



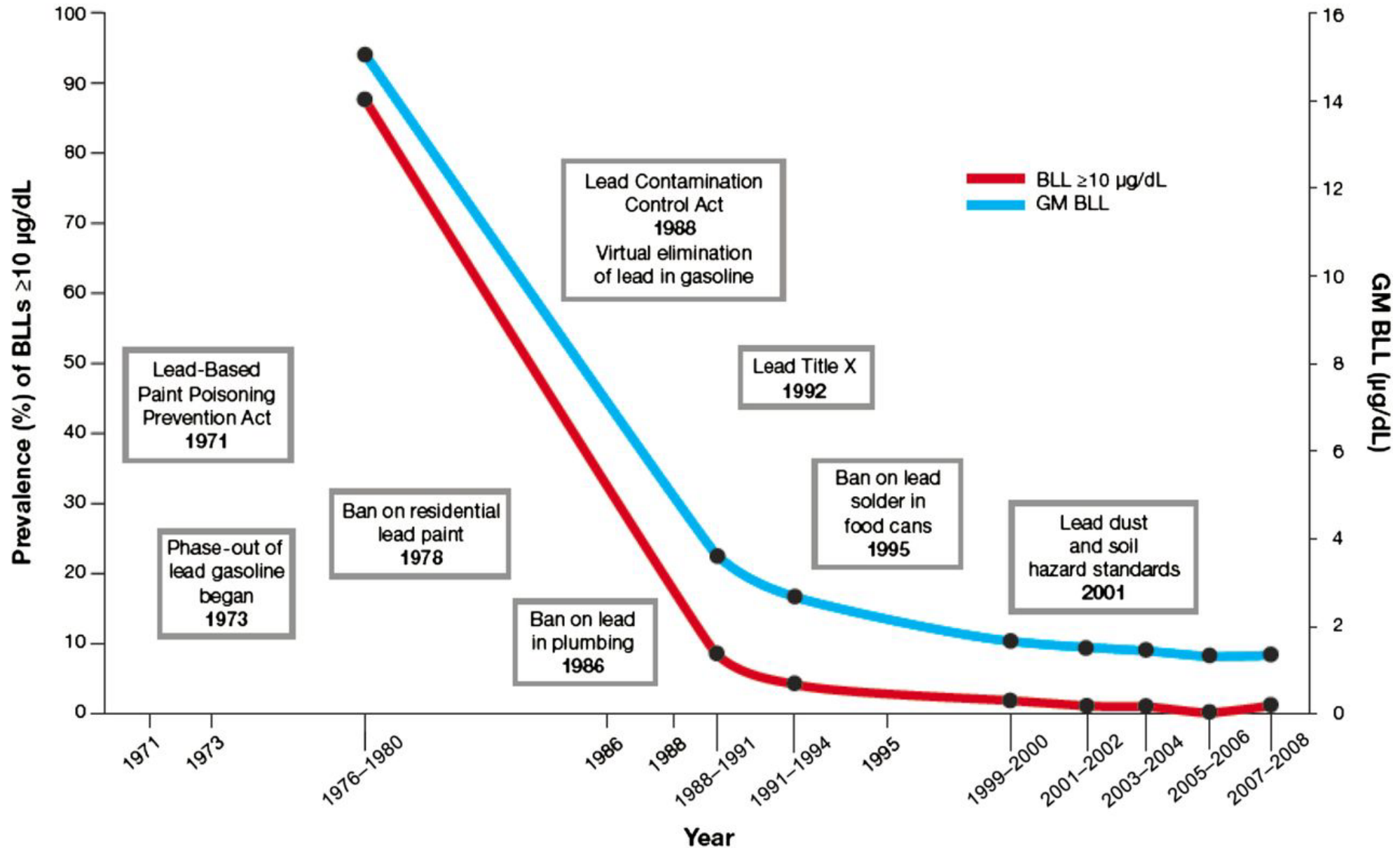
LIVE LEAD FREE QC

Tony Knobbe,
Live Lead Free QC President

MEMBERS



HISTORY OF LEAD

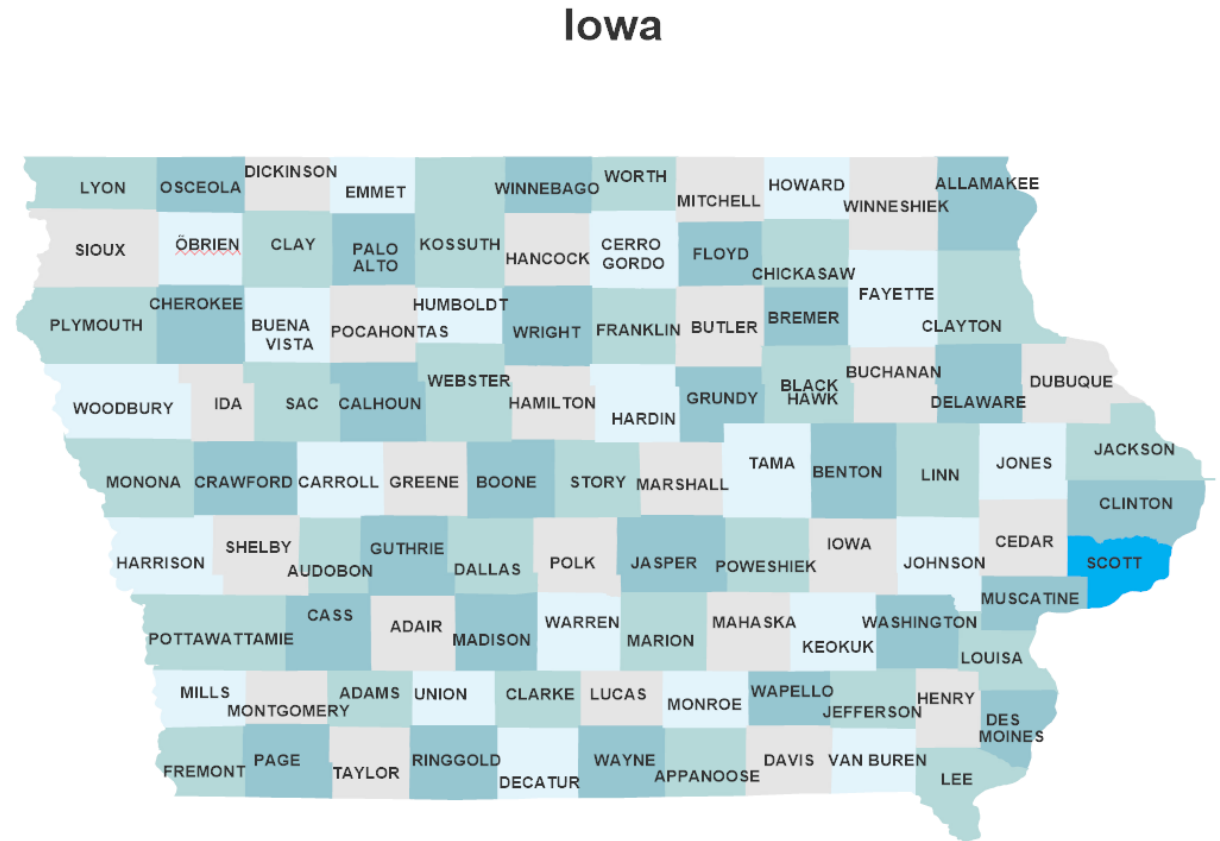


LEAD IN IOWA

- 3rd in the Nation for Percent of Houses pre-1940s
- 22.3% are pre-1950s homes

Scott County:

- Scott County is at 30%
- Census Tract 106-112 is at 77%
- Common for children to have blood lead level (BLL) poisoning
- 50 children (moving average) have BLL above 5 micrograms per deciliter of blood



KNOWN RISK FACTORS

- **Housing age (pre-1955 homes highest risk)**
- **Socio-economic status (lower median family incomes & single-parent households at highest risk)**
- **Ownership status (renter-occupied at highest risk)**
- **Race/ethnicity (African American neighborhoods at highest risk)**
- **Rural/urban status (depends on location)**
- **Nutritional status (low calcium diets at higher risk)**

High maintenance/renovation/remodel costs = lead paint found in older, lower income rental housing in poor condition



