- ⁹¹ Murphey, D., & Redd, Z. (2014, January 8). *5 Ways Poverty Harms Children*. Child Trends. Retrieved August 21, 2023 from <https://www.childtrends.org/publications/5-ways-poverty-harms-children>
- ⁹² Healthy People 2030. (n.d.) *Economic stability*. Office of Disease Prevention and Health Promotion. Retrieved August 16, 2023, from <https://health.gov/healthypeople/objectives-and-data/browse-objectives/economic-stability>
- ⁹³ Ascend at the Aspen Institute. (2019, April 1). *Family economic stability: Work supports and tax credits*. Robert Wood Johnson Foundation. Retrieved August 22, 2023 from <https://www.rwjf.org/en/insights/our-research/2019/04/family-economic-stability.html>
- ⁹⁴ Wagnmiller, R. & Adelman, R. (2009). *Children and intergenerational poverty: The long-term consequences of growing up poor*. National Center for Children in Poverty. Retrieved August 22, 2023 from <http://www.nccp.org/publication/childhood-and-intergenerational-poverty/>
- ⁹⁵ Duncan, G., Ziol-Guest, K., & Kalil, A. (2010). Early-childhood poverty and adult attainment, behavior, and health. *Child Development*, 81(1), 306-325. Retrieved August 22, 2023 from <https://doi.org/10.1111/j.1467-8624.2009.01396.x>
- ⁹⁶ National Academies of Sciences, Engineering, and Medicine. (2023). *Reducing Intergenerational Poverty*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/27058>
- ⁹⁷ Office of Family Assistance. (2016). *TANF-ACF-IM-2016-03 (Strengthening TANF outcomes by developing two-generation approaches to build economic security)*. U.S. Department of Health and Human Services. Retrieved August 18, 2023 from <https://www.acf.hhs.gov/ofa/policy-guidance/tanf-acf-im-2016-03>
- ⁹⁸ Luby, J. L., Constantino, J. N., & Barch, D. M. (2022). Poverty and the developing brain. *Cerebrum*. Retrieved August 22, 2023 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9224364/pdf/cer-04-22.pdf>

-
- ⁹⁹ Murphey, D., & Redd, Z. (2014, January 8). *5 Ways Poverty Harms Children*. Child Trends. Retrieved August 21, 2023 from <https://www.childtrends.org/publications/5-ways-poverty-harms-children>
- ¹⁰⁰ Hair, N. L., Hanson, J. L., Wolfe, B. L., & Pollak, S. D. (2015). Association of child poverty, brain development, and academic achievement. *JAMA Pediatrics*, *169*(9), 822–829. <https://doi.org/10.1001/jamapediatrics.2015.1475>
- ¹⁰¹ Brooks-Gunn, J., & Duncan, G. (1997). The effects of poverty on children. *The Future of Children*, *7*(2), 55-71. <https://doi.org/10.2307/1602387>
- ¹⁰² McLoyd, V. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, *53*(2), 185-204. <https://doi.org/10.1037/0003-066X.53.2.185>
- ¹⁰³ Ratcliffe, C., & McKernan, S. (2012). *Child poverty and its lasting consequences*. *Low-Income Working Families Series*. The Urban Institute. Retrieved August 17, 2023 from <https://www.urban.org/sites/default/files/publication/32756/412659-Child-Poverty-and-Its-Lasting-Consequence.PDF>
- ¹⁰⁴ Duncan, G., Ziol-Guest, K., & Kalil, A. (2010). Early-childhood poverty and adult attainment, behavior, and health. *Child Development*, *81*(1), 306-325. Retrieved August 22, 2023 from <https://srcd.onlinelibrary.wiley.com/doi/full/10.1111/j.1467-8624.2009.01396.x>
- ¹⁰⁵ Gupta, R. P., de Wit, M. L., & McKeown, D. (2007). The impact of poverty on the current and future health status of children. *Pediatrics & Child Health*, *12*(8), 667-672. <https://doi.org/10.1093/pch/12.8.667>
- ¹⁰⁶ Jensen, S. K. G., Berens, A. E., & Nelson, C. A. (2017). Effects of poverty on interacting biological systems underlying child development. *The Lancet Child & Adolescent Health*, *1*(3), 225–239. [https://doi.org/10.1016/S2352-4642\(17\)30024-X](https://doi.org/10.1016/S2352-4642(17)30024-X)
- ¹⁰⁷ Brisson, D., McCune, S., Wilson, J. H., Speer, S. R., McCrae, J. S., & Calhoun, K. H. (2020). A systematic review of the association between poverty and biomarkers of toxic stress. *Journal of Evidence-Based Social Work*, *17*(6), 696-713. <https://doi.org/10.1080/26408066.2020.1769786>
- ¹⁰⁸ Crouch, Probst, J. C., Radcliff, E., Bennett, K. J., & McKinney, S. H. (2019). Prevalence of adverse childhood experiences (ACEs) among US children. *Child Abuse & Neglect*, *92*, 209–218. <https://doi.org/10.1016/j.chiabu.2019.04.010>
- ¹⁰⁹ McEwen, & Gregerson, S. F. (2019). A Critical Assessment of the Adverse Childhood Experiences Study at 20 Years. *American Journal of Preventive Medicine*, *56*(6), 790–794. <https://doi.org/10.1016/j.amepre.2018.10.01>
- ¹¹⁰ National Academies of Sciences, Engineering, and Medicine. (2019). *A Roadmap to Reducing Child Poverty*. Washington, DC: The National Academies Press. doi: <https://doi.org/10.17226/25246>
- ¹¹¹ United States Government. (n.d.). *Welfare benefits or Temporary Assistance for Needy Families (TANF)*. Retrieved September 27, 2023 from <https://www.usa.gov/welfare-benefits>
- ¹¹² Economic Research Service, U.S. Department of Agriculture. (2021). *Definitions of Food Security*. Retrieved October 23, 2023 from <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/>
- ¹¹³ Bruening, M., Dinour, L. M., & Chavez, J. B. R. (2017). Food insecurity and emotional health in the USA: A systematic narrative review of longitudinal research. *Public Health Nutrition*, *20*(17), 3200-3208. <https://doi.org/10.1017/S1368980017002221>
- ¹¹⁴ Baer, T. E., Scherer, E. A., Flegler, E. W., & Hassan, A. (2015). Food insecurity and the burden of health-related social problems in an urban youth population. *Journal of Adolescent Health*, *57*(6), 601-607. <https://doi.org/10.1016/j.jadohealth.2015.08.013>
- ¹¹⁵ Zaslow, M., Bronte-Tinkew, J., Capps, R., Horowitz, A., Moore, K. A., & Weinstein, D. (2009). Food security during infancy: implications for attachment and mental proficiency in toddlerhood. *Maternal and Child Health Journal*, *13*, 66-80. <https://doi.org/10.1007/s10995-008-0329-1>
- ¹¹⁶ Kimbro, R. T., & Denney, J. T. (2015). Transitions into food insecurity associated with behavioral problems and worse overall health among children. *Health Affairs*, *34*(11), 1949-1955. <https://doi.org/10.1377/hlthaff.2015.0626>

