



# A new approach to reduce infant mortality and achieve equity

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Policy recommendations to improve  
housing, transportation, education  
and employment



Prepared by the Health Policy Institute of Ohio  
for the Ohio Legislative Service Commission

Dec. 1, 2017

### Housing overview

This section begins with a brief summary of the ways that housing affects health overall and then describes more specific ways that housing challenges contribute to infant mortality and related risk factors based upon a review of the research literature. This section also describes:

- Scope of housing problems in Ohio
- Housing policy landscape in Ohio (types of services, major policy levers, funding sources and planning and implementation entities)
- Housing policy goals and recommendations

Equity is addressed throughout this section by:

- Describing differences by race, ethnicity, sex, income level or other factors when data is available
- Discussing structural drivers of inequities

### How housing affects infant mortality: Literature review

Housing affects *overall health and wellbeing* in several ways:<sup>1</sup>

- **Affordability:** High housing costs make it more difficult for families with low incomes to pay for other necessities such as food, medical care and prescription drugs that can have a direct and negative impact on health. Predatory landlords, eviction, involuntary moves and difficulty paying for housing can lead to toxic and persistent stress that contributes to poor mental and physical health.
- **Residential segregation:** Deteriorating conditions in segregated communities expose residents to poor housing conditions, high poverty and crime. Segregation also isolates some minority communities from mainstream resources, including quality healthcare services and educational and employment opportunities.
- **Stability:** Housing instability is associated with poor health and disrupted access to health care and other social services. Families with low incomes may experience housing instability in the form of difficulty staying current on rent, forced and frequent moves and, in the most severe cases, homelessness.
- **Neighborhood conditions:** Neighborhoods with inadequate access to healthy foods, safe places to exercise, a sufficient number of good

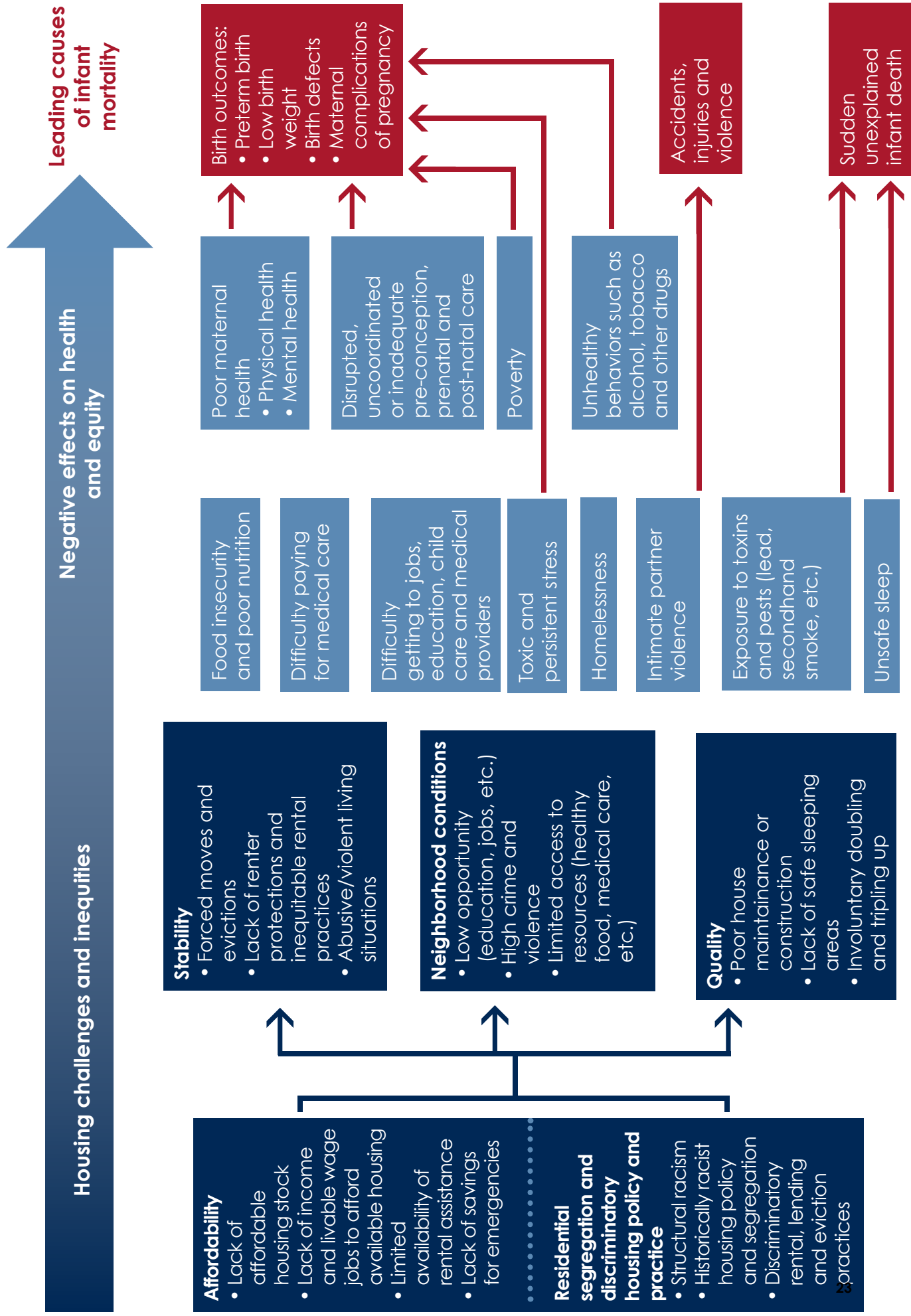
jobs and strong social capital contribute to poor mental and physical health through poor nutrition, lack of physical activity and increased stress. Poor neighborhood conditions may expose residents to violence and other sources of toxic and persistent stress which can be damaging to mental and physical health.

- **Quality:** Housing that is unsafe, infested with rodents or other pests, not well maintained and/or overcrowded contributes to physical and mental health problems from accidents or injuries, exposure to harmful contaminants (such as lead, mold and secondhand smoke) and toxic and persistent stress.

Housing that is high-quality, affordable and located in safe, resource-rich neighborhoods supports good health. A lack of affordable housing stock in most communities, historical policies of segregation and discriminatory housing practices make it difficult for people in groups at the greatest risk of poor birth outcomes to find housing that meets this description. In order to “get by” some have to live in housing that has negative effects on health and can increase the likelihood of poor birth outcomes and infant mortality.

Figure 4.1 applies the relationships between housing and health to the main causes of infant mortality as outlined in the research literature.

Figure 4.1.1. Relationship between housing and infant mortality





## Housing affordability

Households are considered to be affordably housed when they spend 30 percent or less of total household income on housing costs, including rent or mortgage, regular maintenance, repairs and utilities. Households that spend more than one-half of their income on housing costs are considered severely cost-burdened. Spending too much on housing contributes to infant mortality through two primary pathways:

- Cost-burdened households have difficulty paying for other necessities such as food, transportation, medical care and prescription drugs which can lead to conditions that are associated with poor birth outcomes, including poor nutrition<sup>2</sup> and disrupted access to prenatal care.<sup>3</sup>
- Inability to pay for housing and other necessities is a source of stress and anxiety for cost-burdened households.<sup>4</sup> Research shows that pregnant women who experience anxiety are more likely to have a preterm birth, particularly when the anxiety is related to external factors such as finances or the pregnancy itself.<sup>5</sup>

## Residential segregation

A significant body of research identifies and untangles the complex relationship between segregation and birth outcomes.<sup>6</sup> Research shows that isolation resulting from residential segregation<sup>7</sup> and racial discrimination<sup>8</sup> increases risk for poor birth outcomes and infant mortality. Residents of segregated communities are often isolated from mainstream resources such as good jobs, high-quality education and capital investment.<sup>9</sup> This happens as businesses, lenders and other entities that are crucial to supporting growing and thriving communities divest from segregated communities. The isolation from opportunity and concentration into extremely under-resourced neighborhoods disproportionately impacts African-American and low-income communities, a result of a legacy of policies and programs that support segregation and institutional racism.

In Ohio, people living in neighborhoods with a high concentration of non-Hispanic black residents are more likely to experience infant mortality than people living in neighborhoods with a lower concentration of non-Hispanic black people.<sup>10</sup> A recent study from the Joint Center for Political and Economic Studies found that if racial segregation were eliminated, the black infant mortality rate would decrease by two

per 1,000 live births and the Hispanic rate would be lower than the white rate.<sup>11</sup> This evidence and similar research on the multi-dimensional impacts of residential segregation<sup>12</sup> suggests that segregation is an important risk factor for infant mortality, but that solutions for this problem are complex.

## Housing stability

Housing instability is a term used to describe households that are severely cost burdened, often have trouble paying rent, move frequently and/or live in overcrowded conditions, sometimes with friends or relatives.<sup>13</sup> Research has established connections between housing instability and negative physical and mental health outcomes, including frequent mental distress<sup>14</sup>, depression<sup>15</sup>, fair or poor overall health and delayed medical care.<sup>16</sup> Based on these associations, pregnant women who experience housing instability may be at increased risk for infant mortality due to poor physical and mental health and delayed or disrupted prenatal care.

