

Issue Brief: Arizona's Health Start Program improves health outcomes for mothers with less than high school education & their children



September 2022

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Key Findings

A recent evaluation of Arizona's Health Start Program found that mothers and children enrolled during 2006-2016 had several improved health outcomes. This Issue Brief highlights study results about mothers with less than a high school education. Compared to mothers who did not participate, Health Start mothers were:



more likely to attend **prenatal visits** early and often



less likely to have **preterm births** & babies with very or extremely **low birthweight**



more likely to complete **early childhood vaccinations** for their children by age 2

Introduction

Researchers in Arizona conducted a multi-year study to find out if the Health Start home visiting program improved the health of mothers and children. This Issue Brief summarizes the results from journal articles and reports and describes the findings for mothers with less than a high school degree. Education is often used as an indicator of socioeconomic status. In 2016, about 18% of Arizona women (ages 16-45) reported less than a high school degree, and were more likely to be uninsured (19.5% vs. 12.8%) and have low income (34.3% vs. 19.5%).¹

What is Arizona's Health Start Program?

The Arizona Department of Health Services operates Health Start in 14 counties throughout Arizona (map, p. 4). Health Start's mission is "to educate, support and advocate for families at risk by promoting optimal use of community-based family health care services and education services through the use of community health workers (CHWs) who live in and reflect the ethnic, cultural and socioeconomic characteristics of the community they serve." Health Start CHWs complete more than 50 hours of training and can meet with clients at home, health clinics, or in a convenient location.

Some of the facts

Compared to all mothers who gave birth in 2016, mothers without a high school degree reported:

↓ lower rates of any prenatal care (94.2% vs. 97.2%) & adequate prenatal care (55.6% vs. 69.2%)

↑ higher rates of preterm births (9.1% vs. 7.5%) & low birthweight babies (7.3% vs. 5.7%)

Health Start CHWs

↓ Encourage mothers to access prenatal care early in pregnancy

↓ Conduct child developmental screenings

↓ Encourage early childhood immunizations

↓ Provide referrals & application assistance for insurance, WIC, & other social/medical programs

Who is enrolled in the Arizona Health Start Program?

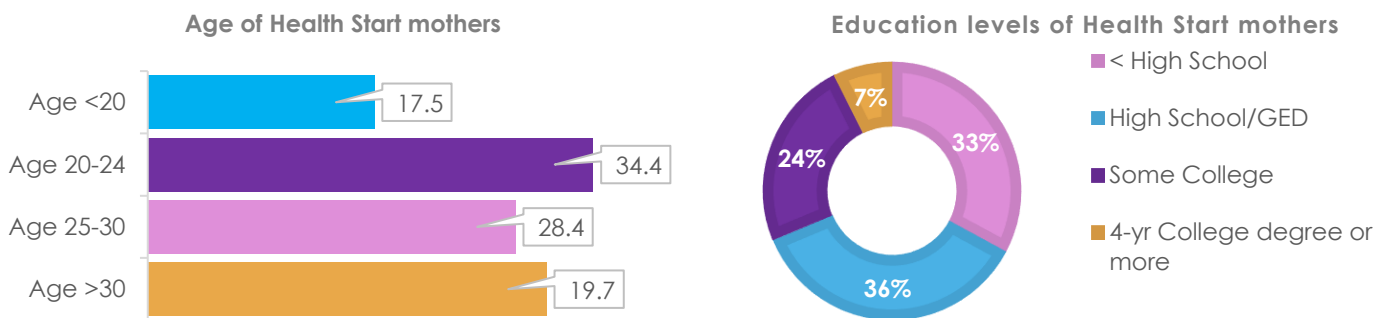
Women are eligible to enroll in Health Start if they 1) live in the targeted service area, 2) are pregnant or postpartum with a child under age two, and 3) have one or more risk factors. There are no income or age requirements.

Majority of Health Start mothers identify as Latina (59%), 24% white, 12% American Indian, and 5% other. Over 80% of participants have Medicaid insurance. Almost 42% are first-time mothers and about 11% have a pre-pregnancy health risk such as diabetes or hypertension. Most mothers who participate in Health Start are under age 25 and 33% have less than a high school education.

(Note: data based on over 17,000 Health Start participants who were enrolled between 2006 and 2016)²

What's a risk factor?