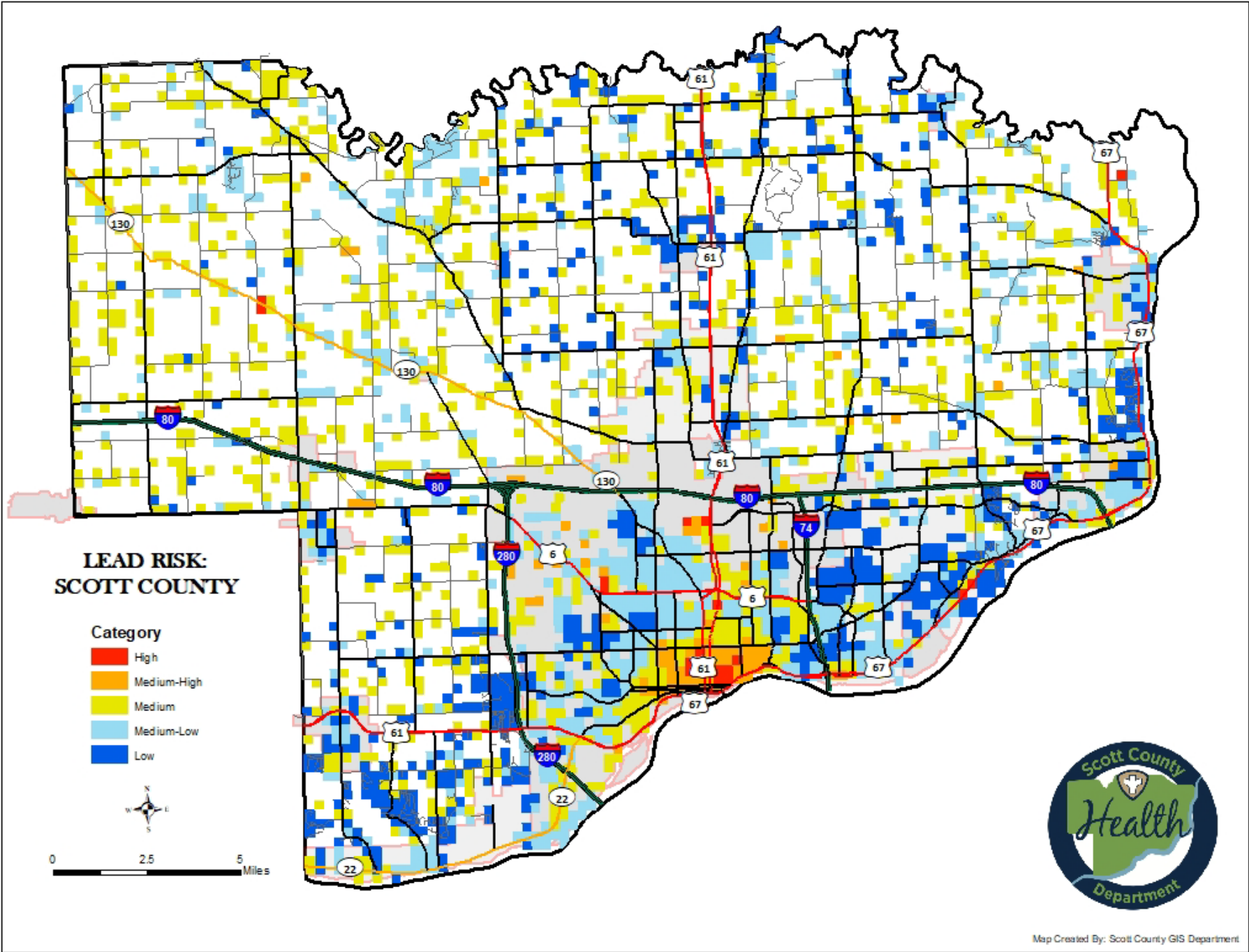
14% OF PRE-1979 HOUSING STOCK POISONED 57% OF CHILDREN (840 CHILDREN) IN SCOTT COUNTY

Priority Zone	Risk Category	Number of Parcels	Percent of Parcels with Elevated Blood Lead Levels	Number Elevated Blood Lead Levels	Home Age
1	High	1955	21	410	1915
2	Medium-high	3843	11	430	1899
3	Medium	10545	3	364	1938
4	Medium-low	13786	1	167	1960
5	Low	11192	1	88	1964