Research has also established associations between aspects of housing instability like frequent moves or living in crowded and/or “doubled up” and other potentially harmful conditions that can negatively impact birth outcomes, including food insecurity and living with abusive partners. Research from Boston, Massachusetts found that households that moved two or more times during the previous year were more than twice as likely to be food insecure compared to households that had not moved.<sup>17</sup> Studies about the effectiveness of rental assistance programs — which address housing instability by helping to pay rent — found that rental subsidies decreased the incidence of intimate partner violence and enabled people to live separate from abusive partners.<sup>18</sup>

Homelessness is the most extreme form of housing instability and is associated with several infant mortality risk factors, including low birth weight<sup>19</sup> and preterm birth.<sup>20</sup> An analysis of data from the Pregnancy Risk Assessment Monitoring System (PRAMS) found that 4 percent of U.S. women were homeless in the year before they became pregnant.<sup>21</sup> The study also found that infants born to women that experienced perinatal homelessness were more likely to have low birth weight and require additional services in the hospital.<sup>22</sup>



## Neighborhood conditions

In general, residents of neighborhoods with low socioeconomic status experience poorer health outcomes.<sup>23</sup> Several studies examine the connections between neighborhood conditions and infant mortality.<sup>24</sup> For example, one study found that women from areas with a high neighborhood deprivation index (social and environmental factors including income and housing) experienced higher rates of infant mortality.<sup>25</sup>

Neighborhood conditions and housing quality are closely linked. Rental housing that is safe, well-maintained and in close proximity to resources and opportunities for advancement demands higher market rents. Housing stock in neighborhoods marked by high poverty rates, high crime, poor health outcomes and low-performing schools<sup>26</sup> is often poorly-maintained, deteriorating or near vacant homes and abandoned buildings<sup>27</sup> and demands lower rents. Over time, low property values and low rents cause investments in communities to decrease, which accelerates declines in housing cost and quality.<sup>28</sup>

Neighborhood blight — a result of decreased investment in neighborhoods — is associated with poor health outcomes. A report from the Urban Institute connects conditions of neighborhood blight, including substandard housing, rodent and pest infestations, lead exposure and concentrations of vacant and abandoned buildings with negative health outcomes.<sup>29</sup>

## Housing quality

Housing quality problems, such as property damage and structural deterioration, are associated with negative birth outcomes and may lead to poor mental health.<sup>30</sup> Other environmental factors, such as overcrowding, lack of safe sleeping surfaces, difficulty regulating temperatures in sleeping rooms and the presence of pests or rodents in the home, are risk factors found in some cases of sleep-related infant deaths.<sup>31</sup>

The physical environment of a family's home, including exposure to structural problems (such as problems with foundations, steps and exterior surfaces<sup>32</sup>) and toxins (such as lead<sup>33</sup> and secondhand smoke<sup>34</sup>) are associated with poor

birth outcomes. Exposure to secondhand smoke is also associated with an increased risk for Sudden Infant Death Syndrome (SIDS).<sup>35</sup> According to data from 2011, Ohio children from households with incomes below 100 percent of the Federal Poverty Level (FPL) are almost 25 times more likely to be exposed to secondhand smoke than children in households with incomes above 400 percent FPL.<sup>36</sup> Regulations are in place in Ohio to protect people from exposure to secondhand smoke in workplaces, but children and pregnant women in non-smoking households may be exposed to secondhand smoke in multifamily housing units.<sup>37</sup>



### Scope of housing problems in Ohio

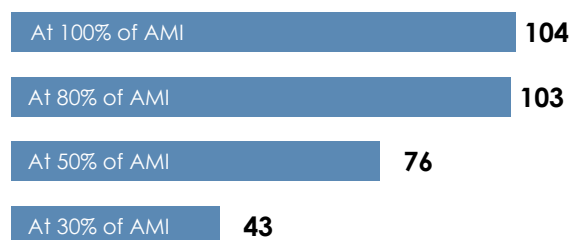
This section describes the current status of housing-related challenges in Ohio that are particularly relevant to infant mortality—access to affordable housing and rental assistance, housing instability and homelessness, neighborhood conditions and housing quality. This section ends with a description of three underlying structural drivers of inequities that contribute to housing-related challenges.

It is important to note that housing needs vary greatly by housing market. For example, some growing metropolitan areas are experiencing rising housing costs and gentrification, while other housing markets are declining as a result of divestment and population decline in rural areas. Interventions should be tailored to address affordable housing challenges in each housing market. This report focuses on housing challenges at the state level that are relevant to the priority population, which includes people living in infant mortality hot spot areas.

### Access to affordable housing and rental assistance

Lack of affordable housing for people with low incomes is a problem throughout most of the U.S., particularly for people with Extremely and Very Low Incomes (see Area Median Income text box for definitions).<sup>38</sup> The National Low Income Housing Coalition (NLIHC) estimates that, in 2015, there were only 43 affordable and available rental units in Ohio for every 100 Extremely Low Income renter households (see figure 4.2). For these households, finding and securing safe,

Figure 4.2. **Affordable and available units per 100 renter households in Ohio by income level (2015)**



**Note:** AMI=Area median income  
**Source:** National Low Income Housing Coalition, 2017 *State Housing Profile*

### Data on households facing severe housing cost burden

A NLIHC analysis of 2015 data from the U.S. Census found that 68 percent of renters with Extremely Low Incomes are severely cost burdened — spend more than 50 percent of income on housing costs — in Ohio compared to 18 percent of renters with Very Low Incomes.<sup>39</sup> Data on rates of severe cost burden for renters is not readily accessible from the U.S. Census Bureau for most local areas. However, national organizations have created tools for state and local stakeholders to understand the scope of housing affordability problems in communities, including the **Joint Center for Housing Studies of Harvard University**<sup>40</sup> and **NLIHC**.<sup>41</sup>

stable and affordable housing is extremely difficult without financial assistance. According to Housing Subcommittee members, this is because it is very difficult to build, maintain and financially sustain safe, quality rental housing that is affordable for households with Extremely Low Incomes due to resource constraints for capital development, operating support and rental assistance.

Figure 4.3 shows the percent of renters in selected counties that spend more than 30 percent of their household income on rent only.

Figure 4.3. **Percent of renters spending more than 30 percent of household income on rent only, Ohio Equity Institute counties (2016)**

County	Percent
Stark County	39.4
Butler County	40.7
Mahoning County	41.2
Franklin County	42.4
Hamilton County	42.5
Summit County	43.6
Cuyahoga County	45.7
Lucas County	46.3
Montgomery County	46.8

**Source:** U.S. Census Bureau



## Area Median Income (AMI)

Incomes and fair market rents vary by geography. To help account for geographic differences, housing programs use AMI to measure household income. AMI is determined annually for each metropolitan statistical area using data collected by the U.S. Census Bureau, American Community Survey. U.S. Department of Housing and Urban Development (HUD)

income eligibility standards for housing subsidies are set as a percentage of AMI. For targeting HUD subsidies and measuring available housing stock, the population is stratified into three groups: Extremely Low Income (0-30 percent AMI), Very Low Income (31-50 percent AMI) and Low Income (51-80 percent AMI).

County	AMI	Extremely Low Income limit*	Very Low Income limit**	Low Income limit**
Butler	\$74,700	\$24,600	\$37,350	\$59,750
Cuyahoga	\$67,900	\$24,600	\$33,950	\$54,300
Franklin	\$74,500	\$24,600	\$37,200	\$59,500
Hamilton	\$74,700	\$24,600	\$37,350	\$59,750
Lucas	\$61,500	\$24,600	\$30,750	\$49,200
Mahoning	\$54,600	\$24,600	\$28,800	\$46,100
Montgomery	\$63,600	\$24,600	\$31,800	\$50,900
Stark	\$60,800	\$24,600	\$30,400	\$48,650
Summit	\$65,700	\$24,600	\$32,850	\$52,550

\*The Extremely Low Income limit is set at 60 percent of the Very Low Income limit or the federal poverty level, whichever is greater.

\*\*Very Low Income and Low Income limits are adjusted in low-cost and high-cost areas.

Source: U.S. Department of Housing and Urban Development, FY 2017 Income Limits Documentation System

In addition to a shortage of affordable rental housing units, Ohio households with low incomes also face a shortage of rental assistance programs. The federal government provides funding for the majority of rental assistance programs available to Ohioans. Between 2004 and 2014, the number of families with children that received federal rental assistance across the U.S. decreased by 13 percent to 1.7 million households.<sup>42</sup> Households that do not receive rental assistance are at the highest risk of experiencing housing-related challenges such as difficulty paying for other necessities, eviction or feeling forced to live in a dangerous environment (see figure 4.4).<sup>43</sup>

