

Crises in Flint and Detroit compound toxic stress, health risks

When babies are born, they have their whole lives ahead of them. But for too many kids, including many in Flint and Detroit, their options in life are limited by the world they're born in to. One of the most devastating concerns with the Flint water crisis and the physical and financial struggles of Detroit Public Schools is that they primarily hurt kids who already face many hurdles.

Toxic stress will be a reality of life for the residents of Flint for the foreseeable future, and when compounded by the impacts of the lead-contaminated water, will have the potential to negatively affect the health status of those in Flint for years to come. Without concerted efforts and a focus on the social determinants of health, the already poor health status of Flint and Genesee County's kids and residents will erode even further.

TOXIC STRESS AND SOCIAL DETERMINANTS OF HEALTH

The Toxic stress is defined as the excessive or prolonged activation of stress response systems in the body and brain. It can adversely impact health, learning and behavior, and is most prevalent in low-income children who are under constant strain.

Toxic stress goes hand-in-hand with the concept of social determinants of health. The League's Kids Count in Michigan Data Book 2011 outlined social determinants of a child's health as "the emotional and physical dimensions of their family lives, the material and human resources in



Source: Smart City Memphis

their neighborhoods, the support and institutional capacities in their communities." The environment and community in which a person lives plays a key role in determining their health as does the clinical care they receive and have access to, and social and economic factor like income, education, and employment level.

LOW-INCOME KIDS, CHILDREN OF COLOR AT GREATEST RISK

Kids of color and children living in poverty are most at risk of toxic stress and poor health because they face challenges in so many aspects of their lives, and they begin before they are even born. Women with low incomes are more likely to experience inadequate nutrition and chronic health conditions, which lead to a higher probability of delivering low-birthweight babies—the leading cause of infant mortality—and can lead to other health and developmental problems.

Persistent health disparities based on income and race and ethnicity continue to exist because of structural barriers that have reduced opportunity for good health and well-being. Not having nutritional foods or enough to eat period, living in unhealthy homes filled with lead, playing in contaminated grass or soil and polluted communities that cause asthma, going to school in deteriorating buildings, or dealing with the stress of unemployed parents and high-crime neighborhoods all harm a child’s well-being.

DISASTERS IN FLINT AND DETROIT LEAVE LASTING IMPACT

These are all stresses a majority of Flint and Detroit kids were already facing before the recent crises in their communities began. And now that they’ve been drinking and bathing in lead-laced water and attending unsafe schools, they are at even greater risk for lifelong health problems.

On nearly all measures of health and well-being, children are rock bottom in Genesee and Wayne counties, which ranked 81st and 82nd out of 82 counties in the [2015 County Healthy Rankings](#). The [Kids Count in Michigan Data Book 2016](#), which analyzes 16 key indicators across economic security, health and safety, family and community, and education, ranked Wayne County 66th and Genesee County 75th out of 82 counties in child well-being. The counties both ranked even worse in child poverty—78th for Genesee and 80th for Wayne. The already stressed situations in Genesee and Wayne counties are even more dramatic in Flint and Detroit. And sadly, these numbers are likely to get worse in Flint as the effects of lead poisoning in the community set in.

Health Outcome	Genesee Co.	Flint	Wayne Co.
High school graduation	70%	58%	74%
Unemployment	9.7%	15%	10.5%
Children in poverty	33%	62%	37%
Population in poverty	21.5%	41.6%	24.1%
Children with single parents	44%		47%
Severe housing problems	19%		23%
Violent crime (reported offenses per 100,000 population)	854	1,716	1,089

Source: County Health Rankings & Roadmaps; United States Census Bureau

A WHOLESALE SOLUTION TO CHILD WELL-BEING

These Children need to be healthy and safe if they are to reach their full potential. Ensuring that children start off on the right path with a healthy birth, early detection of developmental disabilities, access to healthcare, and safe, clean communities to live in are all necessary to enable children to thrive. Lawmakers must first recognize the connection of all these factors, and then work to improve them—in Flint, in Detroit schools and in the state’s other struggling communities.

The policy strategies to help kids in these cities in crisis can improve the overall well-being of all children. These include providing adequate services to support kids’ health, nutrition and education; investing in schools, neighborhoods and communities; and addressing two-generation policies that help kids by helping their parents get a GED, degree or certification and a stable, good-paying job. Specifically, the League recommends increased At-Risk School Aid Funding, eliminating the asset test on food assistance, expanded access to child care through eligibility changes and investment in adult education.

Kids Count Health Outcome	Detroit	Flint
Births to mothers with less than adequate prenatal care	41.9%	37.9%
Birth to mothers with late or no prenatal care	9.3%	6.6%
Births to mothers who are foreign born	10.5%	1.7%
Infant mortality rate (available by race/ethnicity)	13.6 per 1,000 live births	11 per 1,000 live births
Low-birthweight babies	13.3%	13.8%
Children, ages 1-2, tested for lead	48.1% (2014)	46% (2014)
Children, ages 1-2, with EBL	10% (2014); 10.2% (2013)	4.7% (2014); 9.1% (2013)
Children, ages 1-2, with EBL, confirmed by venous	8.1% (2014—first year collecting data “confirmed by venous testing”)	2.3% (2014—first year collecting data “confirmed by venous testing”)
Child and teen death counts (available by race/ethnicity)	51.1 per 100,000 children ages 1-19	
Children, ages 0-14, hospitalized for asthma	38.0 per 10,000 children ages 0-14 (state average rate is 14.2)	

EBL=Elevated Blood Levels, *Unless noted, all data are 3-year averages from 2011-2013. Sources: Kids Count in Michigan Data Book 2016; KIDS COUNT Data Center