Health Start screens for **medical risks** (previous preterm birth, miscarriage, chronic diseases, maternal weight/height/age) and **social risks** (marital status, race/ethnicity, education level, insurance type).



Health Start improves maternal & child health

Between **2006 and 2016**, Health Start CHWs served over **7200 pregnant mothers**.² The study found that Health Start mothers attended more prenatal care visits, had better birth outcomes, and completed all vaccinations for their children compared to mothers who were not enrolled in Health Start (control group). The study focused on several subgroups that are historically underserved and/or disadvantaged (e.g. Latina mothers, American Indian mothers, mothers with low education). This Issue Brief reports on prenatal care attendance, birth outcomes, and child vaccination completion rates for mothers with less than a high school education and their children.

Prenatal care

Early and adequate prenatal care is widely accepted to improve pregnancy and birth outcomes.^{3,4} CHWs screen, educate, assist, & follow-up with clients to ensure they have access to prenatal care with a medical provider. Mothers with less than high school education **13% more likely to have adequate prenatal care** if they were enrolled in Health Start, compared to mothers with less than high school education who were not in the program.

Did you know?

In 2016, Health Start CHWs had 1300 pregnant clients and conducted a total of 4770 prenatal visits.

Definitions: Any prenatal care= visits completed at any time during pregnancy; Adequate prenatal care= visits started by 4th month and 80-109% of recommended visits completed; Adequate plus= visits started by 2nd month and 110% or more of recommended visits completed. Recommended visits= one visit every 4 weeks through 28 weeks, one visit every 2 weeks through 36 weeks, one visit weekly thereafter.⁵

Birth outcomes

Babies with a healthy birthweight have lower risks of health and learning/behavioral issues.⁶ CHWs help clients prepare for safe and healthy pregnancies through education and referrals. Mothers with less than high school education had more favorable birth outcomes, like lower preterm birth rates and fewer low birthweight babies, if they were enrolled in Health Start, compared to mothers who were not in the program, but these results were not statistically significant.

Did you know?
In 2019, the average hospital costs in AZ for a very low birthweight baby is nearly **25x more than** a baby with healthy birthweight.⁶

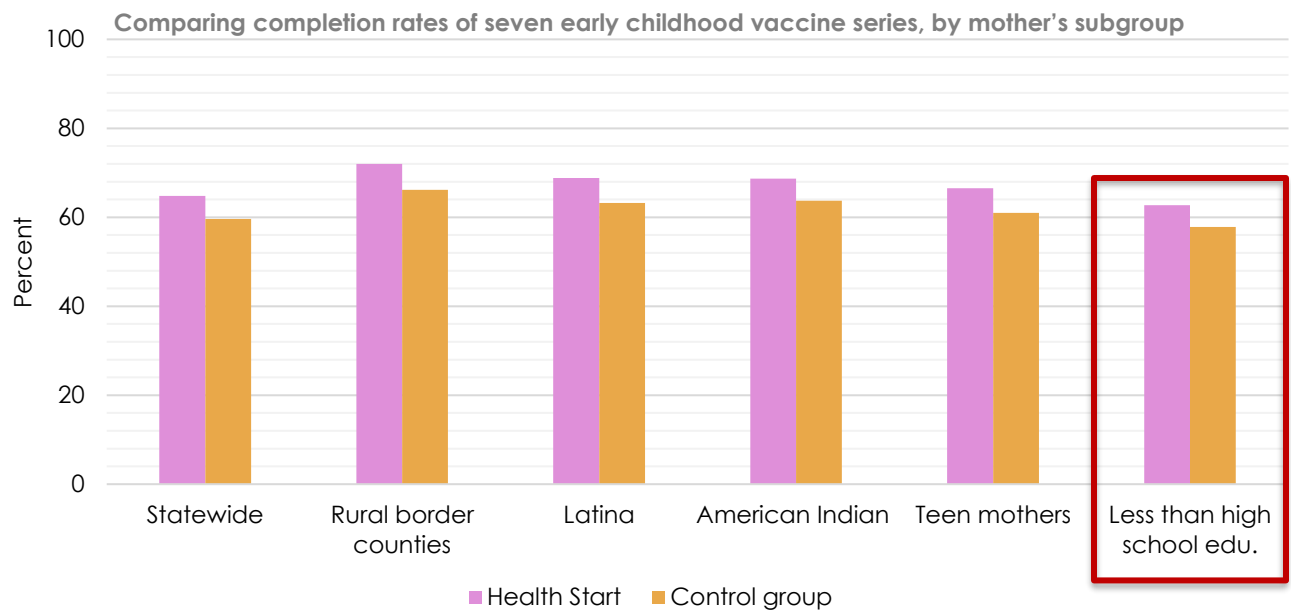
Definitions: preterm = birth before 37wks of pregnancy, low birthweight = <2500g (5.5lb), very low birthweight = <1500g, extremely low birthweight = <1000g.