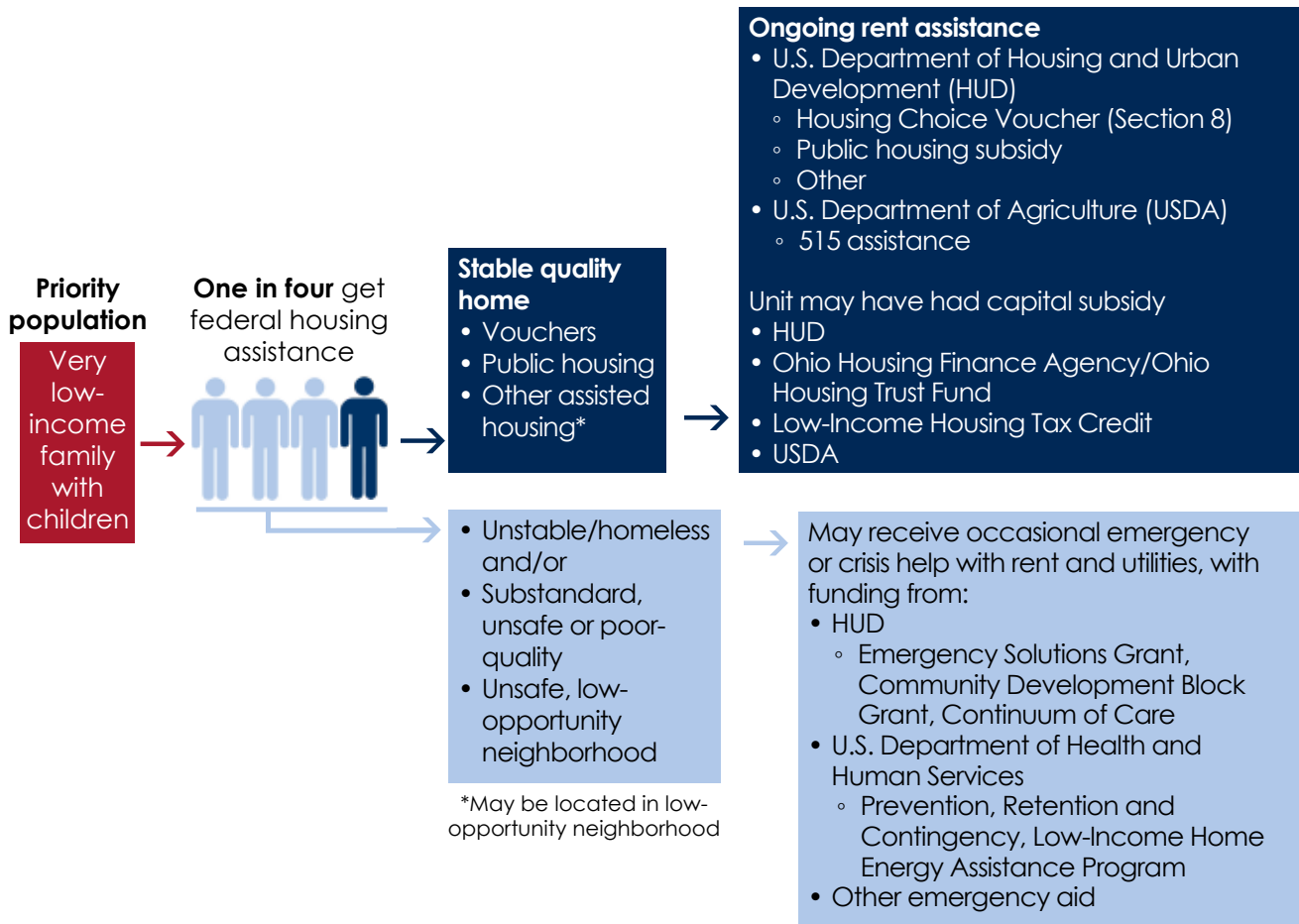
Accessing federal rental assistance involves applying through a local public housing authority (PHA). Because the demand for rental assistance is greater than the supply of federal subsidies, PHAs typically maintain waitlists that can be very long and, in some cases, are closed for periods of time. Figure 4.5 shows the average number of months households that received assistance waited before receiving a Housing Choice Voucher in selected communities.

## Housing instability

Policymakers and housing practitioners have been working to develop a uniform measure for housing instability in recent years.<sup>44</sup> The lack of a definition and measure, and the transient nature of the problem, make it difficult to accurately estimate the number of people experiencing housing instability. A recent report from HUD included data about housing instability for a subset of renters in the U.S. (see figure 4.6).<sup>45</sup>

PRAMS collects state-level, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy, including data related to housing stability. In 2010, the PRAMS survey asked respondents if they moved to a new address in the 12 months before their baby was born. A single move is not necessarily indicative of housing instability, but this data is consistent with other research regarding the prevalence of housing instability among black and low-income populations.<sup>46</sup> In 2010, 18 percent of Ohioans with incomes above \$50,000 per year moved before having a baby, compared to almost half of people with incomes below \$10,000 (see figure 4.7). During the same year, 44 percent of black Ohioans moved before having a baby, compared to 31 percent of white Ohioans.

Figure 4.4. Affordable housing options for households with low incomes



### Homelessness

Homelessness is more clearly defined and measured than housing instability at the federal, state and local levels. HUD releases the Annual Homeless Assessment Report (AHAR) which uses multiple data sources to estimate the number of people who are homeless nationally and in each state. The 2016 point-in-time homeless count identified over 10,000 Ohioans who were homeless on a single night in January (see figure 4.8).

Comprehensive local-level data on the number of people who are pregnant while experiencing homelessness is not available because pregnancy status is not included in the 2017 HUD Homeless Management Information System Data Standards for HUD-funded projects.<sup>47</sup> In Cuyahoga County, the Continuum of Care (CoC) has elected to determine pregnancy status for households based on the age of children when they enter the emergency shelter system.<sup>48</sup> In state fiscal year (SFY) 2017, 9 percent of children entering the shelter system in Cuyahoga County were infants, suggesting that the household may have been experiencing housing instability or homelessness during pregnancy.<sup>49</sup>

Figure 4.5. Average months on public housing authority waiting list before receiving a Housing Choice Voucher, Ohio Equity Institute counties (2016)

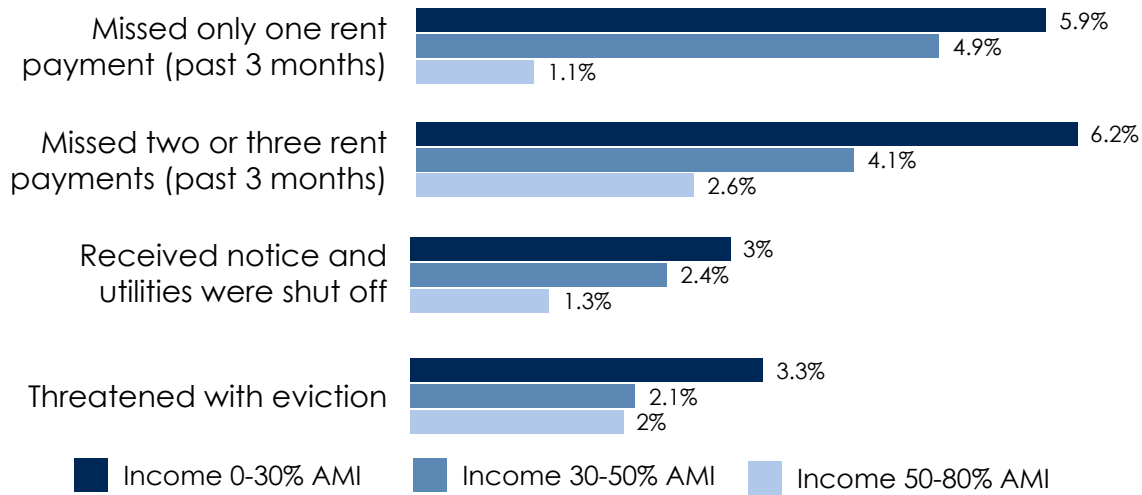
Metropolitan housing authority	Avg. months waiting for Housing Choice Voucher (rental assistance)
Columbus Metropolitan Housing Authority	17
Stark Metropolitan Housing Authority	17
Dayton Metropolitan Housing Authority	20
Cuyahoga Metropolitan Housing Authority	25
Cincinnati Metropolitan Housing Authority	27
Youngstown Metropolitan Housing Authority	28
Lucas Metropolitan Housing Authority	33
Akron Metropolitan Housing Authority	35
Butler Metropolitan Housing Authority	53

Source: U.S. Department of Housing and Urban Development, Picture of Subsidized Households: 2016.



