

Better Housing for Healthier Children

A Report by the Community Health Roundtable

March 2018



COMMUNITY
HEALTH
ROUNDTABLE

Springfield, Illinois

Executive Summary

Sangamon County delivers exceptional clinical services, ranking 2nd out of 102 Illinois counties based on the 2017 County Health Rankings. However, the county ranked 67th in overall health outcomes in the same survey. The difference in these rankings reflects the fact the majority of overall health outcomes can be attributed to social determinants of health, which include social and economic circumstances, environmental conditions, work environment, and living conditions such as housing.

In response, the Community Health Roundtable was founded in 2015 by a dozen concerned citizens and community leaders. The Roundtable focused on the overall health of children who represent the future of our community and who are especially susceptible to health risks posed to them by their daily living conditions.

After meeting with more than twenty people from fourteen different local organizations, and reviewing available data about our community's health, the Roundtable is issuing this Report to raise awareness of the need for healthy housing, specifically reflected in the high incidence of childhood asthma and lead exposure.

Asthma:

- The incidence of asthma among all Springfield residents is 10%, nearly two percent higher than the national rate.
- In 2017, 1 in 7 District 186 school children were diagnosed with asthma; 37% higher than the national rate of childhood asthma. Springfield children with asthma:
 - Missed twice as many school days per school year than those without asthma, and
 - Incurred \$93 per child/student incremental cost of school days lost.
- Children at or below the federal poverty level are 60% more likely than higher income children to be diagnosed with asthma.
- Household triggers include poor housing conditions, inadequate maintenance and housekeeping, unclean, moist, and moldy conditions, and lack of proper ventilation.

Lead Hazards:

- In 2014 to 2016, over 400 Springfield children tested positive for dangerous levels of lead; and, overall, Sangamon County's rate of elevated blood lead levels is higher than the state average.
- This correlates to the fact that 68% of housing in Springfield was built prior to 1978 compared to the national average of 58%.
- Elevated blood lead levels can severely affect mental and physical development.

Conclusion

Springfield children unnecessarily incur higher rates of asthma and of elevated blood lead levels. Both of these conditions can be mitigated with appropriate home construction, maintenance and repair. Community-wide efforts that focus on the social determinants of health, especially on children's living conditions, have been shown to be achievable and effective; such efforts will be required to create healthy housing throughout our community. Only then can we ensure that all Springfield children grow, play, live and learn in healthy homes, and become healthy, happy, productive adults.

Better Housing for Healthier Children

A Report by the Community Health Roundtable

Introduction

Sangamon County has an exceptional health care system. In 2017, our county's clinical services ranked 2nd out of 102 Illinois counties in the County Health Rankings, a national program in which each county's health characteristics are ranked within its state. Despite our excellent clinical services, the County Health Rankings program found that our overall health outcomes, including premature death rates, low birthweight babies, and physical and mental health status, ranked 67th among the 102 counties. The difference between our great clinical services and our less impressive overall health outcomes clearly illustrates that the "social determinants of health," such as education, social and economic circumstances, environmental conditions, work environment, and living conditions such as housing are the key drivers of how healthy we are. The Community Health Roundtable was founded in 2015 to consider how these social determinants can be identified and addressed to improve the health of people in Springfield and Sangamon County. We focused on children, who should all have the opportunity to grow, play, live and learn, in a community where they are healthy and happy as children, and can become healthy, productive adults.

As a result of its deliberations, the Roundtable found that more Springfield children have asthma and elevated blood lead levels than state or national averages; that these conditions occur when children live in older housing that is challenging to maintain; and that asthma and elevated lead levels have significant health and social consequences in children that can extend throughout their adult lives. We also learned that, when people and communities work together to address these "unhealthy" housing conditions through proper construction, maintenance and repair, they can improve the health of the people who live in them. The Roundtable has concluded that, for our children's health and our community's future, the people of Springfield must take community wide action to ensure that every child, in every one of our neighborhoods, lives in healthy housing.

The Community Health Roundtable

Background

The Community Health Roundtable, originally made up of a dozen concerned citizens and community leaders and now including eight additional participants, was founded in 2015 to consider how the social determinants of health can be addressed to improve the health of people in Springfield and Sangamon County. We focused on the health of children, because they represent the future of the community, they are especially susceptible to health risks and stressors, and they do not control their own living conditions.