-
- ¹¹⁷ Knowles, M., Rabinowich, J., Ettinger de Cuba, S., Cutts, D. B., & Chilton, M. (2016). “Do you wanna breathe or eat?”: Parent perspectives on child health consequences of food insecurity, trade-offs, and toxic stress. *Maternal and Child Health Journal*, 20, 25-32. <https://doi.org/10.1007/s10995-015-1797-8>
- ¹¹⁸ Johnson, A. D., & Markowitz, A. J. (2018). Food insecurity and family well-being outcomes among households with young children. *The Journal of Pediatrics*, 196, 275-282. <https://doi.org/10.1016/j.jpeds.2018.01.026>
- ¹¹⁹ No Kid Hungry Center for Best Practices (2022). Supplemental Nutrition Assistance Program (SNAP) Overview. Retrieved December 2023 from <https://bestpractices.nokidhungry.org/resource/supplemental-nutrition-assistance-program-snap-overview>
- ¹²⁰ Food Research and Action Center. (2013). SNAP and public health: The role of the Supplemental Nutrition Assistance Program in improving the health and well-being of Americans. Retrieved September 27, 2023 from http://frac.org/pdf/snap_and_public_health_2013.pdf
- ¹²¹ United States Department of Agriculture (2023). WIC program: Average monthly benefit per person. Retrieved December 12, 2023 from <https://fns-prod.azureedge.us/sites/default/files/resource-files/25wifavgfd-costs-12.pdf>
- ¹²² United States Department of Agriculture. (n.d.). *How to participate in summer meals*. Retrieved October 26, 2021, from <https://fns-prod.azureedge.net/sites/default/files/resource-files/SFSP-Fact-Sheet.pdf>
- ¹²³ United States Department of Agriculture (2022). *Child nutrition COVID-19 waivers*. Retrieved February 6, 2024 from <https://www.fns.usda.gov/disaster-assistance/child-nutrition-covid-19-waivers>
- ¹²⁴ Arizona Department of Education. (2021, June 14). *Introduction to the CACFP* [Video]. Vimeo. <https://vimeo.com/562872764>
- ¹²⁵ Healthy People 2030. (n.d.). *Social determinants of health*. Office of Disease Prevention and Health Promotion. Retrieved August 16, 2023 from <https://health.gov/healthypeople/priority-areas/social-determinants-health>
- ¹²⁶ Berger, R.P., Fromkin, J.B., Stutz, H., Makoroff, K., Scribano, P.V., Feldman, K., Tu, L.C., & Fabio, A. (2011). Abusive head trauma during a time of increased unemployment: A multicenter analysis. *Pediatrics*, 128(4), 637-643. <https://doi.org/10.1542/peds.2010-2185>
- ¹²⁷ Isaacs, J. B. (2013, March 25). *Unemployment from a child’s perspective*. Urban Institute. Retrieved September 14, 2021 from <https://www.urban.org/research/publication/unemployment-childs-perspective>
- ¹²⁸ National Center for Children in Poverty. (2014). *Arizona demographics for low-income children*. Retrieved September 20, 2023 from http://www.nccp.org/profiles/AZ_profile_6.html
- ¹²⁹ Ascend at the Aspen Institute. (2019, April 1). *Family economic stability: Work supports and tax credits*. Robert Wood Johnson Foundation. Retrieved August 22, 2023 from <https://www.rwjf.org/en/insights/our-research/2019/04/family-economic-stability.html>
- ¹³⁰ Office of Family Assistance. (2016). *TANF-ACF-IM-2016-03 (Strengthening TANF outcomes by developing two-generation approaches to build economic security)*. U.S. Department of Health and Human Services. Retrieved August 18, 2023 from <https://www.acf.hhs.gov/ofa/policy-guidance/tanf-acf-im-2016-03>
- ¹³¹ Ascend at the Aspen Institute. (n.d.) *The 2Gen approach*. Retrieved August 22, 2023 from [https://ascend.aspeninstitute.org/2gen-approach/#:~:text=Two%2Dgeneration%20\(2Gen\)%20approaches,one%20generation%20to%20the%20next.](https://ascend.aspeninstitute.org/2gen-approach/#:~:text=Two%2Dgeneration%20(2Gen)%20approaches,one%20generation%20to%20the%20next.)
- ¹³² Pina, G., Moore, K. A., Sacks, V., & McClay, A. (2022, December 14). *Two-generation programs may have long-term benefits, according to simulation*. Child Trends. Retrieved August 22, 2023 from <https://www.childtrends.org/publications/two-generation-programs-may-have-long-term-benefits-according-to-simulation>
- ¹³³ Morgan, A., Champion, E., & Harrison E. (2022, January 7). *How two-generation programs can advance housing stability*. Urban Institute. Retrieved August 22, 2023 from <https://www.urban.org/urban-wire/how-two-generation-programs-can-advance-housing-stability>

-
- ¹³⁴ Children’s Bureau, an Office of the Administration of Children & Families. (2023, March). *Two-generation approaches to supporting family well-being*. Child Welfare Information Gateway. Retrieved August 22, 2023 from <https://www.childwelfare.gov/pubPDFs/bulletins-2gen.pdf>
- ¹³⁵ McCoy-Roth, M., Mackintosh, B., & Murphey, D. (2012, February 15). When the bough breaks: The effects of homelessness on young children. *Child Trends*, 3(1). Retrieved September 14, 2021 from <https://cms.childtrends.org/wp-content/uploads/2012/02/2012-08EffectHomelessnessChildren.pdf>
- ¹³⁶ Gabriel, S., & Painter, G. (2017). *Housing affordability: Why does it matter, how should it be measured, and why is there an affordability problem?* American Enterprise Institute. Retrieved April 10, 2017 from <https://www.aei.org/wp-content/uploads/2017/04/CHA-Panel-1.pdf>
- ¹³⁷ Federal Interagency Forum on Child and Family Statistics. (2015). *America’s children: Key national indicators for well-being, 2015*. U.S. Government Printing Office. Retrieved September 14, 2021 from https://www.childstats.gov/pdf/ac2015/ac_15.pdf
- ¹³⁸ Schwartz, M., & Wilson, E. (n.d.). *Who can afford to live in a home? A look at data from the 2006 American Community Survey*. United States Census Bureau. Retrieved September 14, 2021 from <https://cdn2.hubspot.net/hubfs/4408380/PDF/General-Housing-Homelessness/who-can-afford.pdf>
- ¹³⁹ Enterprise Community Partners. (2014). *Impact of affordable housing on families and communities: A review of the evidence base*. Retrieved August 21, 2023 from <https://homeforallsmc.org/wp-content/uploads/2017/05/Impact-of-Affordable-Housing-on-Families-and-Communities.pdf>.
- ¹⁴⁰ McCoy-Roth, M., Mackintosh, B., & Murphey, D. (2012). When the bough breaks: The effects of homelessness on young children. *Child Health*, 3(1). Retrieved September 20, 2023 from <https://cms.childtrends.org/wp-content/uploads/2012/02/2012-08EffectHomelessnessChildren.pdf>
- ¹⁴¹ Turcios, Y. (2023, March 22). *Digital access: A super determinant of health*. Substance Abuse and Mental Health Services Administration. Retrieved August 21, 2023 from <https://www.samhsa.gov/blog/digital-access-super-determinant-health>
- ¹⁴² Rideout, V. J. & Katz, V. S. (2016). *Opportunity for all? Technology and learning in lower-income families. A report of the Families and Media Project*. The Joan Ganz Cooney Center at Sesame Workshop. Accessed August 30, 2023 from <https://files.eric.ed.gov/fulltext/ED574416.pdf>
- ¹⁴³ Herbert, C., Hermann, A., and McCue, D. (2018). *Measuring housing affordability: Assessing the 30 percent of income standard*. Cambridge, MA: Joint Center for Housing Studies of Harvard University. Retrieved September 14, 2021 from https://www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_Herbert_Hermann_McCue_measuring_housing_affordability.pdf
- ¹⁴⁴ Healthy People 2030. (n.d.). *Education Access and Quality*. Office of Disease Prevention and Health Promotion. Retrieved July 17, 2023 from <https://health.gov/healthypeople/objectives-and-data/browse-objectives/education-access-and-quality>
- ¹⁴⁵ National Research Council. (2012). *Key national education indicators: Workshop summary*. The National Academies Press. <https://doi.org/10.17226/13453>
- ¹⁴⁶ Healthy People 2020. (n.d.). *Adolescent health*. Office of Disease Prevention and Health Promotion. Retrieved July 17, 2023 from <https://wayback.archive-it.org/5774/20220413181755/https://www.healthypeople.gov/2020/topics-objectives/topic/Adolescent-Health>
- ¹⁴⁷ Cataldi, E. F., Bennett, C. T., & Chen, X. (2018). *First-generation students: College access, persistence, and postbachelor’s outcomes*. National Center for Education Statistics. Retrieved September 20, 2023 from <https://nces.ed.gov/pubs2018/2018421.pdf>
- ¹⁴⁸ Child Trends Data Bank. (2014, July). *Parental education: Indicators on children and youth*. Retrieved September 7, 2021 from https://web.archive.org/web/20150525195005/http://www.childtrends.org/wp-content/uploads/2012/04/67-Parental_Education.pdf