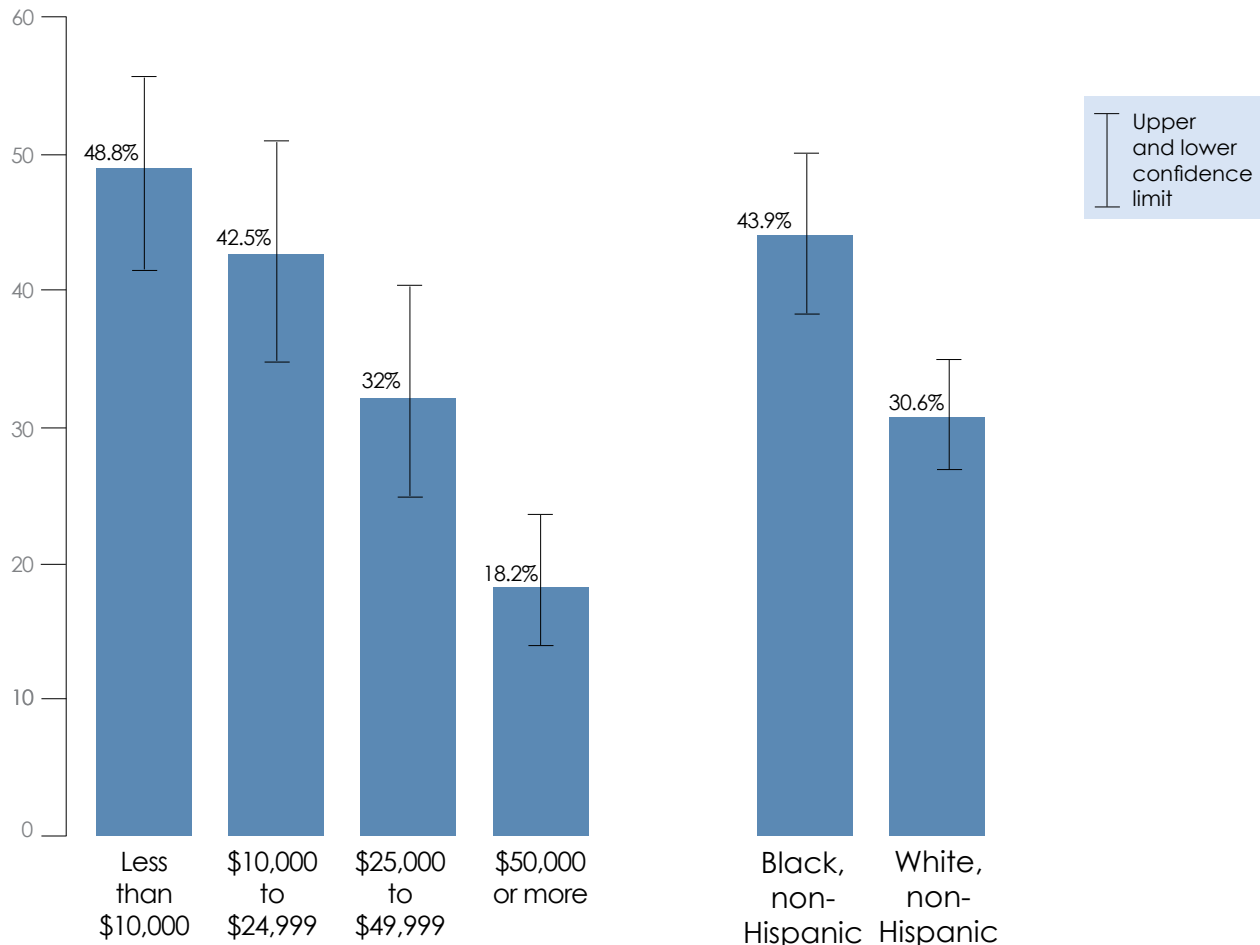


**Figure 4.6. Percent of unassisted renter households with severe housing problems, U.S. (2013)**



**Note:** AMI=Area median income  
**Source:** U.S. Department of Housing and Urban Development, 2013 American Housing Survey data as published in the 2015 Annual Homeless Assessment Report

**Figure 4.7. Percent of women who moved to a new address in the 12 months before their baby was born, by income and race and ethnicity, Ohio (2010)**



**Source:** Ohio University analysis of 2010 Pregnancy Risk Assessment Monitoring System (PRAMS) data

Figure 4.8. **Point-in-time homeless counts by Ohio Continuums of Care (CoCs) (2016)**

Continuum of Care (CoC) Name	Total number of homeless people
Youngstown/Mahoning County CoC	346
Canton/Massillon/Alliance/Stark County CoC	460
Toledo/Lucas County CoC	599
Akron/Barberton/Summit County CoC	679
Dayton/Kettering/Montgomery County CoC	751
Cincinnati/Hamilton County CoC	1,116
Cleveland/Cuyahoga County CoC	1,697
Columbus/Franklin County CoC	1,724
Ohio Balance of State CoC* (includes all areas in Ohio not listed above)	3,032

\*All communities that are not represented by a local Continuum of Care are included in the Balance of State point-in-time estimates

**Source:** U.S. Department of Housing and Urban Development, Annual Homeless Assessment Report, 2016

### Advisory Group insights: Experiences of women who are homeless

Housing Subcommittee and Advisory Group members emphasized the importance of addressing homelessness in order to improve outcomes related to infant mortality. They explained that homelessness is prevalent among women at high risk of infant mortality and that women who are homeless face unique barriers to having a healthy pregnancy. For example, the director of Moms2B – a program that provides support for high-risk mothers during pregnancy and the first year of a baby’s life – estimates that approximately 25 percent of the women enrolled in the program are housing insecure and that many live in homeless shelters while taking part in the program.<sup>50</sup> Examples of unique barriers faced by women who are homeless that the Advisory Group mentioned include:

- Stress associated with living in group settings, not having control over many aspects of life and pressure related to time limits on shelter stays
- Restrictions on bringing food and drinks into shelters
- Limitations on storing food, drinks and medications that require refrigeration
- Limitations on accessing and storing equipment to care for infants (i.e., diapers, pack and play, medications and breastfeeding equipment)
- Limited access to safe and private locations for breastfeeding
- Requirements to leave shelters during daytime hours
  - Difficulty getting around with baby and all possessions
  - Lack of places for new mothers and infants to pass time
- Women who are pregnant and/or have young children have a harder time finding permanent housing than households without young children



### Residential segregation, neighborhood conditions and housing quality

Neighborhood conditions and housing quality are often interrelated, particularly in segregated communities with a high proportion of people of color. In general, these neighborhoods have worse neighborhood conditions and poorer housing quality than neighborhoods with higher proportions of white residents. For example, rates of lead poisoning among children in Toledo between 2010 and 2014 were significantly higher in segregated parts of the city.<sup>51</sup> Most of the housing in these areas is older, which is a risk factor for lead exposure.<sup>52</sup> In addition, a large-scale analysis of U.S. cities found that rates of violent crime are higher in cities with greater degrees of residential segregation.<sup>53</sup>

The connections between residential segregation, housing quality and neighborhood conditions are particularly important in states, like Ohio, where the degree of segregation is very high. One common measure of residential segregation is the dissimilarity index. The index measures how the racial composition of an area is similar or dissimilar to the surrounding area. A dissimilarity index greater than 60 is considered to be highly segregated. Figure 4.9 displays the black-white dissimilarity index for Ohio's largest metropolitan areas. The largest metros in the eight case study states discussed in part nine of this report are also included for reference.

### Underlying structural drivers of inequities in housing

Today's housing inequities are largely the result of policy decisions made in the 20th century.<sup>54</sup> The three issues discussed below have historical roots and can be traced back to specific policies and practices. In many cases, these policies and practices have

Figure 4.9. **Black-white dissimilarity index for selected Metropolitan Statistical Areas (2010)**

Metropolitan Statistical Area	Black-white dissimilarity index
Las Vegas-Henderson-Paradise, NV	35.9
Greenville-Anderson-Mauldin, SC	42.7
Columbia, SC	48.3
Nashville-Davidson-Murfreesboro-Franklin, TN	55.0
Denver-Aurora-Lakewood, CO	59.4
<b>Columbus, OH</b>	<b>60.0</b>
Washington-Arlington-Alexandria, D.C.	61.0
Boston-Cambridge-Newton, MA	61.5
<b>Cincinnati, OH</b>	<b>66.9</b>
<b>Cleveland-Elyria, OH</b>	<b>72.6</b>
Detroit-Warren-Dearborn, MI	74.0
New York-Newark-Jersey City, NY	76.9

**Source:** Data from the American Community Survey, as compiled by the American Communities Project

been addressed by more recent policy changes, but the inequities they created are still experienced by Ohioans at greatest risk of infant mortality, particularly African Americans.

### Low income relative to housing cost

Underlying most inequities in housing is the fundamental disconnect between the incomes of

### Advisory Group and Housing Subcommittee insights: Discrimination and inequitable rental practices

The Advisory Group identified discrimination and inequitable rental practices as underlying factors that are particularly relevant to populations at the greatest risk for infant mortality. Research from Milwaukee, Wisconsin finds that black women with low incomes are the group most likely to be evicted.<sup>55</sup>

Other discriminatory and/or inequitable rental practices that contribute to housing inequities mentioned by the Advisory Group include:

- Restrictions against renting to people with criminal convictions and/or arrest records
- Refusing to accept certain forms of payment, including rental assistance vouchers, Supplemental Security Income (SSI) and Temporary Assistance for Needy Families (TANF)
- Requiring long-term leases for renters in high-poverty neighborhoods
- "Rent-to-own" arrangements
- Informal lease agreements

(Some of these practices may be illegal under current law)



residents and the cost of housing. This problem is particularly important to consider when addressing infant mortality because families at the greatest risk for infant mortality are often also members of groups that are more likely to have low incomes.

Changes in rental markets contribute to structural inequities in access to affordable housing. Across the country, the price of renting has gone up since the early 2000s.<sup>56</sup> During the same period, income growth for the lowest income renter households has lagged behind increases in housing costs. The consequence is a rapidly growing number of families confronted with paying a higher share of their incomes for housing. As the housing cost burden facing renter households grows, government-funded rental assistance is not expanding to meet the need. Today, only one in four potentially eligible households receives federal rental assistance (see figure 4.4).<sup>57</sup>

### **Residential segregation**

Policies and practices that lead to segregated communities contribute to structural inequities in

housing. One such policy frequently associated with residential segregation in the U.S. is redlining — the practice by which banks limited access to mortgages and other capital investment in areas with high percentages of black households. Other practices and policies, such as those related to education funding, transportation planning and zoning or land use decisions contribute to residential segregation and inequities.<sup>58</sup> Communities with good schools, growing economies and quality access to transportation support vibrant economies that provide opportunities to all residents.

### **Discriminatory and inequitable rental practices**

Discriminatory and inequitable rental practices also contribute to inequities in housing conditions. Evictions contribute to housing inequities by restricting future housing options which can force households into substandard housing in high-poverty neighborhoods.<sup>59</sup> Displacement related to a forced move can also lead to job loss, poor credit and homelessness.<sup>60</sup>

### **Ohio story**

#### **Have you experienced housing discrimination?**

*In August 2008, Celeste Barker found a townhouse advertised in a local Ohio newspaper. When she stopped by the rental office, the property manager told her the office was closed and the townhouse was no longer available, according to HUD. Barker, who is black, suspected discrimination and filed a complaint with a fair housing group. The group had a white tester call to inquire about the rental. The property manager made an appointment to show the tester the apartment the next day. When a black tester called, he once again claimed he had nothing to rent.*



— ProPublica, Oct. 28, 2012 (excerpt)



## Housing policy landscape in Ohio

This section focuses on current programs and policies in Ohio that impact renters with Extremely and Very Low Incomes and people who experience homelessness. These are the groups most at-risk for infant mortality.

The largest rental assistance programs — Housing Choice Vouchers (Section 8) and public housing — are federally-funded by the U.S. Department of Housing and Urban Development (HUD) and locally administered by public housing authorities (PHAs). State government agencies prepare and submit plans to federal agencies that outline how federal funding for affordable housing and homeless services will be used. The Ohio Development Services Agency (ODSA) and the Ohio Housing Finance Agency (OHFA) are the state agencies with primary responsibility for affordable housing, rental assistance and services for people who experience homelessness.