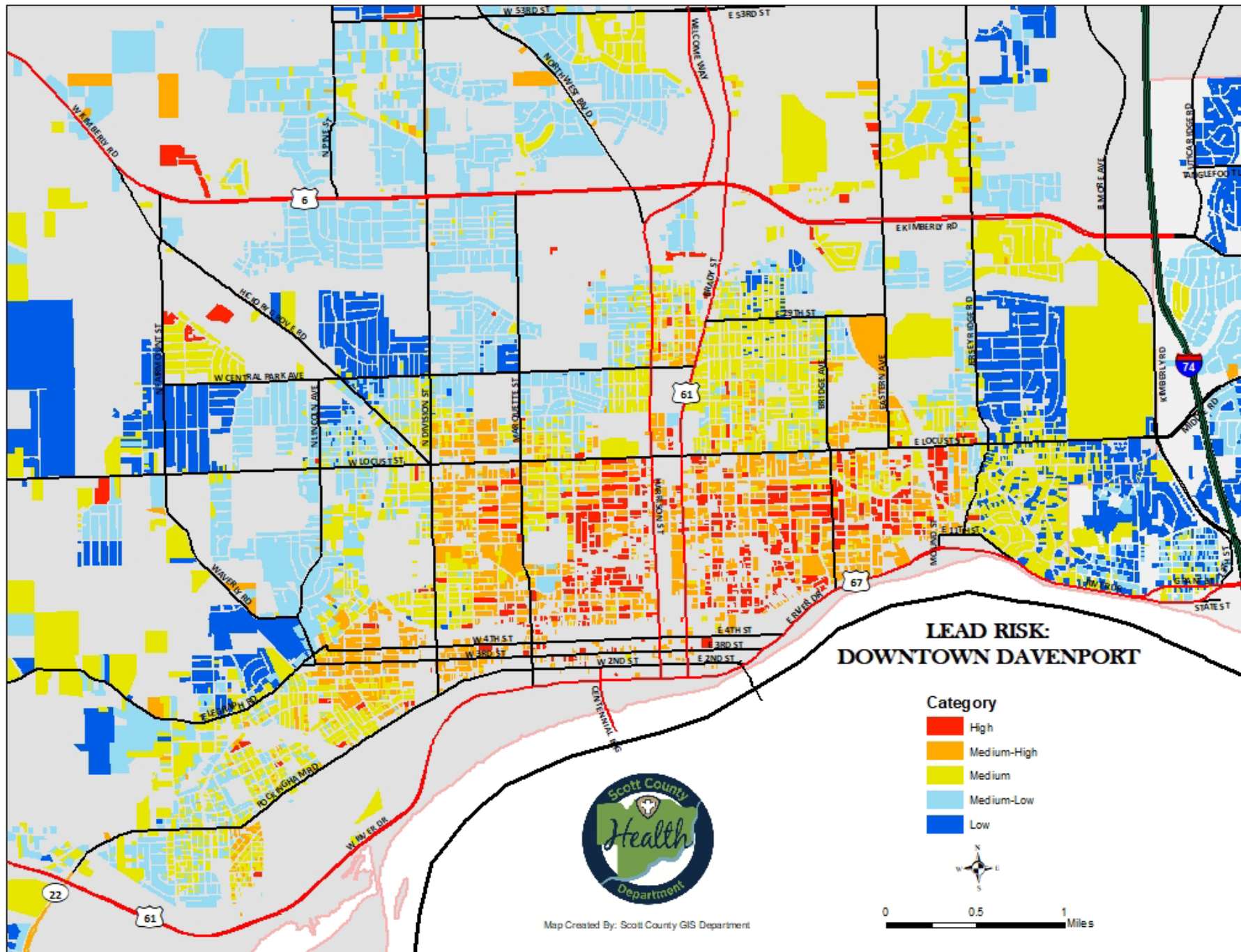
Model validated using addresses where children poisoned since 2000 under data-sharing agreement with Iowa Department of Public Health (Augustana College Sustainable Working Landscapes Initiative)



Based on study from 2018.



Based on study from 2018.