The Roundtable conducted monthly in depth discussions, reviewed extensive local health and community data, and met with more than twenty people from fourteen different local organizations who provided information about our community's health. As detailed in this Report, we learned that housing affects children's health in many ways, and that the health of many Springfield children could be improved simply through practical individual and community wide efforts to address the construction, maintenance and repair of the housing they live in. This was especially the case in considering high rates of asthma and elevated blood lead levels in Springfield children, although we recognize that housing also relates to other health risks, such as childhood injuries and poisonings, neighborhood violence, and household fires. However, for this Report, we are focused on asthma and lead as powerful direct indicators of how housing affects the health of our children. The Roundtable is issuing this Report to raise awareness that the health of children is significantly affected by the conditions of the housing in which they live, and to promote further community wide efforts to ensure that all Springfield children live in healthy housing.

Asthma

Background

Asthma is a lung disease that affects the respiratory system resulting in problems with breathing. Currently, the Illinois Department of Public Health (IDPH) estimates that 10% of Illinois children suffer from asthma, compared to 7.8% nationally; about 9% of Illinois adults have asthma. Children from households that are at or below the federal poverty level are 60% more likely than higher income children to be diagnosed with asthma. Over half of asthma cases

are known as “allergic-asthma,” in which a variety of household triggers can exacerbate the disease. Poor housing conditions without adequate housekeeping, repairs or maintenance contribute to those triggers. Mold, pests such as cockroaches or mice, unclean or moist conditions, and inadequate ventilation found in poorly maintained housing all increase exposure to irritants and allergens, which in turn increases asthma morbidity and mortality. Interventions that address these household health hazards can prevent or reduce the frequency of asthma attacks, and lead to fewer emergency department visits, fewer absences from school, and better health among both children and adults. Unhealthy housing not only affects those with a current asthma diagnosis; children who simply live in the vicinity of unhealthy homes are more likely to be diagnosed with asthma. Evidence based asthma treatment, such as implementing a systematic asthma treatment plan, can help to control asthma, but fewer than half of asthma patients in Illinois are provided with such a plan, and both acute and chronic management of many children with asthma is suboptimal. When preventive and treatment measures are not taken to reduce the frequency and severity of asthma, costs add up. In addition to the individual toll that asthma puts on Illinoisans, IDPH estimates that in 2011 over \$383 million was spent on hospitalizations due to asthma complications.

Asthma in Springfield

Asthma is a common health problem among Springfield residents. Just under 10% of Springfield adults and children have asthma, nearly two percent higher than the national rate of 7.8%; in some Springfield neighborhoods, the rate is nearly 14%. Almost all neighborhoods in Springfield have asthma rates at or above the state average, suggesting that asthma is a citywide problem that needs citywide attention. In 2017, there were 1873 District 186 students, or about 14%, who had been diagnosed with asthma, higher than the national rate among children of 8.4%. Springfield school children with asthma miss an average of four days of school per year, compared to an average of two days for those without asthma; and in general, adults with asthma miss five days of work per year due to their condition. According to the CDC, the incremental medical cost of asthma per patient is \$3,300; additionally, the cost of days lost of work or school was \$301 per adult and \$93 for each child/student. In Springfield, this amounts to more than \$6 million per year in excess medical and personal costs for families with children who have asthma.

The facts are clear: asthma is a community wide problem in Springfield that interferes significantly with children's school attendance and performance, costs millions of dollars, and could be significantly addressed by ensuring that all of Springfield's housing is healthy housing. The Roundtable has determined that a community wide approach to tackle unhealthy housing conditions should occur as a first step to reducing the burden of asthma in Springfield.

Lead Hazards

Background

The emergence of the lead-contaminated water crisis in Flint, Michigan sparked a nationwide discussion on the dangers of lead poisoning. In Springfield, District 186 schools have eliminated all sources of even very small amounts of lead in school drinking water. This is an important step to reduce children's lead exposure. However, it is widely accepted among public health authorities that the most important sources of elevated lead levels among children are ingestion of paint chips, and inhalation of lead containing dust, which occur most commonly in homes built prior to 1978, when lead was removed from paint used in homes.

According to the Illinois Department of Public Health and the CDC, there is no safe level of lead in the bloodstream. And, while elevated blood lead levels are not safe for anyone, children are the most at risk. Elevated blood lead levels in children can severely affect mental and physical development, leading to lifelong consequences including intellectual and learning disabilities, growth delay, and behavior problems. Adults who had elevated blood lead levels in childhood suffer lower rates of employment, higher frequency of criminal activity, lower educational attainment, and lower incomes than those who were not exposed to lead. The cost of these physical and cognitive disabilities is \$43 billion per year nationwide. Therefore, it is vitally important to eliminate, or at least reduce, childhood exposure to lead hazards.