### Existing programs and services most relevant to infant mortality

Women who are most at-risk for infant mortality are likely to be renters with Extremely or Very Low Incomes. Figure 4.10 provides examples of rental assistance programs and services for people with low incomes who may be experiencing housing instability or homelessness.

Based on the findings of the literature review above, and feedback from the Advisory Group, policies and programs related to the following categories are most relevant to infant mortality high-risk populations:

- Rental assistance
- Services for people who experience homelessness
- Affordable housing preservation and development

### Rental assistance and services for people who experience homelessness

These two categories are grouped together in this report because, in Ohio, most federal funding for rental assistance and services for people who experience homelessness comes from HUD directly to local administering agencies or is passed through ODSA.

Rental assistance programs mitigate many of the potentially harmful effects of unaffordable,

substandard and/or unstable housing. Rental subsidies are typically tied to income, meaning that a household pays a portion of total income toward rent and utilities. When household income fluctuates, the rent payment can usually be adjusted. To ensure that rental subsidy recipients live in quality housing, regulations set standards for the health and safety of subsidized units, and PHAs enforce these regulations through inspections.

Services for people who experience homelessness encompass a continuum of services that ranges from emergency shelter and transitional housing to rapid rehousing programs and permanent supportive housing for formerly homeless individuals.

### Funding

Federal funding for rental assistance and services for people who experience homelessness comes mostly from HUD. Funds for the largest federal rental assistance programs — Housing Choice Vouchers (Section 8) and public housing<sup>61</sup> — are appropriated by Congress and allocated directly to public housing authorities.<sup>62</sup> Other HUD funds that can be used to provide rental assistance and/or services for people who are homeless come from these programs:

- Community Development Block Grants
- HOME Investment Partnerships
- Emergency Solutions Grants
- Housing Opportunities for Persons with AIDS
- Continuums of Care
- National Housing Trust Fund

Funding from these federal programs is distributed through programs developed by the Office of Community Development at ODSA and OHFA.<sup>63</sup>

State funding for rental assistance and services for people who experience homelessness comes from the OHTF<sup>64</sup>, which was established more than 25 years ago to “provide housing and housing assistance for specifically targeted low- and moderate-income families and individuals.”<sup>65</sup>

Fees from county recorders fund the OHTF. Funds are distributed based on guidelines in the Ohio Revised Code and recommendations from an advisory committee comprised of members appointed by the Governor. In 2016, the OHTF allocated \$42 million to numerous programs and providers.<sup>66</sup>

Figure 4.10. **Selected examples of rental and homeless assistance programs for people with low incomes and people experiencing homelessness in Ohio\***

Type of service or program	Program description	Eligibility and priority populations
<b>Voucher rental assistance</b>	<ul style="list-style-type: none"> <li>Provides rental assistance voucher to eligible households</li> <li>Rent typically based on income</li> <li>Voucher may be used for any unit that meets agency (usually HUD) standards with agreement from the landlord</li> <li>Administered by local public housing authorities (PHAs) or other designated agency</li> </ul>	<ul style="list-style-type: none"> <li>Usually income below 50% AMI, additional consideration below 30% AMI</li> <li>Agencies may establish preferences for specific populations</li> </ul>
<b>Public housing</b>	<ul style="list-style-type: none"> <li>Provides subsidized rent to people living in PHA-owned and operated units</li> <li>Rent typically based on income, but may require a minimum rent contribution</li> <li>Administered by local PHAs</li> </ul>	<ul style="list-style-type: none"> <li>Income below 80% AMI, additional consideration below 50% AMI</li> <li>PHAs may establish preferences for specific populations</li> </ul>
<b>Rental assistance and support services</b>	Provides subsidized rental assistance and supportive services to eligible tenants	<ul style="list-style-type: none"> <li>Low income</li> <li>Projects typically serve a target population(s) such as families, people with disabilities or mental illness and seniors</li> </ul>
<b>Transitional housing</b>	<ul style="list-style-type: none"> <li>Provides funding to rapidly transition people from homelessness to housing</li> <li>Administered by local agencies</li> </ul>	<ul style="list-style-type: none"> <li>Homeless and low income</li> <li>Some programs require proof of ability to maintain housing after assistance ends</li> </ul>
<b>Rapid Rehousing</b>	<ul style="list-style-type: none"> <li>Provides assistance through housing identification, limited financial assistance for rent and case management</li> <li>Administered by County Department of Job and Family Services (CDJFS) agencies</li> </ul>	<ul style="list-style-type: none"> <li>Eligibility may vary, but typically low income with dependent children</li> <li>Must demonstrate capacity to maintain stability after receiving assistance, typically through employment</li> </ul>
<b>Prevention, Retention and Contingency (PRC)</b>	<ul style="list-style-type: none"> <li>Provides one-time assistance to households to prevent eviction, job loss or to provide other temporary support that may prevent reliance on public assistance</li> <li>Administered by CDJFS agencies</li> </ul>	<ul style="list-style-type: none"> <li>Eligibility may vary, but typically low income with dependent children</li> <li>Must demonstrate capacity to maintain stability after receiving assistance, typically through employment</li> </ul>
<b>Emergency shelter</b>	<ul style="list-style-type: none"> <li>Provides a temporary place to stay for people without other housing options</li> <li>Administered by local agencies</li> </ul>	May require access through a coordinated point of entry

\*Programs will be described in more detail later in this section



OHFA recently made new funding available for a rental assistance pilot program targeted at reducing infant mortality. On July 31, 2017, OHFA released a Notice of Funding Availability for \$1 million dollars seeking proposals to establish a rental assistance pilot program. The goal of the pilot program is to assess the potential impact of a rental subsidy to reduce the risk factors for infant mortality and increase housing stability of low-income households with children. The pilot program must include rental assistance, access to maternal and child healthcare services, social service supports and activities to foster long-term housing stability.

### **Planning and implementation**

ODSA prepares the **Ohio Consolidated Plan**<sup>67</sup>, which outlines how federal funding for homeless services will be used. It also outlines which state agency will administer the funds, organizations eligible to receive funding and sources of matching funds. The Consolidated Plan for program year 2017 covers \$70 million in federal funding. Counties and city governments that receive HUD funding are also required to prepare consolidated plans.

### **The Ohio Housing and Homelessness**

**Collaborative** (OHHC) is an inter-agency collaborative that works to align resources and create new, comprehensive approaches to address housing and homelessness by utilizing public and private resources at both the state and federal levels. Members coordinate funding priorities and strategies as well as engage local housing and homelessness interest groups. The OHHC is creating a statewide plan to end homelessness which is slated to be published by the end of 2017.

At the local level, Continuums of Care (CoCs) play an important role in planning and implementing services for people who are homeless. The CoC program is a HUD program that provides funding, as well as a framework for communities to coordinate housing and homeless services. Communities apply for funding through a single, lead agency known as the “collaborative applicant.” This lead agency develops the application through a collaborative process. Metropolitan areas typically convene a community-wide CoC, and non-metropolitan counties are convened in a “balance-of-state

CoC” led by the Coalition on Homelessness and Housing in Ohio. Some communities, including Columbus and Cincinnati, apply for CoC funding through a Unified Funding Agency designated by HUD. Local CoCs may receive funding from ODSA and/or the OHTF as well as other local and state entities.

Rental assistance programs administered by public housing authorities operate independently of Ohio’s Consolidated Plan and local CoCs. In some cases, a public housing authority will work with local and state agencies to address community issues related to housing.<sup>68</sup>

### **Affordable housing preservation and development**

New development increases the supply of units available to households with low incomes. Preserving existing affordable housing ensures that residents with low incomes are not displaced by increasing housing costs. Both are critical components to closing the affordable housing gap. New developments in low-poverty, high-opportunity neighborhoods are supportive of good health for residents.

### **Funding**

HUD funding from several of the programs discussed above may also be used for affordable housing development, including Community Development Block Grants, HOME Investment Partnerships and the National Housing Trust Fund. This funding is managed at the state level by ODSA, which allocates funding to local entities.

Ohio also receives significant investment for affordable housing development through the federal Low Income Housing Tax Credit Program. The program is administered by OHFA based on guidelines set by the Internal Revenue Service. Housing developers receive a tax benefit for projects that are selected to receive credits in exchange for providing an agreed-upon number of units that are affordable for people with specified incomes. In July 2017, OHFA announced that it awarded more than \$27 million dollars in tax credits to 34 affordable housing development projects. Additional funding for affordable housing development comes from local governments and private investors.



### Planning and implementation

OHFA conducts an **annual housing needs assessment**<sup>69</sup> and develops an **annual plan**<sup>70</sup> that outlines how the agency will distribute funding for development of affordable housing. The 2018 annual housing needs assessment includes information about infant mortality, including maps that overlay OHFA project sites with infant mortality census tracts. In response to SB 332, OHFA's **2018 Annual Plan**<sup>71</sup> included infant mortality reduction as strategic priority 2.4:

*Join efforts to reduce Ohio's infant mortality rate by making strategic housing investments that address the needs of vulnerable families.*

*In 2015, the Ohio Department of Health reported that 7.2 in every 1,000 infants died before their first birthday, a rate well above the national average. OHFA will contribute to efforts to improve low birth weight and infant mortality rates in Ohio through strategic partnerships with established organizations and partners.*

In addition to the annual plan, OHFA develops a Qualified Allocation Plan (QAP) that outlines how projects will be selected for Low Income Housing Tax Credits. OHFA released a draft of the **2018 QAP**<sup>72</sup> in September 2017. The plan outlines how developers can integrate services for people at risk of experiencing infant mortality to receive points in the project consideration process.