-
- ¹⁴⁹ Rathbun, A., & McFarland, J. (2017). *Risk factors and academic outcomes in kindergarten through third grade*. National Center for Education Statistics. Retrieved September 7, 2021 from https://nces.ed.gov/programs/coe/pdf/coe_tgd.pdf
- ¹⁵⁰ The Annie E. Casey Foundation. (2013). *The first eight years: Giving kids a foundation for lifetime success*. Retrieved August 30, 2023 from <http://www.aecf.org/m/resourcedoc/AECF-TheFirstEightYearsKCpolicyreport-2013.pdf>
- ¹⁵¹ DeAngelis, C. A., Holmes Erickson, H., & Ritter, G. W. (2020). What's the state of the evidence on pre-K programmes in the United States? A systematic review. *Educational Review*, 72(4), 495-519. <https://doi.org/10.1080/00131911.2018.1520688>
- ¹⁵² Allison, M. A., Attisha, E., Lerner, M., De Pinto, C. D., Beers, N. S., Gibson, E. J., Gorski, P., Kjolhede, C., O'Leary, S. C., Schumacher, H., & Weiss-Harrison, A. (2019). The link between school attendance and good health. *Pediatrics*, 143(2), e20183648. <https://doi.org/10.1542/peds.2018-3648>
- ¹⁵³ Allison, M. A., Attisha, E., Lerner, M., De Pinto, C. D., Beers, N. S., Gibson, E. J., Gorski, P., Kjolhede, C., O'Leary, S. C., Schumacher, H., & Weiss-Harrison, A. (2019). The link between school attendance and good health. *Pediatrics*, 143(2), e20183648. <https://doi.org/10.1542/peds.2018-3648>
- ¹⁵⁴ Ready, D.D. (2010). Socioeconomic disadvantage, school attendance, and early cognitive development: The differential effects of school exposure. *Sociology of Education*, 83(4), 271-286.
- ¹⁵⁵ Arizona Department of Education. (n.d.). *Assessments*. Retrieved August 20, 2021 from <https://www.azed.gov/assessment>
- ¹⁵⁶ Altavena, L. (2021, February 8). *Testing for Arizona students returns in April, with lots of unanswered questions*. AZ Central. Retrieved August 20, 2021 from <https://www.azcentral.com/story/news/local/arizona-education/2021/02/08/arizona-students-take-standardized-tests-april-lots-questions-unanswered/4251118001/>
- ¹⁵⁷ Arizona Department of Education. (2023). *Move on when reading*. Retrieved July 27, 2023 from <http://www.azed.gov/mowr/>
- ¹⁵⁸ Lesnick, J., Goerge, R. M., Smithgall, C., & Gwynne, J. (2010). *Reading on grade level in third grade: How is it related to high school performance and college enrollment?* Annie E. Casey Foundation. Retrieved September 20, 2023 from <https://assets.aecf.org/m/resourcedoc/aecf-ReadingonGradeLevelLongAnal-2010.PDF>
- ¹⁵⁹ Hernandez, J. D. (2011). *How third-grade reading skills and poverty influence high school graduation*. The Annie E. Casey Foundation. Retrieved September 23, 2023 from <https://files.eric.ed.gov/fulltext/ED518818.pdf>
- ¹⁶⁰ Zajacova A., & Everett, B. G. (2013). The nonequivalent health of high school equivalents. *Social Science Quarterly*, 95(1), 221–238. <https://doi.org/10.1111/ssqu.12039>
- ¹⁶¹ Blumenshine, P., Egerter, S., Barclay, C., Cubbin, C., & Braveman, P. (2010). Socioeconomic disparities in adverse birth outcomes. *American Journal of Preventive Medicine*, 39(3), 263–272. <https://doi.org/10.1016/j.amepre.2010.05.012>
- ¹⁶² Prickett, K. C., & Augustine, J. M. (2015). Maternal education and investments in children's health. *Journal of Marriage and Family*, 78(1), 7–25. <https://doi.org/10.1111/jomf.12253>
- ¹⁶³ Augustine, J. M., Cavanagh, S. E., & Crosnoe, R. (2009). Maternal education, early child care and the reproduction of advantage. *Social Forces*, 88(1), 1–29. <https://doi.org/10.1353/sof.0.0233>
- ¹⁶⁴ Peacock, S., Konrad, S., Watson, E., Nickel, D., & Muhajarine, N. (2013). Effectiveness of home visiting programs on child outcomes: a systematic review. *BMC Public Health*, 13(1). <https://doi.org/10.1186/1471-2458-13-17>
- ¹⁶⁵ Duncan, G. J., & Sojourner, A. (2013). Can intensive early childhood intervention programs eliminate Income-Based cognitive and achievement gaps? *Journal of Human Resources*, 48(4), 945–968. <https://doi.org/10.3368/jhr.48.4.945>
- ¹⁶⁶ Del Campo-Carmona, B. (2022, December 19). *Arizona's disconnected youth*. Making Action Possible for Southern Arizona. Retrieved August 1, 2023 from <https://www.mapazdashboard.arizona.edu/article/arizonas-disconnected-youth>
- ¹⁶⁷ Del Campo-Carmona, B. (2022, December 19). *Arizona's disconnected youth*. Making Action Possible for Southern Arizona. Retrieved August 1, 2023 from <https://www.mapazdashboard.arizona.edu/article/arizonas-disconnected-youth>

-
- ¹⁶⁸ Camilli, G., Vargas, S., Ryan, S., & Barnett, W. S. (2010). Meta-analysis of the effects of early education interventions on cognitive and social development. *Teachers College Record: The Voice of Scholarship in Education*, 112(3), 579–620. <https://doi.org/10.1177/016146811011200303>
- ¹⁶⁹ Center on the Developing Child at Harvard University. (2016). From best practices to breakthrough impacts: A science-based approach to building a more promising future for young children and families. Retrieved August 30, 2023 from https://harvardcenter.wpenginpowered.com/wp-content/uploads/2016/05/From_Best_Practices_to_Breakthrough_Impacts-4.pdf
- ¹⁷⁰ Center on the Developing Child at Harvard University. (2016). *From best practices to breakthrough impacts: A science-based approach to building a more promising future for young children and families*. Retrieved August 30, 2023 from https://harvardcenter.wpenginpowered.com/wp-content/uploads/2016/05/From_Best_Practices_to_Breakthrough_Impacts-4.pdf
- ¹⁷¹ Kuhl, P.K. (2011). Early language learning and literacy: Neuroscience implications for education. *Mind, Brain, and Education*, 5(3), 128-142. <https://doi.org/10.1111/j.1751-228X.2011.01121.x>
- ¹⁷² Center on the Developing Child at Harvard University. (2016). From best practices to breakthrough impacts: A science-based approach to building a more promising future for young children and families. Retrieved August 30, 2023 from https://harvardcenter.wpenginpowered.com/wp-content/uploads/2016/05/From_Best_Practices_to_Breakthrough_Impacts-4.pdf
- ¹⁷³ National Scientific Council on the Developing Child. (2020). Connecting the brain to the rest of the body: Early childhood development and lifelong health are deeply intertwined: Working paper No. 15. Center on the Developing Child at Harvard University. Retrieved August 30, 2023 from https://harvardcenter.wpenginpowered.com/wp-content/uploads/2020/06/wp15_health_FINALv2.pdf
- ¹⁷⁴ NICHD Early Child Care Research Network. (2002). Early child care and children’s development prior to school entry: Results from the NICHD study of early child care. *American Educational Research Journal*, 39(1), 133–164. Retrieved August 20, 2021 from <http://www.jstor.org/stable/3202474>.
- ¹⁷⁵ Center on the Developing Child at Harvard University. (2016). From best practices to breakthrough impacts: A science-based approach to building a more promising future for young children and families. Retrieved August 30, 2023 from https://harvardcenter.wpenginpowered.com/wp-content/uploads/2016/05/From_Best_Practices_to_Breakthrough_Impacts-4.pdf
- ¹⁷⁶ National Scientific Council on the Developing Child. (2020). Connecting the brain to the rest of the body: Early childhood development and lifelong health are deeply intertwined: Working paper No. 15. Center on the Developing Child at Harvard University. Retrieved August 30, 2023 from https://harvardcenter.wpenginpowered.com/wp-content/uploads/2020/06/wp15_health_FINALv2.pdf
- ¹⁷⁷ Center on the Developing Child at Harvard University. (2010, July). *The foundations of lifelong health are built in early childhood*. Retrieved August 20, 2021 from <http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf>
- ¹⁷⁸ Ibid.
- ¹⁷⁹ National Scientific Council on the Developing Child. (2020). Connecting the brain to the rest of the body: Early childhood development and lifelong health are deeply intertwined: Working paper No. 15. Center on the Developing Child at Harvard University. Retrieved August 30, 2023 from https://harvardcenter.wpenginpowered.com/wp-content/uploads/2020/06/wp15_health_FINALv2.pdf
- ¹⁸⁰ Center on the Developing Child at Harvard University. (2010, July). *The foundations of lifelong health are built in early childhood*. Retrieved August 20, 2021 from <http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf>
- ¹⁸¹ Ibid.
- ¹⁸² Hao, W. (2022, August). *Investing in early childhood workforce recovery. Policy update. Vol. 29, No. 5*. National Association of State Boards of Education. Retrieved August 30, 2023 from <https://eric.ed.gov/?id=ED623572>