KEY FACTS



LEAD BASED PAINT

- Lead is a cumulative toxicant that affects multiple body systems and is particularly harmful to young children.
- Lead in the body is distributed to the brain, liver, kidney and bones. It is stored in the teeth and bones, where it accumulates over time.
- Human exposure is usually assessed through the measurement of lead in blood.
- Lead in bone is released into blood during pregnancy and becomes a source of exposure to the developing fetus.
- **There is no known level of lead exposure that is considered safe.**
- **Lead exposure is preventable.**



SOURCES OF ENVIRONMENTAL CONTAMINATION

Inhalation

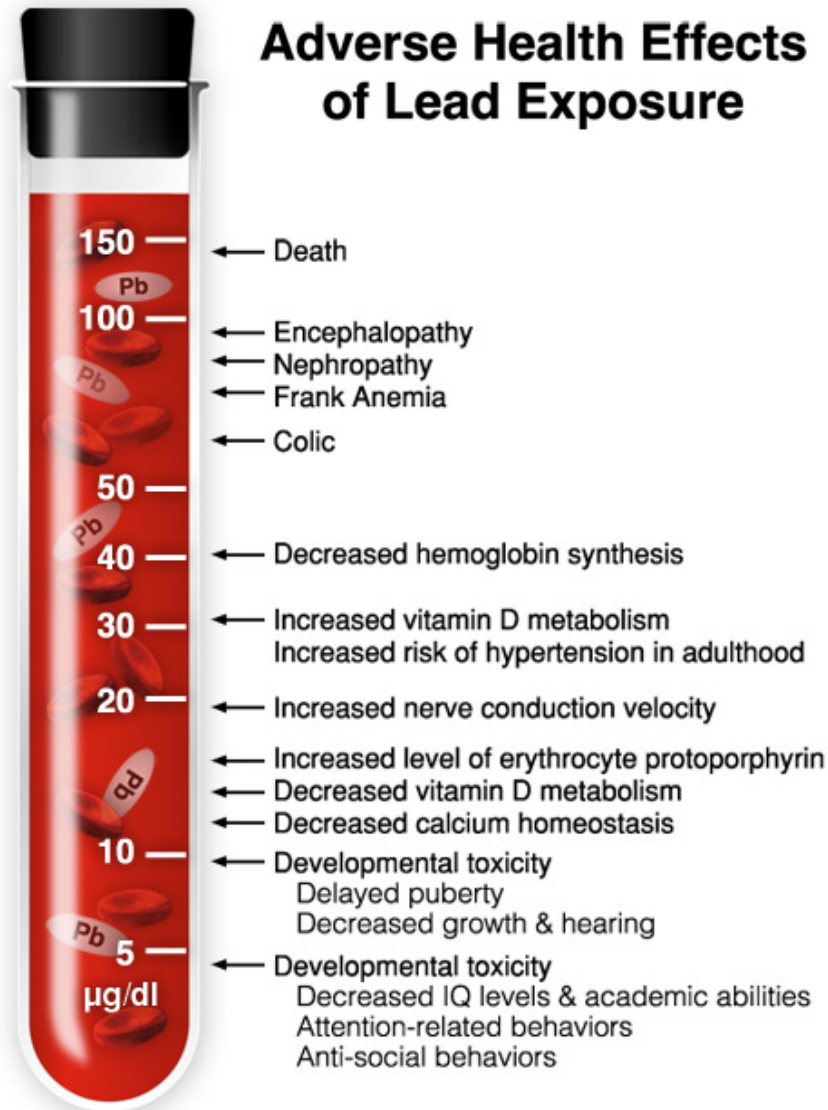
- Mining
- Smelting
- Manufacturing
- Recycling
- Leaded paint
- Leaded gasoline
- Aviation fuel

Ingestion

- Lead dust
- Water (leaded pipes)
- Food (lead-glazed, lead-soldered containers)



HEALTH EFFECTS ON CHILDREN



- **There is no known safe blood lead concentration.**
- As lead exposure increases, the range and severity of symptoms and effects also increases.
- 5 µg/dL may be associated with decreased intelligence in children, behavioral difficulties, and learning problems



HEALTH EFFECTS ON CHILDREN

How **lead** effects childrens' health

Brain
Any exposure is linked to lowered **IQ, ADHD, hearing loss, and damaged nerves**. Acute exposures can cause **convulsions, loss of body movement, coma, stupor, hyperirritability, & death**.

Heart
Studies suggest that adults who endured lead poisoning as children had significantly higher risks of **high blood pressure 50 years later**.