Evidence from the Moving to Opportunity study suggests that when people use rental assistance vouchers to move away from high-poverty, low-opportunity areas, they experience better outcomes than people who stay in those areas.<sup>73</sup> OHFA worked with the Kirwan Institute for the Study of Race and Ethnicity at The Ohio State University to develop the **Urban Suburban Rural Opportunity Index**, a tool to help with the placement of low-income housing in 2018 and 2019.

### Advisory Group and Housing Subcommittee insights: Barriers to affordable housing

The Advisory Group and Housing Subcommittee highlighted barriers to new affordable housing development in low-poverty, high-opportunity areas:

- Lack of appropriately zoned land for rental housing development and exclusionary land use policies
- "NIMBY-ism," or Not In My Backyard, which is a collective attitude that affordable housing should not be built in affluent areas
- Development costs, including land, and

regulatory barriers to developing affordable housing in low-poverty and high-opportunity areas

Housing Subcommittee members also discussed barriers that federal rental assistance voucher recipients encounter when locating rental housing in low-poverty, high-opportunity areas, including:

- Restrictions against renting to people with criminal records
- Limitations on renting to people with poor credit and/or a history of previous evictions
- Restrictions against renting to voucher holders





## Housing policy recommendations

HPIO drew upon the following sources of information to identify policy goals and recommendations to improve housing in Ohio:

- Literature review, scope of problem and policy landscape (part four of this report)
- Evidence inventories (see Appendix B)
- Suggestions and feedback from the Advisory Group and Housing Subcommittee, including prioritization of goals and recommendations
- Input from additional subject matter experts on technical and political feasibility

See Appendix D for a detailed description of the policy recommendation development process.

The following policy goals address the most critical housing challenges and inequities facing Ohio families at risk for infant mortality. Research indicates that achievement of these goals would likely contribute to improved birth outcomes, healthier infants and health equity.

### Housing policy goals

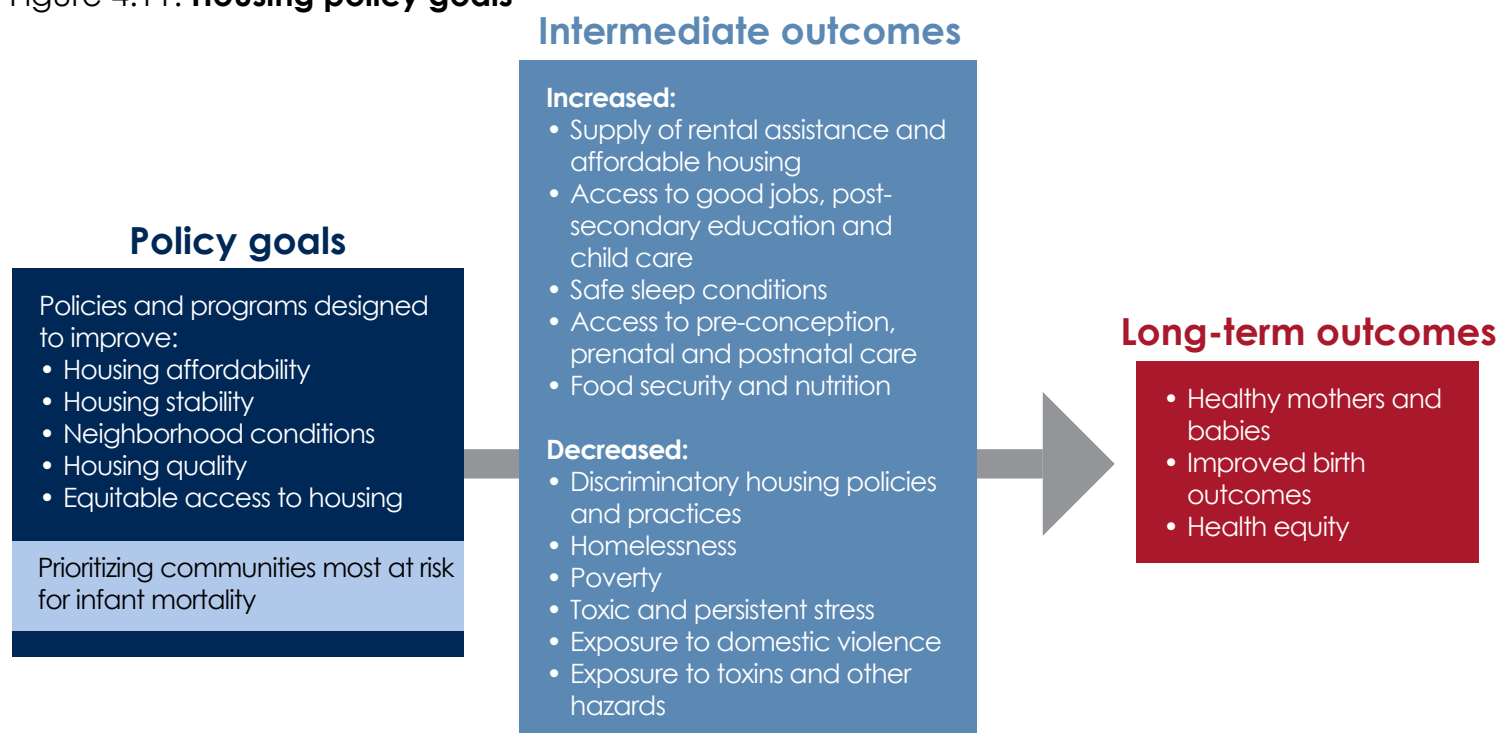
#### Top-priority goals

1. Increase the availability of rental assistance programs for renters with Extremely Low Incomes
2. Reduce structural barriers to accessing affordable housing for the highest-risk renters (structural barriers include level of income, source of income, criminal record, etc.)
3. Increase the supply of affordable rental housing for Extremely Low Income and Very Low Income households in high-opportunity and low-poverty areas
4. Improve coordination of services for low-income families by convening cross-sector partnerships

#### Additional goals

5. Increase the supply of affordable housing for renters with Extremely Low Incomes
6. Reduce the number of evictions and forced moves experienced by low-income families most at risk of infant mortality, including African Americans and pregnant women
7. Improve the quality of affordable housing stock

Figure 4.11. Housing policy goals





In order to reach these long-term policy goals, this report identifies specific and actionable recommendations for state and local policymakers. The top-priority recommendations are listed below and additional policy options are listed in Appendix A.

### **Housing policy goal 1.** Increase the availability of rental assistance programs for renters with Extremely Low Incomes

- 1.1 State policymakers can provide funding from the General Revenue Fund for the Ohio Housing Finance Agency (OHFA) to establish a new state-funded rental assistance program targeted to reducing infant mortality among populations most at-risk for infant mortality, including people with low incomes and low levels of educational attainment, African Americans and residents of infant mortality hot spot zip code areas or neighborhoods.
- 1.2 State policymakers can direct state agencies to increase funding from new and existing sources for rapid re-housing programs and rental assistance programs for pregnant women and families with very young children. Potential sources of new and existing funding include:
  - a. Increased revenue to the Ohio Housing Trust Fund through increased county recordation fees
  - b. Increased funding for these programs from the Ohio Development Services Agency
  - c. Amending the state TANF spending plan to allow funds to be dedicated to these programs
- 1.3 State policymakers can use recommendations from the OHFA evaluation of the Housing Assistance to Reduce Infant Mortality pilot project to plan future state-funded rental assistance programs targeted to reduce infant mortality.

### **Housing policy goal 2.** Reduce structural barriers to accessing affordable housing for the highest-risk renters (structural barriers include level of income, source of income, criminal record, etc.)

- 2.1 State legislators can pass legislation to reduce or eliminate barriers to obtaining affordable housing. Barriers that could be reduced or eliminated include:
  - a. Landlord discrimination based on the source of income potential tenants will

use to pay rent (such as Housing Choice Vouchers, Supplemental Security Income and Temporary Assistance for Needy Families)

- b. "Banning the box" or delaying the use of criminal background checks in the tenant screening process until after a conditional housing offer is made
- c. Restrictions on not renting to people with criminal records

### **Housing policy goal 3.** Increase the supply of affordable rental housing for Extremely Low Income and Very Low Income households in high opportunity and low poverty areas

- 3.1 State policymakers can provide incentives, such as increased funding for services or preference for state grant programs, to municipalities that encourage and support the development of affordable housing in high opportunity areas within their communities.
- 3.2 Local policymakers can require or incentivize that new housing developments implement inclusionary policies such as reserving a certain percentage of new units to be affordable as a condition of obtaining a zoning variance. Local policymakers can also require that housing developers work with local public housing authorities to ensure that new housing developments will be eligible to accept rental assistance.

### **Housing policy goal 4.** Improve coordination of services for low-income families by convening cross-sector partnerships

- 4.1 Convene the Ohio Department of Medicaid, Ohio Housing Finance Agency, Ohio Development Services Agency, Ohio Capital Corporation for Housing, Ohio Department of Mental Health and Addiction Services, Ohio Department of Health and Ohio's Medicaid managed care plans with Ohio Equity Institute partners and Continuums of Care to discuss ways that Medicaid managed care plans can support housing stability among Medicaid enrollees most at-risk for infant mortality, including people with low incomes and low levels of educational attainment, African Americans and residents of infant mortality hot spot zip code areas or neighborhoods.