Child immunizations

Immunizations are an effective measure to prevent childhood diseases. CHWs screen, educate, and coordinate care to ensure Health Start children receive vaccines on time. Children whose mothers had less than a high school education were **25% more likely** to complete their 7-vaccine series than children who were not in the program (**63% vs 58%**).

Did you know?
For every \$1 spent per child vaccination, **10X more** is saved to society.⁷

Definitions: The 7 vaccine series & doses= Diphtheria & tetanus toxoids & acellular or whole-cell pertussis (DTaP/DTP; 4 doses), *Haemophilus influenzae* type b (Hib; 3 or 4 doses depending on the regimen), hepatitis B (HepB; 3 doses), measles-mumps-rubella (MMR; 1 dose), pneumococcal conjugate vaccine (PCV13; 4 doses), poliovirus (3 doses), and varicella (1 dose).⁸



Conclusions

Results from the Arizona Health Start Program Evaluation provide strong evidence of the effectiveness of including CHWs in home visitation programs. After 30 years of working with families, Health Start remains committed to strengthening the program to improve health for mothers and children in Arizona.

Want to learn more?

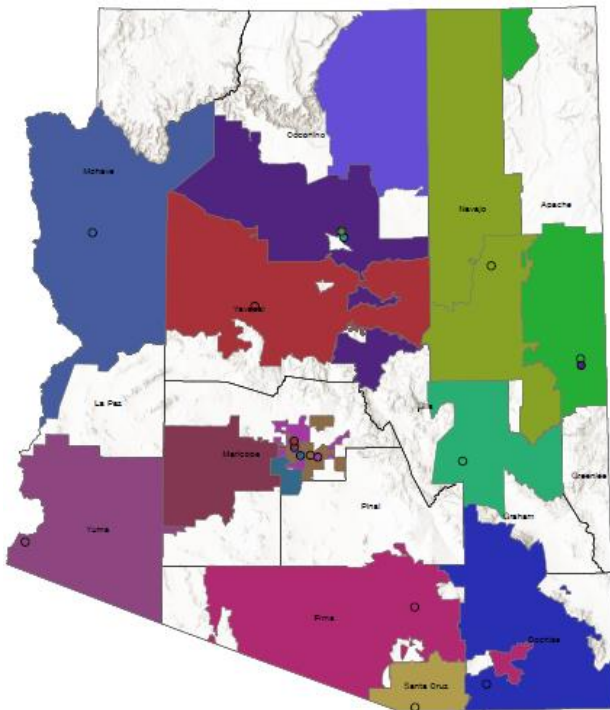
Review our Evaluation Report, peer-reviewed articles, & technical appendices at <https://nau.edu/cher/>
Or scan here!



Recommendations

- **Promote** CHWs as a patient-centered, cost-effective healthcare workforce
- **Integrate** CHWs in community-based and clinical settings
- **Enhance** CHW curriculum to emphasize healthy weight and health conditions management during the prenatal period
- **Support** CHWs (resources, training) to connect with all clients up to 4 times per month during pregnancy
- **Encourage** CHWs to check-in with clients before and after each scheduled prenatal visit to promote and improve attendance and preparation, and provide follow-up
- **Develop** and expand transportation services to address clients' access barriers to prenatal visits

Arizona Health Start Area Map, 2021



Arizona Health Start sites

- Adelante Healthcare
- Apache County Health Department
- Cochise County Health & Social Services
- Coconino County Public Health Services District
- Mariposa Community Health Center
- Mohave County Health Department
- Native Health Community Health Center (Mesa)
- Native Health Community Health Center (Phoenix)
- North Country Healthcare, Inc (Apache County)
- North Country Healthcare, Inc (Flagstaff)
- North Country Healthcare, Inc (Navajo County)
- Pima County Health Department
- San Carlos Apache Tribe
- Tempe Community Action Agency
- Unlimited Potential
- Yavapai County Community Health Services
- Yuma County Health Department

References

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