Lead in Springfield

The burden of lead poisoning in Illinois remains one of the highest in the nation. In 2014 to 2016, over 400 Springfield children tested higher than nationally accepted blood lead level considered to be dangerous to children. Sangamon County as a whole has a significantly higher rate of elevated lead levels than the state average. This corresponds to the fact that Springfield's

housing stock is relatively old: over two thirds of housing in Springfield was built prior to 1978, compared to the national average of 59%. While some parts of Springfield have even higher rates of pre-1978 housing, much of the city has a significant proportion of housing of pre-1978 vintage. Lead hazards in homes can be identified and mitigated at modest cost. However, while many Springfield property owners voluntarily address lead hazards, required systematic inspection and mitigation of lead hazards does not occur. Community investment in new affordable housing is also a widely supported direct step to lowering childhood lead exposure.

Consistent with our approach to asthma in the community, the Roundtable has concluded that a community wide effort to eliminate lead hazards in older homes throughout Springfield is urgently needed to protect the current and future health of our children and our city.

Conclusions

Springfield children have high rates of asthma and of elevated blood lead levels; both are significantly higher than state or national averages, and both of these conditions are strongly related to housing conditions that, once identified, can be resolved with appropriate home maintenance and repair. Both of these conditions often have serious consequences during childhood that extend into adulthood—they result in social and educational deficiencies, less economic success for affected individuals, and poorer health outcomes for our community as a whole.

The Community Health Roundtable has concluded that community wide efforts are needed to ensure that Springfield children in every neighborhood in our city live in healthy housing. According to the US Department of Housing and Urban Development, healthy housing has eight characteristics: it is dry, clean, pest free, safe, contaminant free, well ventilated, well maintained, and thermally controlled. Property owners, neighborhoods, city leaders, tenants, and all of our citizens must work together so that healthy housing is where all Springfield families live, whether they are owners or renters. Lead hazards and asthma triggers, as well as risks for house fires, injuries and poisonings, and other household deficiencies, can and should be routinely identified and eliminated from all local housing units. By uniting to eliminate their exposure to household health hazards, we can ensure that all Springfield children can grow, play, live, and learn in healthy homes, and become healthy, happy, productive adults.

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The Community Health Roundtable

Mission:

The Roundtable will champion community understanding of the factors underlying good health so that action to improve them becomes expected and habitual.

Our overall goal:

To continuously improve the health of children in our community by enhancing the physical environment in which they live.

Our Current Project

The Community Health Roundtable seeks to protect Springfield children from unhealthy living conditions that lead to serious health problems like lead poisoning and asthma.

Roundtable Members and Participants

JIM BIRGE	Manager, Sangamon County Farm Bureau
SHELIA BOOZER	Director of Teaching and Learning, Springfield Schools District 186
CINDY DENBY	President, King's Daughters; CEO, Big Brothers Big Sisters
CHRIS HEMBROUGH	President and CEO, Greater Springfield Chamber of Commerce
JOHN KELKER	President and Chief Professional Officer, United Way of Central Illinois
POLLY POSKIN	President, Harvard Park Neighborhood Association
DAVID RACINE	Executive Director, Center for State Policy and Leadership, UIS
DON ROSS	President, Frontiers International
GAIL SIMPSON	Former Alderwoman, Springfield City Council
DAVE STEWARD	Professor, Internal Medicine, SIU School of Medicine
JOHN STREMSTERFER	President and CEO, Community Foundation of the Land of Lincoln
PAULA GRAMLEY	Community Benefits Manager, Memorial Health System
LENNY HAMENDE	Sangamon County Community Resources, Weatherization Program
CAROL KNEEDLER	Chair, Inner City Older Neighborhoods
KIM LUZ	Director, Community programs, HSHS Health System
CAROLYN POINTER	Office of Population Science and Policy, SIU School of Medicine
TIM ROWLES	Director, Springfield Project
PAM SPOOR	Sangamon County Community Resources; Local Landlord
ROY WILLIAMS	Faith Coalition for the Common Good
MEGAN WILLIAMS	Outreach Facilitator, HSHS St. John's Hospital