- 4.2 State policymakers can require service systems, such as Medicaid, Temporary Assistance for Needy Families (TANF) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), to collect information about the housing status of households during the application and re-certification process. This data could be collected consistently across systems and used to:
- Provide a standardized means for identifying and connecting people experiencing a housing crisis to appropriate and timely interventions
  - Inform the allocation of resources to affordable housing programs
  - Direct resources to areas with the greatest need
  - Inform the development of cross-sector partnerships with the potential to improve housing outcomes for Ohioans
- 4.3 The Ohio Department of Health and the Ohio Housing Financial Agency can collaborate to create additional guidance for directing hospital community benefit spending to affordable housing strategies related to the State Health Improvement Plan.

### **Housing policy goal 5. Increase the supply of affordable housing for renters with Extremely Low Incomes**

- 5.1 State agencies can promote strategies that can be implemented at the local level to reduce financial and regulatory barriers to increasing the supply of affordable housing. Examples of strategies that could be promoted include:
- Adopting clearer and shorter permitting requirements for affordable housing development
  - Revising zoning ordinances to reduce the need for variances and/or expedite the process for obtaining a variance for affordable housing development
  - Allowing developers to purchase or use housing plans that are examples of good design that have been pre-approved by the city for conformance with building codes and/or other standards
  - Allowing or encouraging the use of innovative housing design and construction techniques to reduce

the cost of developing and operating affordable housing by investing in micro-housing, green affordable housing development and/or non-conventional building technology, such as modular, prefabricated or shipping container units

### **Housing policy goal 6. Reduce the number of evictions and forced moves experienced by low-income families most at risk of infant mortality, including African Americans and pregnant women**

- 6.1 State and local policymakers can increase rapid access to legal representation, landlord-tenant mediation and other supportive services, including emergency financial assistance, to prevent formal evictions experienced by low-income families most at risk of infant mortality, including African Americans and pregnant women.
- 6.2 State policymakers and the Ohio Supreme Court can commission research to determine how inequitable rental practices and discrimination based on race, gender and pregnancy status impact housing stability for low-income families most at risk of infant mortality, including African Americans and pregnant women, and provide recommendations for local executives and courts to address these issues.

### **Housing policy goal 7: Improve the quality of affordable housing stock**

- 7.1 State policymakers can increase funding to the Ohio Department of Health, local health departments and other local entities that screen for and remediate housing quality issues with potential impacts on health such as lead, mold and pests. Additional incentives could be developed for entities that give preference to women who are pregnant and families with infants.



## Connections to other outcomes

Although developed to reduce infant mortality, the housing policy goals and recommendations also support many other state priorities for improving population health outcomes, controlling healthcare spending and increasing economic opportunity and vitality. Housing stability, for example, is important to children's social-emotional functioning at school<sup>74</sup> and supports the policy goals in part six of this report. Improving data collection on the housing status of Ohioans accessing work support programs would provide important information that could help to improve outcomes across systems.

Housing policy goals 1, 2 and 5 directly align with affordable, quality housing strategies in the **2017-2019 State Health Improvement Plan**<sup>75</sup> (SHIP). The SHIP is being implemented by state agencies and by local health departments and hospitals through their community health improvement initiatives.



## Impact study: Rental assistance program targeted to reducing infant mortality

### Background

Senate Bill 332 states that OHFA “may establish a housing assistance pilot program” targeted to reducing infant mortality and lays out broad criteria for the program.<sup>76</sup> This recommendation was based on the accepted view that safe, quality and stable housing is a critical component for helping women and infants maintain good health before, during and after pregnancy.<sup>77</sup>

Understanding the potential impact of a proposed intervention provides policymakers with information to determine how to effectively allocate resources and implement programs to achieve desired outcomes. This impact study is required by SB 332.<sup>78</sup>

Federal, state and local government entities provide rental assistance.<sup>79</sup> However, available assistance does not meet the needs of the entire population with incomes that are too low to afford fair market rental housing. Recent estimates indicate that, nationally, only one in four potentially eligible households receive federal rental housing assistance.<sup>80</sup>

State-funded rental assistance programs targeted to reducing infant mortality are not common among other states. Healthy Start in Housing in Boston, Massachusetts is the only program specifically targeted to reducing infant mortality with published information about program outcomes that was identified while preparing this impact study.<sup>81</sup> In July 2017, OHFA released a Notice of Funding Availability (NOFA) requesting proposals to implement a similar pilot program. The NOFA requires applicants to evaluate outcomes related to infant mortality. Both programs are described below.

### Ohio Housing Finance Agency pilot program

OHFA released the “Housing Assistance to Reduce Infant Mortality” NOFA on July 31, 2017. The purpose of the funding is to “establish a time-limited housing assistance pilot program to expand housing opportunities and demonstrate the effectiveness of a time-limited rental subsidy targeted to households that include pregnant women, new mothers or infants within the first year of life.”<sup>82</sup> The NOFA requires applicants to ensure that program participants receive supportive

services, including maternal and child healthcare services. Preference will be given to proposals that target Extremely Low-Income households with incomes below 30 percent AMI. Evaluation of program outcomes is required “to assess the potential impact of a rental subsidy to reduce the risk factors for infant mortality and increase housing stability of low-income households with children.”<sup>83</sup> A proposal will likely be selected in December 2017.

### Healthy Start in Housing

**Healthy Start in Housing** (HSiH) is a partnership between the Boston Public Health Commission (BPHC) and the Boston Housing Authority (BHA) that began in 2011.<sup>84</sup> HSiH gives priority housing placement for 75 units of public-housing set aside for pregnant women who:

- Reside in BHA’s service area,
- Are experiencing homelessness or housing instability and
- Are at medical risk of poor birth outcomes or have previously experienced a poor birth outcome<sup>85</sup>

The HSiH pilot program was designed to support a quasi-experimental research design “to assess the effects of program participation on maternal mental health and social functioning.”<sup>86</sup>

The program has received much attention and is often highlighted as a promising intervention to reduce infant mortality and disparities.<sup>87</sup> As of November 2017, a final outcomes evaluation of the program has not been published, but an analysis of preliminary data found improvement in mental health and social and mental functioning.<sup>88</sup> These preliminary results are not sufficient to determine the potential impact of the HSiH program on poor birth outcomes or infant mortality, but they do suggest that interventions designed to provide housing stability for pregnant women at risk of infant mortality can improve mental health.

Research findings based on preliminary data from the HSiH program are consistent with other research. Moving to Opportunity, a pilot program with an experimental research component, found that Section 8 rental assistance voucher recipients experienced statistically significant improvements in mental health outcomes compared to a control group.<sup>89</sup>



## Potential impact of a state-funded rental assistance program targeted to reduce infant mortality

Additional research is needed to predict the impact of rental assistance programs on reducing infant mortality and poor birth outcomes. To address this gap in research, HPIO turned to three sources of information to complete this impact study:

1. Expertise from the Housing Subcommittee (Ohio housing experts)
2. General literature review on the impact of housing affordability interventions on health and related outcomes
3. What Works for Health review of evidence of effectiveness of relevant housing programs

The Housing Subcommittee assembled by HPIO included members of the Advisory Group who have specific housing expertise (see Appendix C for list of members). HPIO tasked this group with developing a logic model that lays out the short- and intermediate-term outcomes that could be expected from a state-funded rental assistance program targeted to reducing infant mortality (see figure 4.12).

Housing Subcommittee members said they needed more details about the potential rental assistance program than were provided by SB 332 to anticipate short and intermediate outcomes. For example, more information about the priority population, referral sources and barriers to program participation (i.e., landlord limitations on people with criminal records, poor credit scores and/or previous evictions) is needed to anticipate the percent of the priority population that would enroll. Additional information about the structure of the subsidy, including whether the subsidy will be tenant-based or project-based, the amount of rent assistance provided and the time limit on rental assistance is needed to anticipate outcomes related to housing stability for program participants. Figure 4.12 includes potential attributes and partnerships of a rental assistance program targeted to reduce infant mortality that were highlighted by Housing Subcommittee members.

To ensure that the policy recommendations included in this report are evidence-informed, HPIO staff identified three programs rated by **What Works for Health** that exhibit some of the attributes identified by subcommittee members. What Works for Health is an

evidence registry produced by the University of Wisconsin Population Health Institute that rates the effectiveness of interventions to improve health and other outcomes on a six-level scale: evidence of ineffectiveness, mixed evidence, insufficient evidence, expert opinion, some evidence and scientifically supported.<sup>90</sup> What Works for Health reviewed three housing affordability programs that align with subcommittee recommendations:

- **Housing Choice Voucher Program (Section 8)**
- **Service-enriched housing**
- **Rapid re-housing**

All three are rated as “some evidence” of effectiveness, the second highest rating of effectiveness assigned to programs. Figure 4.13 provides a brief description of the interventions and illustrates connections between the policies or programs and their expected beneficial outcomes, as well as other potential beneficial outcomes.

## Connections between expected beneficial outcomes and infant mortality

This section describes how the expected beneficial outcomes of the housing affordability programs reviewed in figure 4.13 are relevant to the leading causes of infant mortality.