-
- ¹⁸³ Kashen, J., Cai, J., Brown, H., & Fremstad, S. (2022, March 21). *How states would benefit if congress truly invested in child care and pre-K*. *Policy Commons*. Retrieved August 13, 2023 from <https://policycommons.net/artifacts/2287927/how-states-would-benefit-if-congress-truly-invested-in-child-care-and-pre-k/3048017/>
- ¹⁸⁴ Malik, R., Hamm, K., Adamu, M., & Morrissey, T. (2016, October 27). Child care deserts: An analysis of child care centers by ZIP code in 8 states. *Center for American Progress*. Retrieved August 20, 2021 from <https://www.americanprogress.org/issues/early-childhood/reports/2016/10/27/225703/child-care-deserts/>
- ¹⁸⁵ Tanoue, K. H., DeBlois, M., Daws, J., & Walsh, M. (2017, September 14). *Child care and early education accessibility in Tucson (White Paper No. 5)*. Making Action Possible for Southern Arizona. Retrieved October 12, 2023 from <https://www.americanprogress.org/issues/early-childhood/reports/2016/10/27/225703/child-care-deserts/>
- ¹⁸⁶ Child Care Aware® of America. (2018). *Mapping the gap: Exploring the child care supply & demand in Arizona*. Child Care Aware of America. Retrieved August 20, 2021 from <http://usa.childcareaware.org/wp-content/uploads/2017/10/Arizona-Infant-Toddler-Brief1.pdf>
- ¹⁸⁷ Smith, L. K., Bagley, A., & Wolters, B. (2020, October). *Child care in 25 states: What we know and don't know (Rep.)*. Bipartisan Policy. Retrieved August 20, 2021 from https://bipartisanpolicy.org/wp-content/uploads/2020/10/BPC_Working-Family-Solutions_FinalPDFV4.pdf
- ¹⁸⁸ Center for American Progress. (2018). *Child care access in Arizona*. Retrieved October 12, 2023 from <https://childcaredeserts.org/2018/>
- ¹⁸⁹ Center for American Progress. (2019). *Early learning factsheet 2019, Arizona*. Retrieved October 12, 2023 from https://americanprogress.org/wp-content/uploads/sites/2/2019/09/Arizona.pdf?_ga=2.124660044.738685272.1697189841-1575343709.1693426880
- ¹⁹⁰ Bipartisan Policy Center. (2020). *The supply of, potential need for, and gaps in child care in Arizona in 2019*. Child Care Gap. Retrieved August 20, 2021 from <https://childcaregap.org/assets/onePagers/Arizona.pdf>
- ¹⁹¹ Lee, E. K., & Parolin, Z. (2021). The care burden during COVID-19: A national database of child care closures in the United States. *Socius*, 7. <https://doi.org/10.1177/237802312111032028>
- ¹⁹² Chen, Y. (2023, April 5). *Latino households with children continued to experience pandemic-related disruptions to their child care arrangements*. Research Connections. Retrieved August 30, 2023 from <https://researchconnections.org/childcare/resources/154631>
- ¹⁹³ Chen, Y. (2023, April 5). *Latino households with children continued to experience pandemic-related disruptions to their child care arrangements*. Research Connections. Retrieved from <https://researchconnections.org/childcare/resources/154631>
- ¹⁹⁴ Health Management Associates. (2022). *2022 Arizona Child Care Market Rate Survey*. Arizona Department of Economic Security. Retrieved February 21, 2024 from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf>
- ¹⁹⁵ National Low Income Housing Coalition. (2021). *Out of Reach 2021 – Arizona*. Retrieved September 7, 2021 from <https://reports.nlihc.org/sites/default/files/oor/files/reports/state/az-2021-oor.pdf>
- ¹⁹⁶ Knueven, L., & Grace, M. (2020, August 6). *The average monthly mortgage payment by state, city, and year*. Business Insider. Retrieved September 7, 2021 from <https://www.businessinsider.com/personal-finance/average-mortgage-payment>
- ¹⁹⁷ Arizona Department of Economic Security. (n.d.). *Child care*. Retrieved October 12, 2023 from <https://des.az.gov/services/child-and-family/child-care>
- ¹⁹⁸ Walsh, M., Tanoue, K. H., & deBlois, M. (2018). Relationship of economic independence and access to childcare for single moms (2018 research brief). Women Giving. Retrieved October 12, 2023 from <https://womensgiving.org/wp-content/uploads/2022/01/WFSA-2018-Research-Brief.pdf>
- ¹⁹⁹ Tanoue, K. H., deBlois, M., Daws, J., & Walsh, M. (2017). *Child care and early education accessibility in Tucson (White Paper No. 5)*. Making Action Possible for Southern Arizona. Retrieved October 12, 2023 from <https://mapazdashboard.arizona.edu/article/child-care-and-early-education-accessibility-tucson>

-
- ²⁰⁰ First Things First. 2023 Building Bright Futures. Arizona’s Early Childhood Opportunities Report. Retrieved January 10, 2024 from <https://www.firstthingsfirst.org/wp-content/uploads/2023/12/State-Needs-and-Assets-Report-2023.pdf>
- ²⁰¹ The Annie E. Casey Foundation. (2013). *The first eight years: Giving kids a foundation for lifetime success*. Retrieved August 20, 2021 from <http://www.aecf.org/m/resourcedoc/AECF-TheFirstEightYearsKCpolicyreport-2013.pdf>
- ²⁰² White House Council of Economic Advisors. (2015, January). *The economics of early childhood investments*. Obama White House Archive. Retrieved August 20, 2021 from https://obamawhitehouse.archives.gov/sites/default/files/docs/early_childhood_report_update_final_non-embargo.pdf
- ²⁰³ Campbell, F., Conti, G., Heckman, J., Moon, S., Pinto, R., Pungello, L., & Pan, Y. (2014). *Abecedarian & health: Improve adult health outcomes with quality early childhood programs that include health and nutrition*. The Heckman Equation. Retrieved August 20, 2021 from https://heckmanequation.org/wp-content/uploads/2017/01/F_Heckman_AbecedarianHealth_062615.pdf
- ²⁰⁴ National Scientific Council on the Developing Child. (2020). Connecting the brain to the rest of the body: Early childhood development and lifelong health are deeply intertwined: Working paper No. 15. Center on the Developing Child at Harvard University. Retrieved August 30, 2023 from https://harvardcenter.wpenginpowered.com/wp-content/uploads/2020/06/wp15_health_FINALv2.pdf
- ²⁰⁵ Hahn, R. A., & Barnett, W. S. (2023). Early childhood education: Health, equity, and economics. *Annual Review of Public Health*, 44(1), 75–92. <https://doi.org/10.1146/annurev-publhealth-071321-032337>
- ²⁰⁶ First Things First. (n.d.). *About Quality First*. Retrieved October 12, 2023 from <https://www.firstthingsfirst.org/resources/quality-first/about-quality-first/>
- ²⁰⁷ First Things First. (n.d.). *About Quality First*. Retrieved October 12, 2023 from <https://www.firstthingsfirst.org/resources/quality-first/about-quality-first/>
- ²⁰⁸ Prenatal-to-3 Policy Impact Center. (2022). *Prenatal-to-3 policy clearinghouse evidence review: Early intervention services (ER 11C.0922)*. Retrieved August 30, 2023 from <http://pn3policy.org/policy-clearinghouse/early-intervention-services>
- ²⁰⁹ Hebbeler, K., Spiker, D., Bailey, D., Scarborough, A. A., Mallik, S., Simeonsson, R. J., Marnie, S., & Nelson, L. (2007, January). *Early intervention for infants and toddlers with disabilities and their families: Participants, services, and outcomes*. Research Connections. Retrieved August 30, 2023 from <https://researchconnections.org/childcare/resources/13407>
- ²¹⁰ Diefendorf, M., & Goode, S. (2005). *The long term economic benefits of high quality early childhood intervention programs*. National Early Childhood Technical Assistance Center. Retrieved August 20, 2021 from <http://ectacenter.org/~pdfs/pubs/econbene.pdf>
- ²¹¹ Arizona Department of Economic Security. (n.d.). *Arizona early intervention program*. Retrieved October 12, 2023 from <https://des.az.gov/AzEIP/>
- ²¹² Arizona Department of Economic Security. (n.d.). *About early intervention in Arizona*. Retrieved October 12, 2023 from <https://des.az.gov/services/disabilities/early-intervention/about-early-intervention-arizona>
- ²¹³ Arizona Department of Economic Security. (n.d.). *Developmental disabilities*. Retrieved October 12, 2023 from <https://des.az.gov/ddd/>
- ²¹⁴ Prenatal-to-3 Policy Impact Center. (2022). *Prenatal-to-3 policy clearinghouse evidence review: Early intervention services (ER 11C.0922)*. Retrieved August 30, 2023 from <http://pn3policy.org/policy-clearinghouse/early-intervention-services>
- ²¹⁵ Prenatal-to-3 Policy Impact Center. (2022). *Prenatal-to-3 state policy roadmap: Arizona*. <https://pn3policy.org/pn-3-state-policy-roadmap-2021/az/early-intervention>
- ²¹⁶ Prenatal-to-3 Policy Impact Center. (2022, September). *Prenatal-to-3 policy clearinghouse evidence review: Early intervention services (ER 11C.0922)*. Accessed August 31, 2023 from <http://pn3policy.org/policy-clearinghouse/early-intervention-services>