### Increased housing stability

- There is limited research on the connections between housing instability and birth outcomes. However, one study of pregnant women aged 14-21 conducted in New York City found that housing instability (as defined by moving two or more times in the past year) is a predictor of lower birth weight.<sup>91</sup>
- Housing instability is associated with factors that are related to poor birth outcomes, including frequent mental distress<sup>92</sup>, depression<sup>93</sup>, fair or poor overall health and delayed medical care.<sup>94</sup>
- Interventions to increase housing stability among the priority population could reduce poor mental health among mothers and children.<sup>95</sup>

### Reduced homelessness

- Homelessness is the most severe and visible form of housing instability.
- Homelessness is associated with several leading causes of infant mortality, including low birth weight<sup>96</sup> and preterm birth.<sup>97</sup>



Figure 4.12. Logic model for a state-funded rental assistance program targeted to reduce infant mortality

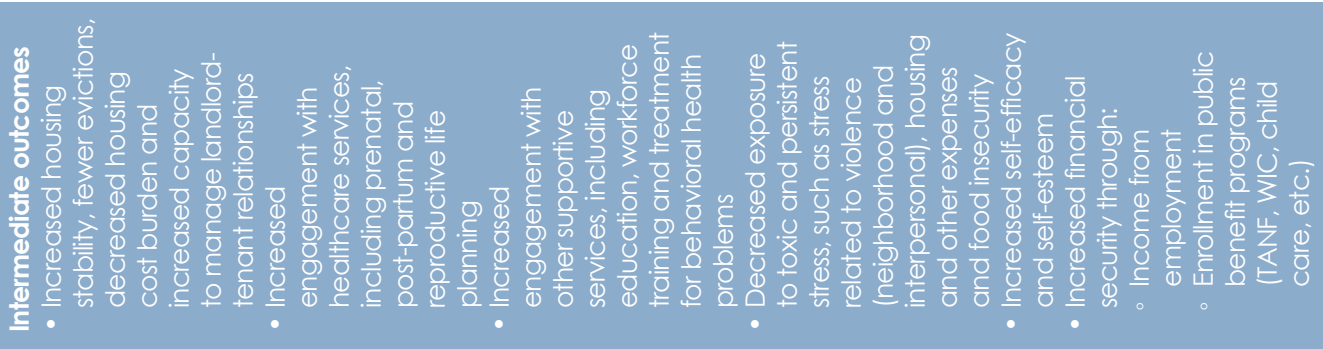
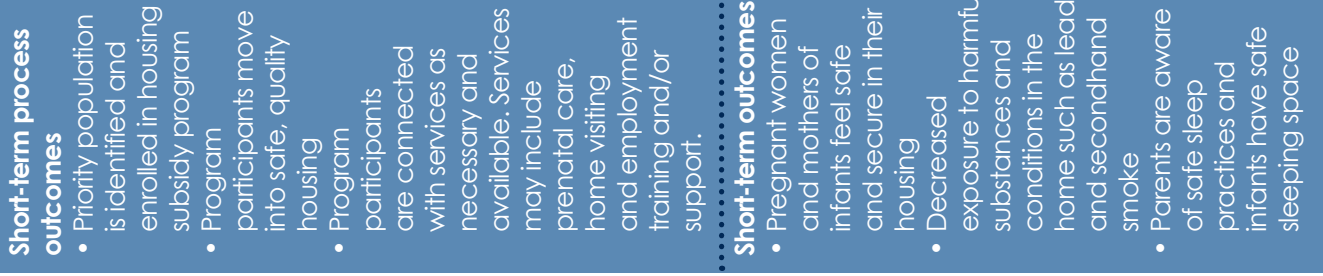




Figure 4.13. Housing affordability programs evidence summary

Program as listed in What Works for Health evidence registry

**Housing Choice Voucher Program (Section 8)**

- Federally-funded (U.S. Department of Housing and Urban Development), locally-administered (public housing authorities) rental assistance program
- Provides a voucher to eligible households:
  - 50 percent area median income (AMI) or lower
  - 75 percent of vouchers must go to people with income below 30 percent AMI
- Recipients may use vouchers to rent any privately-owned apartment that:
  - Is owned by a landlord that participates in the Section 8 program
  - Meets certain quality standards
  - Is priced at or near fair market rent

**Rapid re-housing**

- Provides support services and time-limited rental assistance to people experiencing homelessness, often families and/or priority populations such as military veterans
- Support services may include assistance with locating housing, landlord negotiations and other housing stabilization assistance

**Service-enriched housing**

- Housing with supportive services that are co-located or provided through a referral partnership for residents
- May be funded and operated by private, nonprofit and/or government agencies
- One model of service-enriched housing is permanent supportive housing

**Expected beneficial outcomes** rated as “some evidence of effectiveness” by What Works for Health

- Increased neighborhood choice
- Increased neighborhood socio-economic diversity
- Reduced exposure to crime
- Improved access to social services
- Reduced homelessness
- Increased housing stability
- Reduced hospital utilization

**Other potential beneficial outcomes**, evidence not rated by What Works for Health

- Reduced homelessness
- Reduced poverty
- Improved housing stability
- Increased food security
- Improved health outcomes
- Improved mental health
- Increased income





- The system of services available to families experiencing homelessness has created opportunities to measure the impact of rental assistance interventions on health outcomes.
  - The Family Options Study<sup>98</sup> interim evaluation found statistically significant improvements in rates of psychological distress among permanent subsidy recipients.

### **Increased neighborhood choice**

- Factors that limit neighborhood choice, such as residential segregation<sup>99</sup> and racial discrimination<sup>100</sup>, increase risk for poor birth outcomes and infant mortality.
- The Moving to Opportunity final impacts evaluation<sup>101</sup> found that, compared to residents of public housing, Section 8 voucher recipients lived in neighborhoods with lower poverty and higher-quality homes, felt safer in their neighborhoods, were slightly less racially segregated and developed social connections with more affluent people.
- Three studies<sup>102</sup> that used data from the Effects of Housing Vouchers on Welfare Families study found a limited long-term impact on neighborhood quality for voucher recipients. The studies also identified improvements in other metrics associated with poor birth outcomes, including homelessness and crowding.<sup>103</sup>

### **Increased neighborhood socio-economic diversity**

- Research indicates that birth outcomes are worse in neighborhoods where residents have lower socio-economic status.<sup>104</sup>
- Research on income inequality — an indicator of socio-economic diversity — has found states with higher levels of income inequality also have worse birth outcomes.<sup>105</sup>

### **Improved access to social services**

- Research shows that receipt of assistance from the food stamp program<sup>106</sup> and other food assistance programs such as the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) is associated with improved birth outcomes.
- Experimental studies of rental assistance programs find increased receipt of Temporary Assistance for Needy Families (TANF) and food stamp programs:
  - The Effects of Housing Vouchers on Welfare Families study found that voucher recipients

saw an increase in their total combined TANF and food stamps receipts compared to the control group.<sup>108</sup>

- The Moving to Opportunity study found somewhat higher food stamp use for voucher recipients with location restrictions and less food insufficiency for all voucher recipients.<sup>109</sup>

### **Reduced exposure to crime**

- Exposure to crime is a source of toxic and persistent stress and, in some cases, a direct cause of infant mortality (homicide). Recent research from Ohio found that people living in areas with high homicide rates are at greater risk of infant mortality.<sup>110</sup>
- Research has identified connections between intimate partner violence and adverse birth outcomes.<sup>111</sup> One study found that women who were threatened with harm, but not physically abused during pregnancy, were significantly more likely to deliver low birth weight babies.<sup>112</sup> The connection was explained in part by risky health behaviors that are also associated with emotional and verbal abuse, including smoking, alcohol and drug use.<sup>113</sup> Being threatened during pregnancy is also associated with increased stress, anxiety and depression.<sup>114</sup>
- Rental subsidy recipients that participated in the Family Options Study reported fewer experiences of intimate partner violence in the past six months, although the results were only statistically significant for permanent subsidy recipients.<sup>115</sup>
- Qualitative information collected during the Effects of Housing Vouchers on Welfare Families study suggests that the vouchers enabled some participants to live separately from abusive partners.<sup>116</sup>



## Conclusion

One housing assistance program in the U.S. is using housing assistance as a strategy to reduce infant mortality and conducting research on the effectiveness of the intervention; OHFA will fund the second beginning in 2018. Conclusive research about the direct impact of using rental assistance to reduce infant mortality is not available, but there is a significant body of research about the impacts of rental assistance programs on a variety of health, healthcare and social determinant of health outcomes. This

research suggests that rental assistance programs produce outcomes — such as increased housing stability, improved neighborhood conditions and decreased exposure to crime — that are associated with the leading causes of infant mortality. Therefore, a rental assistance program based on the evidence-based programs discussed in this section and tailored to address the needs of women at the greatest risk of infant mortality could potentially improve birth outcomes among program participants.

## Experimental studies about rental assistance programs

### The Family Options Study

The Family Options Study<sup>117</sup> used an experimental research design to assess the effectiveness of four types of rental assistance interventions for families experiencing homelessness: permanent rental subsidy, rapid re-housing with a temporary subsidy, project-based transitional housing with a temporary subsidy and usual emergency shelter care with no subsidy.

### Moving to Opportunity for Fair Housing Demonstration Program

The Moving to Opportunity for Fair Housing Demonstration Program<sup>118</sup> (MTO) evaluated the impact of providing a voucher with location restrictions to rental subsidy-eligible families. The location restrictions were imposed to study the impact of moving to neighborhoods with lower poverty rates on several outcomes, including physical and mental health, economic self-sufficiency, behaviors and educational attainment. The study used an experimental design to determine if such a subsidy would produce better outcomes when compared to public housing and typical Section 8 voucher programs.

### Effects of Housing Vouchers on Welfare Families

This study was conducted to evaluate the Welfare to Work Voucher program, a federally-funded program that gave 50,000 families tenant-based vouchers to help move from welfare to work. The Welfare to Work Voucher program began in 1999 and was created to help families comply with requirements of welfare reform, including time limits on cash benefits and work requirements. The six-site experimental design study evaluated participants' progress on several metrics including housing mobility, neighborhood characteristics, household composition, employment, education, receipt of public assistance, hardships and child wellbeing.



## Notes

- Adapted from *Links between Housing and Health*. The Pew Charitable Trusts; Maqbool, Nabihah, Janet Viveiros, and Mindy Ault. "The Impacts of Affordable Housing on Health: A Research Summary." Center for Housing Policy. Washington, DC: 2015.
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