-
- ²¹⁷ Prenatal-to-3 Policy Impact Center, LBJ School of Public Affairs, & The University of Texas at Austin. (2021, January 6). *Why do we focus on the prenatal-to-3 age period? Understanding the importance of the earliest years*. Accessed August 30, 2023 from <https://pn3policy.org/resources/why-do-we-focus-on-the-prenatal-to-3-age-period-understanding-the-importance-of-the-earliest-years/#:~:text=Our%20health%20and%20wellbeing%20prenatally%20and%20during%20the.many%20families%20face%20substantial%20challenges%20during%20these%20years.>
- ²¹⁸ Prenatal-to-3 Policy Impact Center. (2022). *Prenatal-to-3 policy clearinghouse evidence review: Early intervention services (ER IIC.0922)*. Accessed August 30, 2023 from <http://pn3policy.org/policy-clearinghouse/early-intervention-services>
- ²¹⁹ The Future of Children. (2020). Three trimesters to three years: Promoting early development. *The Future of Children*, 30(2). Retrieved July 18, 2023 from https://futureofchildren.princeton.edu/sites/g/files/toruqf2411/files/foc_vol_30_no_2_compiled.pdf
- ²²⁰ National Scientific Council on the Developing Child. (2020). *Connecting the brain to the rest of the body: Early childhood development and lifelong health are deeply intertwined. Working Paper no. 15*. Harvard University Center on the Developing Child. Retrieved July 18, 2023 from https://futureofchildren.princeton.edu/sites/g/files/toruqf2411/files/foc_vol_30_no_2_compiled.pdf
- ²²¹ Shonkoff, J. P., Boyce, W. T., Levitt, P., Martinez, F. D., & McEwen, B. (2021). Leveraging the biology of adversity and resilience to transform pediatric practice. *Pediatrics*, 147(2), e20193845. <https://doi.org/10.1542/peds.2019-3845>
- ²²² The Future of Children. (2020). Three trimesters to three years: Promoting early development. *The Future of Children*, 30(2). Retrieved July 18, 2023 from https://futureofchildren.princeton.edu/sites/g/files/toruqf2411/files/foc_vol_30_no_2_compiled.pdf
- ²²³ Center on the Developing Child. (2020). *An action guide for policymakers: Health and learning are deeply interconnected in the body*. Harvard University Center on the Developing Child. Accessed July 18, 2023 from https://harvardcenter.wpeenginepowered.com/wp-content/uploads/2020/10/2020_WP15_actionguide_FINAL.pdf
- ²²⁴ Haas, S. A., Glymour, M. M., & Berkman, L. F. (2011). Childhood health and labor market inequality over the life course. *Journal of Health and Social Behavior*, 52(3), 289-313. <https://doi.org/10.1177/0022146511410431>
- ²²⁵ Eunice Kennedy Shriver National Institute of Child Health and Human Development. (2017, January 31). *What is prenatal care and why is it important?* National Institutes of Health. Retrieved August 23, 2021 from <https://www.nichd.nih.gov/health/topics/pregnancy/conditioninfo/prenatal-care>
- ²²⁶ Patrick, D. L., Lee, R. S., Nucci, M., Grembowski, D., Jolles, C. Z., & Milgrom, P. (2006). Reducing oral health disparities: A focus on social and cultural determinants. *BMC Oral Health*, 6(1), S4. Retrieved August 23, 2021 from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2147600/>
- ²²⁷ Council on Children with Disabilities, Section on Developmental Behavioral Pediatrics, Bright Futures Steering Committee, & Medical Home Initiatives for Children with Special Needs Project Advisory Committee. (2006). Identifying infants and young children with developmental disorders in the medical home: An algorithm for developmental surveillance and screening. *Pediatrics*, 118(1), 405-420. <https://doi.org/10.1542/peds.2006-1231>
- ²²⁸ Tolbert, J., Drake, P., & Damico, A. (2022). *Key facts about the uninsured population*. KFF. Retrieved August 8, 2023 from <https://www.kff.org/uninsured/issue-brief/key-facts-about-the-uninsured-population/>
- ²²⁹ Healthy People 2030. (n.d.). *Increase the proportion of people with health insurance – AHS-01*. Office of Disease Prevention and Health Promotion. Retrieved August 8, 2023 from <https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-care-access-and-quality/increase-proportion-people-health-insurance-ahs-01>
- ²³⁰ Tolbert, J., Drake, P., & Damico, A. (2022). *Key facts about the uninsured population*. KFF. Retrieved August 8, 2023 from <https://www.kff.org/uninsured/issue-brief/key-facts-about-the-uninsured-population/>
- ²³¹ Tolbert, J., Drake, P., & Damico, A. (2022). *Key facts about the uninsured population*. KFF. Retrieved August 8, 2023 from <https://www.kff.org/uninsured/issue-brief/key-facts-about-the-uninsured-population/>

-
- ²³² Centers for Disease Control and Prevention. (2023, January 11). *Before pregnancy: Preconception health*. Retrieved August 9, 2023 from <https://www.cdc.gov/preconception/overview.html#PrconceptionHealthCare>
- ²³³ Centers for Disease Control and Prevention. (2006, April 21). Recommendations to improve preconception health and health care—United States: A report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. *MMWR*, 55(RR-06), 1-23. Retrieved August 9, 2023 from <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5506a1.htm>
- ²³⁴ Partridge, S., Balayla, J., Holcroft, C. A., & Abenhaim, H. A. (2012). Inadequate prenatal care utilization and risks of infant mortality and poor birth outcome: A retrospective analysis of 28,729,765 U.S. deliveries over 8 years. *American Journal of Perinatology*, 29(10), 787–793. <https://doi.org/10.1055/s-0032-1316439>
- ²³⁵ U.S. Department of Health and Human Services, Office of the Surgeon General. (2020). *The Surgeon General's Call to Action to Improve Maternal Health*. Retrieved September 7, 2021 from <https://www.hhs.gov/sites/default/files/call-to-action-maternal-health.pdf>
- ²³⁶ Osterman, M. J. K., & Martin, J. A. (2018, May 30). Timing and adequacy of prenatal care in the United States, 2016. *National Vital Statistics Reports*, 67(3), 1–14. Retrieved August 9, 2023 from https://www.cdc.gov/nchs/data/nvsr/nvsr67/nvsr67_03.pdf
- ²³⁷ March of Dimes. (2023). *Maternity care desert: Data for Arizona. Maternity care desert: Arizona, 2020*. Retrieved August 17, 2023 from <https://www.marchofdimes.org/peristats/data?top=23&lev=1&stop=641®=04&sreg=04&obj=9&slev=4>
- ²³⁸ March of Dimes. (2023). *Maternity care desert: Data for Arizona. Access to Hospitals or Birth Centers: Arizona, 2019*. Retrieved August 17, 2023 from <https://www.marchofdimes.org/peristats/data?top=23&lev=1&stop=644®=04&sreg=04&obj=9&slev=4>
- ²³⁹ March of Dimes. (2023). *Maternity care desert: Data for Arizona. Distribution of obstetric providers: Arizona, 2019*. Retrieved August 17, 2023 from <https://www.marchofdimes.org/peristats/data?top=23&lev=1&stop=642®=04&sreg=04&obj=9&slev=4>
- ²⁴⁰ Fryer, K., Munoz, M. C., Rahangdale, L., & Stuebe, A. M. (2020). Multiparous Black and Latinx women face more barriers to prenatal care than White women. *Journal of Racial and Ethnic Health Disparities*, 8, 80-87. <https://doi.org/10.1007/s40615-020-00759-x>
- ²⁴¹ National Partnership for Women and Families. (2019, October). American Indian and Alaska Native women's maternal health: Addressing the crisis. Retrieved December 15, 2023 from <https://nationalpartnership.org/wp-content/uploads/2023/02/american-indian-and-alaska.pdf>
- ²⁴² Hill, L., Artiga, S., & Ranji, U. (2022, November 01). *Racial disparities in maternal and infant health: Current status and efforts to address them*. KFF. Retrieved December 15, 2023 from <https://www.kff.org/racial-equity-and-health-policy/issue-brief/racial-disparities-in-maternal-and-infant-health-current-status-and-efforts-to-address-them/>
- ²⁴³ U.S. Commission on Civil Rights. (2021, September 15). *Racial disparities in maternal health*. Retrieved November 15, 2023 from <https://www.usccr.gov/reports/2021/racial-disparities-maternal-health>
- ²⁴⁴ Fryer, K., Munoz, M. C., Rahangdale, L., & Stuebe, A. M. (2020). Multiparous Black and Latinx women face more barriers to prenatal care than White women. *Journal of Racial and Ethnic Health Disparities*, 8, 80-87. <https://doi.org/10.1007/s40615-020-00759-x>
- ²⁴⁵ March of Dimes. (2022). *Nowhere to go: Maternity care deserts across the U.S.* Retrieved August 3, 2023 from https://marchofdimes.org/sites/default/files/2022-10/2022_Maternity_Care_Report.pdf?mc_cid=87ad97824f&mc_cid=UNIQID
- ²⁴⁶ Centers for Disease Control and Prevention. (2021, November 15). *Reproductive health: Teen pregnancy. About teen pregnancy*. Retrieved August 9, 2023 from <https://www.cdc.gov/teenpregnancy/about/index.htm>
- ²⁴⁷ Diaz, C., & Fiel, J. (2016). The effect(s) of teen pregnancy: Reconciling theory, methods, and findings. *Demography*, 53(1), 85-116. <https://doi.org/10.1007/s13524-015-0446-6>

-
- ²⁴⁸ Youth.gov. (2016). *Pregnancy prevention: Adverse effects*. Retrieved September 10, 2021 from <http://youth.gov/youth-topics/teen-pregnancy-prevention/adverse-effects-teen-pregnancy>
- ²⁴⁹ McClay, A., & Moore, K. A. (2022, November 22). *Preventing births to teens is associated with long-term health and socioeconomic benefits, according to simulation*. Child Trends. Retrieved August 30, 2023 from <https://doi.org/10.56417/2270z3088p>
- ²⁵⁰ Hoffman, S. D., & Maynard, R. A. (Eds.). (2008). *Kids having kids: Economic costs and social consequences of teen pregnancy (2nd ed.)*. Urban Institute Press.
- ²⁵¹ U.S. Department of Health and Human Service. (2010). *A report of the Surgeon General: How tobacco smoke causes disease: What it means to you*. National Institutes of Health. Retrieved September 10, 2021 from https://www.ncbi.nlm.nih.gov/books/NBK53017/pdf/Bookshelf_NBK53017.pdf
- ²⁵² Anderson, T. M., Lavista Ferres, J. M., Ren, S. Y., Moon, R. Y., Goldstein, R. D., Ramirez, J. M., & Mitchell, E. A. (2019). Maternal smoking before and during pregnancy and the risk of sudden unexpected infant death. *Pediatrics*, *143*(4), e20183325. <https://doi.org/10.1542/peds.2018-332>
- ²⁵³ Centers for Disease Control and Prevention. (2022, November 28). *About opioid use during pregnancy*. Accessed September 8, 2023 from <https://www.cdc.gov/pregnancy/opioids/basics.html>
- ²⁵⁴ Centers for Disease Control and Prevention. (2022, November 28). *About opioid use during pregnancy*. Accessed September 8, 2023 from <https://www.cdc.gov/pregnancy/opioids/basics.html>
- ²⁵⁵ Centers for Disease Control and Prevention. (2022, July 14). *Pregnancy: Gestational diabetes and pregnancy*. Retrieved August 1, 2023 from <https://www.cdc.gov/pregnancy/diabetes-gestational.html>
- ²⁵⁶ Daneshmand, S. S., Stortz, S., Morrissey, R., & Faksh, A. (2019). Bridging gaps and understanding disparities in gestational diabetes mellitus to improve perinatal outcomes. *Diabetes Spectrum*, *32*(4), 317-323. <https://doi.org/10.2337/ds19-0013>
- ²⁵⁷ Declercq, E., MacDorman, M., Cabral, H., & Stotland, N. (2016). Prepregnancy body mass index and infant mortality in 38 U.S. States, 2012-2013. *Obstetrics and Gynecology*, *127*(2), 279-287. <https://doi.org/10.1097/AOG.0000000000001241>
- ²⁵⁸ Tyrrell, J., Richmond, R. C., Palmer, T. M., Feenstra, B., Rangarajan, J., Metrustry, S., ... Freatly, R. M. (2016). Genetic evidence for causal relationships between maternal obesity-related traits and birth weight. *JAMA*, *315*(11), 1129-1140. <https://doi.org/10.1001/jama.2016.1975>
- ²⁵⁹ Godfrey, K. M., Reynolds, R. M., Prescott, S. L., Nyirenda, M., Jaddoe, V. W., Eriksson, J. G., & Broekman, B. F. (2017). Influence of maternal obesity on the long-term health of offspring. *The Lancet: Diabetes & Endocrinology*, *5*(1), 53-64. [https://doi.org/10.1016/S2213-8587\(16\)30107-3](https://doi.org/10.1016/S2213-8587(16)30107-3)
- ²⁶⁰ Hill-Briggs, F., Adler, N. E., Berkowitz, S. A., Chin, M. H., Gary-Webb, T. L., Navas-Acien, A., ... & Haire-Joshu, D. (2021). Social determinants of health and diabetes: a scientific review. *Diabetes care*, *44*(1), 258.
- ²⁶¹ Centers for Disease Control and Prevention. (2018, June 14). *CDC: More obesity in U.S. rural counties than in urban counties*. Retrieved August 3, 2023 from <https://www.cdc.gov/media/releases/2018/s0614-obesity-rates.html>
- ²⁶² Siega-Riz, A. M. (2012). Prepregnancy obesity: Determinants, consequences, and solutions. *Advances in Nutrition*, *3*(1), 105-107. <https://doi.org/10.3945/an.111.001081>
- ²⁶³ March of Dimes. (2022). *Nowhere to go: Maternity care deserts across the U.S.* Retrieved August 3, 2023 from https://marchofdimes.org/sites/default/files/2022-10/2022_Maternity_Care_Report.pdf?mc_cid=87ad97824f&mc_eid=UNIQID
- ²⁶⁴ Ibid.
- ²⁶⁵ The American College of Obstetricians and Gynecologists. (2019). Obstetric care consensus: Levels of maternal care. *Obstetrics & Gynecology*, *134*(2), e41-e55. Retrieved August 3, 2023 from <https://www.acog.org/clinical/clinical-guidance/obstetric-care-consensus/articles/2019/08/levels-of-maternal-care>

-
- ²⁶⁶ Bauman, B. L., Ko, J. Y., Cox, S. D'Angelo, D. V., Warner, L., Folger, S., Tevendale, H. D., Coy, K. C., Harrison, L., & Barfield, W. D. (2020). Vital Signs: Postpartum depressive symptoms and provider discussions about perinatal depression – United States, 2018. *Morbidity and Mortality Weekly Report*, 69(19), 575-581. Retrieved August 3, 2023 from <https://www.cdc.gov/mmwr/volumes/69/wr/mm6919a2.htm>
- ²⁶⁷ Slomian, J., Honvo, G., Emonts, P., Reginster, J., & Bruyere, O. (2019). Consequences of maternal postpartum depression: A systematic review of maternal and infant outcomes. *Women's Health (London, England)*, 15, 1745506519844044. <https://doi.org/10.1177/1745506519844044>
- ²⁶⁸ Bauman, B. L., Ko, J. Y., Cox, S., D'Angelo, D. V., Warner, L., Folger, S., Tevendale, H. D., Coy, K. C., Harrison, L., & Barfield, W. D. (2020). Vital Signs: Postpartum depressive symptoms and provider discussions about perinatal depression – United States, 2018. *Morbidity and Mortality Weekly Report*, 69(19). Retrieved October 12, 2023 from <https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6919a2-H.pdf>
- ²⁶⁹ Ibid.
- ²⁷⁰ Thompson, V. (2023, April 17). *Medicaid coverage of maternal depression screenings during well-child visits: Case study of Alaska and Arizona*. National Academy for State Health Policy. Retrieved September 20, 2023 from <https://nashp.org/Medicaid-coverage-of-maternal-depression-screenings-during-well-child-visits-case-study-of-alaska-and-arizona>
- ²⁷¹ Ibid.
- ²⁷² U.S. Centers for Disease Control and Prevention (2022). Selected 2016 Through 2020 Maternal and Child Health (MCH) Indicators. Retrieved from <https://www.cdc.gov/prams/prams-data/selected-mch-indicators.html>
- ²⁷³ Institute of Medicine (US) Committee on Understanding Premature Birth and Assuring Healthy Outcomes. (2007). *Preterm birth: Causes, consequences, and prevention* (R. E. Behrman & A. S. Butler, Eds.). National Academies Press. <https://doi.org/10.17226/11622>
- ²⁷⁴ Beam, A. L., Fried, I., Palmer, N., Agniel, D., Brat, G., Fox, K., Kohane, I., Sinaiko, A., Zupancic, J. A. F., & Armstrong, J. (2020). Estimates of healthcare spending for preterm and low-birthweight infants in a commercially insured population: 2008-2016. *Journal of Perinatology*, 40(7), 1091–1099. <https://doi.org/10.1038/s41372-020-0635-z>
- ²⁷⁵ Luu, T. M., Rehman Mian, M. O., & Nuyt, A. M. (2017). Long-term impact of preterm birth: Neurodevelopmental and physical health outcomes. *Clinics in Perinatology*, 44(2), 305–314. <https://doi.org/10.1016/j.clp.2017.01.003>
- ²⁷⁶ Centers for Disease Control and Prevention. (2022, November 1). *Reproductive health: Preterm birth*. Retrieved August 8, 2023 from <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pretermbirth.htm>
- ²⁷⁷ Petrou, S., Sach, T., & Davidson, L. (2001). The long-term costs of preterm birth and low birth weight: Results of a systematic review. *Child: Care, Health and Development*, 27(2), 97–115. <https://doi.org/10.1046/j.1365-2214.2001.00203.x>
- ²⁷⁸ Goldenberg, R. L., & Culhane, J. F. (2007). Low birth weight in the United States. *The American Journal of Clinical Nutrition*, 85(2), 584S–590S. <https://doi.org/10.1093/ajcn/85.2.584S>
- ²⁷⁹ March of Dimes. (2021, June). *Low birthweight*. Retrieved August 8, 2023 from <https://www.marchofdimes.org/find-support/topics/birth/low-birthweight>
- ²⁸⁰ Harrison, W., & Goodman, D. (2015). Epidemiologic trends in neonatal intensive care, 2007-2012. *JAMA pediatrics*, 169(9), 855-862.
- ²⁸¹ Lean, R. E., Rogers, C. E., Paul, R. A., & Gerstein, E. D. (2018). NICU Hospitalization: Long-Term Implications on Parenting and Child Behaviors. *Current treatment options in pediatrics*, 4(1), 49–69.
- ²⁸² Meek, J., & Noble, L. (2022). Policy Statement: Breastfeeding and the Use of Human Milk. *Pediatrics* (Evanston), 150(1), 1. <https://doi.org/10.1542/peds.2022-057988>
- ²⁸³ Centers for Disease Control and Prevention. (2023, July 31). *Breastfeeding: Why it matters*. Accessed September 12, 2023 from <https://www.cdc.gov/breastfeeding/about-breastfeeding/why-it-matters.html>

-
- ²⁸⁴ Committee on Practice and Ambulatory Medicine, Committee on Infectious Diseases, Committee on State Government Affairs, Council on School Health, & Section on Administration and Practice Management. (2016). Medical versus nonmedical immunization exemptions for child care and school attendance. *Pediatrics*, *138*(3), e20162145. <https://doi.org/10.1542/peds.2016-2145>
- ²⁸⁵ Arizona Department of Health Services (2023, July). *The Arizona immunization handbook for school and childcare programs*. Retrieved August 8, 2023 from <https://azdhs.gov/documents/preparedness/epidemiology-disease-control/immunization/school-childcare/nofollow/school-childcare-immunization-guide.pdf>
- ²⁸⁶ Williams, E., Rudowitz, R., & Moreno, S. (2023). Headed back to school in 2023: A look at children’s routine vaccination trends. *KFF*. Retrieved September 28, 2023 from <https://www.kff.org/coronavirus-covid-19/issue-brief/headed-back-to-school-in-2023-a-look-at-childrens-routine-vaccination-trends/>
- ²⁸⁷ Lopes, L., Shumacher, S., Sparks, G., Presiado, M., Hamel, L., & Brodie, M. (2022). KFF COVID-19 vaccine monitor: December 2022. *KFF*. Retrieved September 28, 2023 from <https://www.kff.org/coronavirus-covid-19/poll-finding/kff-covid-19-vaccine-monitor-december-2022/>
- ²⁸⁸ Garg, I., Shekhar, R., Sheikh, A. B., & Pal, S. (2022). Impact of COVID-19 on the changing patterns of respiratory syncytial virus infections. *Infectious Disease Reports*, *14*(4), 558–568. <https://doi.org/10.3390/idr14040059>
- ²⁸⁹ Mondal, P., Sinharoy, A., & Gope, S. (2022). The influence of COVID-19 on influenza and respiratory syncytial virus activities. *Infectious Disease Reports*, *14*(1), 134–141. <https://doi.org/10.3390/idr14010017>
- ²⁹⁰ Centers for Disease Control & Prevention (2023). RSV in infants and young children. Retrieved from <https://www.cdc.gov/rsv/downloads/RSV-in-Infants-and-Young-Children.pdf>
- ²⁹¹ Amelia Templeton, Oregon Public Broadcasting. (2023, November 9). *A New RSV Shot Could Help Protect Babies This Winter — If They Can Get It in Time - KFF Health News*. *KFF Health News*. <https://kffhealthnews.org/news/article/a-new-rsv-shot-could-help-protect-babies-this-winter-if-they-can-get-it-in-time/>
- ²⁹² Eisenstein, M. (2023). Vaccines could offer fresh hope against respiratory syncytial virus. *Nature*, *621*(7980), S52–S54. <https://doi.org/10.1038/d41586-023-02956-0>
- ²⁹³ Centers for Disease Control & Prevention (2023, Oct 23). Limited Availability of Nirsevimab in the United States—Interim CDC Recommendations to Protect Infants from Respiratory Syncytial Virus (RSV) during the 2023–2024 Respiratory Virus Season. *CDC Health Alert Network, CDCHAN-00499*. Retrieved from <https://emergency.cdc.gov/han/2023/han00499.asp>
- ²⁹⁴ Centers for Disease Control & Prevention (2023). Flu Vaccines are Important for Children. Retrieved from <https://www.cdc.gov/flu/highrisk/children.htm>
- ²⁹⁵ Committee on Infectious Diseases (2022). Recommendations for Prevention and Control of Influenza in Children, 2022–2023. *Pediatrics*, *150*(4). <https://doi.org/10.1542/peds.2022-059274>
- ²⁹⁶ U.S. Department of Health & Human Services & World Health Organization. (2022). *Nearly 40 million children are dangerously susceptible to growing measles threat*. Retrieved August 8, 2023 from <https://www.who.int/news/item/23-11-2022-nearly-40-million-children-are-dangerously-susceptible-to-growing-measles-threat>
- ²⁹⁷ Arizona Department of Health Services. (2020). Number of deaths for selected leading causes of infant mortality by year. *Population Health and Vital Statistics*. Retrieved October 11, 2021 from <https://pub.azdhs.gov/health-stats/menu/info/trend/index.php?pg=infant-deaths>
- ²⁹⁸ Ely, D. M., & Driscoll, A. K. (2020, July 16). Infant mortality in the United States, 2018: Data from the period linked birth/infant death file. *National Vital Statistics Reports*, *69*(7). Retrieved October 11, 2021 from <https://www.cdc.gov/nchs/data/nvsr/nvsr69/NVSR-69-7-508.pdf>
- ²⁹⁹ Kochanek, K., Xu, J., & Arias, E. (2020, December). *Mortality in the United States, 2019 (No. 395)*. National Center for Health Statistics. Retrieved September 10, 2021 from <https://www.cdc.gov/nchs/data/databriefs/db395-H.pdf>

-
- ³⁰⁰ Ely, D. M., & Driscoll, A. K. (2023). Infant Mortality in the United States: Provisional Data From the 2022 Period Linked Birth/Infant Death File. *Vital Statistics Rapid Release*, 33. <https://doi.org/10.15620/cdc:133699>
- ³⁰¹ Landman, K. (November 9, 2023). It's getting increasingly dangerous to be a newborn in the US. *Vox*. Retrieved from <https://www.vox.com/23952456/syphilis-mortality-death-infant-newborn-congenital-babies-prenatal-maternity-pregnancy-desert>
- ³⁰² Bellazaire, A., & Skinner, E. (2019, July 3). *Preventing infant and maternal mortality: State policy options*. National Conference of State Legislatures. Retrieved October 12, 2021 from <https://www.ncsl.org/research/health/preventing-infant-and-maternal-mortality-state-policy-options.aspx>
- ³⁰³ National Center for Health Statistics. (2023, July 25). *Child health*. Centers for Disease Control and Prevention. Retrieved September 12, 2023 from <https://www.cdc.gov/nchs/fastats/child-health.htm>
- ³⁰⁴ Centers for Disease Control and Prevention. (2020, January 29). Vital signs: Child injury. Retrieved September 12, 2023 from <https://www.cdc.gov/vitalsigns/childinjury/index.html>
- ³⁰⁵ Garnett, M. F., Spencer, M. R., & Hedegaard, H. (2021, October). Urban-rural differences in unintentional injury death rates among children aged 0-17 years: United States, 2018-2019. Centers for Disease Control and Prevention. Retrieved September 12, 2023 from <https://www.cdc.gov/nchs/products/databriefs/db421.htm>
- ³⁰⁶ Sarche, M., & Spicer, P. (2008). Poverty and health disparities for American Indian and Alaska Native children: Current knowledge and future prospects. *Annals of the New York Academy of Sciences*, 1136, 126–136. <https://doi.org/10.1196/annals.1425.017>
- ³⁰⁷ DeGeorge, K. C., Neltner, C. E., & Neltner, B. T. (2020). Prevention of unintentional childhood injury. *American Family Physician*, 102(7), 411-417. Retrieved September 12, 2023 from <https://pubmed.ncbi.nlm.nih.gov/32996759/>
- ³⁰⁸ Centers for Disease Control and Prevention. (2023, June 29). *Fast facts: What are Adverse Childhood Experiences?* Retrieved July 18, 2023 from <https://www.cdc.gov/violenceprevention/aces/fastfact.html>
- ³⁰⁹ Jones, C. M., Merrick, M. T., & Houry, D. E. (2020). Identifying and preventing Adverse Childhood Experiences: Implications for clinical practice. *JAMA*, 323(1):25–26. <https://doi.org/10.1001/jama.2019.18499>
- ³¹⁰ Merrick, M. T., Ports, K. A., Ford, D. C., Afifi, T. O., Gershoff, E. T., & Grogan-Kaylor, A. (2017). Unpacking the impact of adverse childhood experiences on adult mental health. *Child Abuse & Neglect*, 69, 10-19. <https://doi.org/10.1016/j.chiabu.2017.03.016>
- ³¹¹ Kalmakis, K. A., & Chandler, G. E. (2015). Health consequences of adverse childhood experiences: A systematic review. *Journal of the American Association of Nurse Practitioners*, 27(8), 457-465. <https://doi.org/10.1002/2327-6924.12215>
- ³¹² Mantina N, Celaya M, Indatwa A., Davis V., & Madhivanan P. (2021). *Adverse Childhood Experiences in Arizona*. Arizona Department of Health Services. Retrieved August 10, 2023 from <https://www.azdhs.gov/documents/prevention/womens-childrens-health/assessment-evaluation/aces-brief-az-may-2021.pdf>
- ³¹³ Evans, G., & Kim, P. (2013). Childhood poverty, chronic stress, self-regulation, and coping. *Child Development Perspectives*, 7(1), 43-48. <https://doi.org/10.1111/cdep.12013>
- ³¹⁴ Shonkoff, J., & Fisher, P. (2013). Rethinking evidence-based practice and two-generation programs to create the future of early childhood policy. *Development and Psychopathology*, 25, 1635-1653. <https://doi.org/10.1017/S0954579413000813>
- ³¹⁵ Center on the Developing Child at Harvard University. (2010). *The foundations of lifelong health are built in early childhood*. Retrieved October 12, 2023 from <http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf>
- ³¹⁶ Van Voorhis, F., Maier, M., Epstein, J., & Lloyd, C. (2013). The impact of family involvement on the education of children ages 3 to 8: A focus on the literacy and math achievement outcomes and social-emotional skills. *MDRC: Building*

Knowledge to Improve Social Policy. Retrieved October 12, 2023 from http://www.p2presources.com/uploads/3/2/0/2/32023713/family_outcomes.pdf

³¹⁷ Magnuson, K. A., & Duncan, G. J. (2002). Parents in poverty. In M. H. Bornstein (Ed.), *Handbook of parenting: Social conditions and applied parenting* (pp. 95-121). Lawrence Erlbaum Associates Publishers. Retrieved October 12, 2023 from <https://psycnet.apa.org/record/2002-02522-005>

³¹⁸ Browne, C. (2014). *The strengthening families approach and protective factors framework: Branching out and reaching deeper*. Center for the Study of Social Policy. Retrieved October 12, 2023 from <https://cssp.org/wp-content/uploads/2018/11/Branching-Out-and-Reaching-Deeper.pdf>

³¹⁹ Bethell, C., Jones, J., Gombojav, N., Linkenbach, J., & Sege, R. (2019). Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample: Associations Across Adverse Childhood Experiences Levels. *JAMA Pediatrics*, 173(11), E193007.

³²⁰ Bethell, C. D., Gombojav, N., & Whitaker, R. C. (2019). Family resilience and connection promote flourishing among US children, even amid adversity. *Health Affairs*, 38(5), 729-737. <https://doi.org/10.1377/hlthaff.2018.05425>

³²¹ Bethell, C. D., Gombojav, N., & Whitaker, R. C. (2019). Family resilience and connection promote flourishing among US children, even amid adversity. *Health Affairs*, 38(5), 729-737. <https://doi.org/10.1377/hlthaff.2018.05425>

³²² Van Voorhis, F., Maier, M., Epstein, J., & Lloyd, C. (2013). The impact of family involvement on the education of children ages 3 to 8: A focus on the literacy and math achievement outcomes and social-emotional skills. *MDRC*:

Building Knowledge to Improve Social Policy. Retrieved from http://www.p2presources.com/uploads/3/2/0/2/32023713/family_outcomes.pdf

³²³ Duncan, G.J., Dowsett, C.J., Claessens, A., Magnuson, K., Huston, A.C., Klebanov, P., ... Sexton, H. (2007). School readiness and later achievement. *Developmental Psychology*, 43(6), 1428.

³²⁴ Bernstein, S., West, J., Newsham, R., & Reid, M. (2014). Kindergartners' skills at school entry: An analysis of the ECLS-K. Mathematica Policy Research.

³²⁵ Ibid.

³²⁶ Ibid.

³²⁷ Peterson, J., Bruce, J., Patel, N., & Chamberlain, L. (2018). Parental attitudes, behaviors, and barriers to school readiness among parents of low-income Latino children. *International Journal of Environmental Research and Public Health*, 15(2), 188.

³²⁸ Reach Out and Read. (n.d.). Programs Near You. Retrieved from <http://www.reachoutandread.org>

³²⁹ Young, N.K., Boles, S.M., & Otero, C. (2007). Parental Substance Use Disorders and child maltreatment: overlap, gaps, and opportunities. *Child Maltreatment*, 12(2): 137-149.

³³⁰ Smith, V., & Wilson. R. (2016). Families affected by parental substance use. *Pediatrics*, 138(2). PMID: 27432847

³³¹ Straussner, S., & Fewell, C. (2018). A review of recent literature on the impact of parental substance use disorders on children and the provision of effective services. *Current Opinion in Psychiatry*, 31(4), 363-367.

³³² Smith, V., & Wilson. R. (2016). Families affected by parental substance use. *Pediatrics*, 138(2). PMID: 27432847

³³³ Arizona Department of Child Safety. (2022). *DCS reaches milestone in safely reducing the number of children in care*. [Press release]. Retrieved August 11, 2023 from <https://dcs.az.gov/news/dcs-reaches-milestone-safely-reducing-number-children-care>

³³⁴ Harvard Kennedy School Government Performance Lab. (2019). *Strengthening in-home child welfare services for families in Arizona*. [Project feature.] Retrieved August 11, 2023 from <https://govlab.hks.harvard.edu/arizona-child-welfare-performance-improvement>

-
- ³³⁵ Casey Family Programs. (2020). *How did Arizona safely reduce its investigation backlog?* [Strategy brief.] Retrieved August 11, 2023 from https://www.casey.org/media/20.07-QFF-HO-Backlog-Arizona_2021.pdf
- ³³⁶ Arizona Department of Child Safety. (2022). *DCS reaches milestone in safely reducing the number of children in care.* [Press release]. Retrieved August 11, 2023 from <https://dcs.az.gov/news/dcs-reaches-milestone-safely-reducing-number-children-care>
- ³³⁷ Harvard Kennedy School Government Performance Lab. (2019). *Strengthening in-home child welfare services for families in Arizona.* [Project feature.] Retrieved August 11, 2023 from <https://govlab.hks.harvard.edu/arizona-child-welfare-performance-improvement>
- ³³⁸ Casey Family Programs. (2020). *How did Arizona safely reduce its investigation backlog?* [Strategy brief.] Retrieved August 11, 2023 from https://www.casey.org/media/20.07-QFF-HO-Backlog-Arizona_2021.pdf
- ³³⁹ Casey Family Programs. (2020). *How did Arizona safely reduce its investigation backlog?* [Strategy brief.] Retrieved August 11, 2023 from https://www.casey.org/media/20.07-QFF-HO-Backlog-Arizona_2021.pdf
- ³⁴⁰ State of Arizona. (2022). *An Act amending section 8-201, Arizona revised statutes; Relating to neglected children. Senate Bill 1050.* Retrieved August 16, 2023 from <https://www.azleg.gov/legtext/55leg/2R/laws/0026.htm>
- ³⁴¹ Children’s Action Alliance. (2022, August 30). *Passage of SB 1050 is a first step in rethinking neglect.* Retrieved August 16, 2023 from <https://azchildren.org/news-and-events/passage-of-sb-1050-is-a-first-step-in-rethinking-neglect/>
- ³⁴² Gellar, J., & Kalisher, A. (2023). *Arizona Department of Child Safety Next Event Study.* Arizona Department of Child Safety. Retrieved August 16, 2023 from <https://dcs.az.gov/content/adcs-next-event-studyjune-2023>
- ³⁴³ Arizona Department of Child Safety. (2023, March 31). *Semi-annual child welfare report Mar 2023.* Retrieved August 16, 2023 from <https://dcs.az.gov/content/semi-annual-child-welfare-report-mar-2023>
- ³⁴⁴ Children’s Defense Fund. (2020, February). *Implementing the Family First Prevention Services Act: A technical guide for agencies, policymakers and other stakeholders.* Retrieved September 10, 2021 from <https://www.childrensdefense.org/wp-content/uploads/2020/07/FFPSA-Guide.pdf>
- ³⁴⁵ Arizona Department of Child Safety. (2023, March 31). *Semi-annual child welfare report Mar 2023.* Retrieved October 12, 2023 from <https://dcs.az.gov/content/semi-annual-child-welfare-report-mar-2023>
- ³⁴⁶ U.S. Census Bureau. (May, 2000). *Factfinder for the Nation.* Retrieved from <http://www.census.gov/history/pdf/cff4.pdf>
- ³⁴⁷ U.S. Census Bureau. (2017). *American Community Survey Information Guide.* Retrieved from https://www.census.gov/content/dam/Census/programs-surveys/acs/about/ACS_Information_Guide.pdf