Blood
Lead inhibits the body's ability to make hemoglobin, which can lead to anemia. This reduces oxygen flow to organs, causing **fatigue, lightheadedness, rapid heartbeat, dizziness, & shortness of breath**.

Hormones
Lead disrupts levels of vitamin D, which can **impair cell growth, maturation, and tooth and bone development**.

Stomach
Severe lead exposure can create intense **abdominal pain and cramping**.

Kidneys
Chronic exposures can cause chronic inflammation, which can lead to **kidney failure, bloody urine, fever, nausea, vomiting, drowsiness, coma, weight gain, confusion, rash, and urinary changes**.

Reproductive System
A moderate exposure can not only **lower sperm count**, but also **damage them**. Chronic exposures can diminish the concentration, total count, and motility of sperm, though it's unclear how long these effects last after the exposure ends.

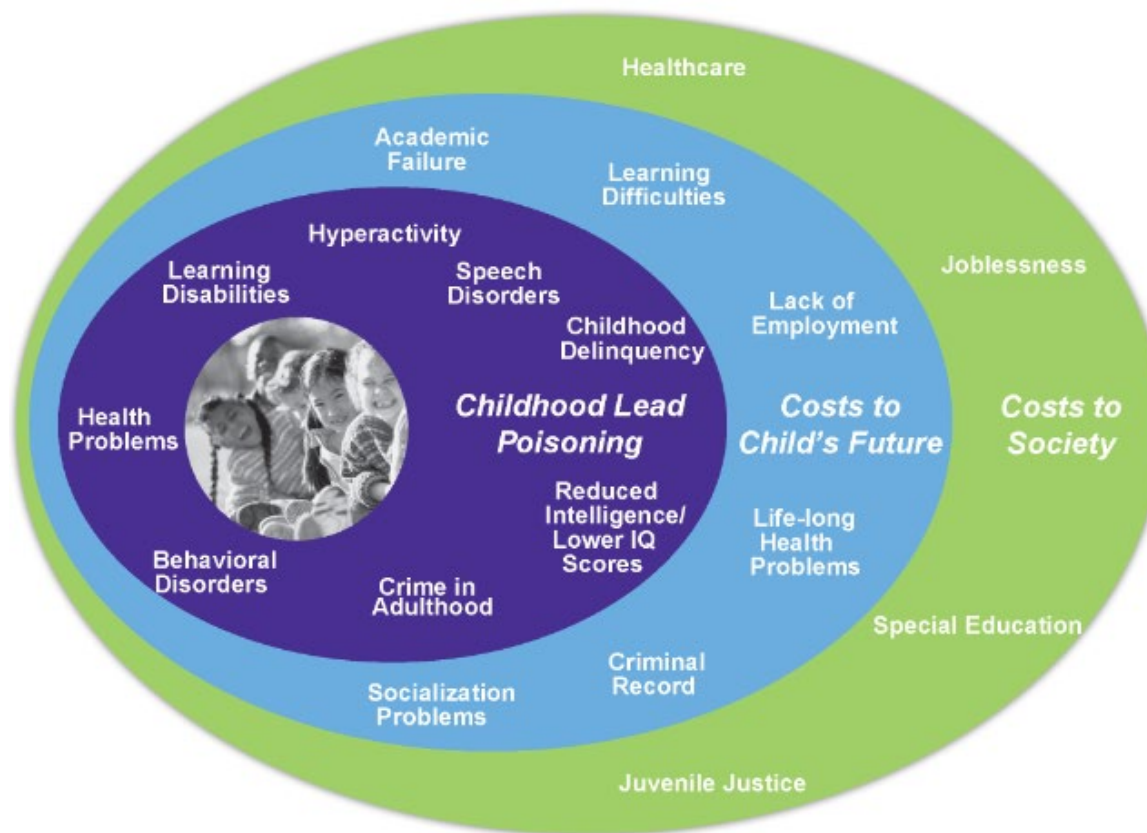
Bones
Lead may impair development and the health of bones, which can **slow growth in children**.

SOURCES: Centers for Disease Control, World Health Organization

TECH INSIDER



SOCIETAL EFFECTS OF LEAD POISONING



BURDEN OF DISEASE FROM LEAD EXPOSURE

- In 2016 – 540,000 deaths worldwide
- Low and middle income countries
- 63.8% of the global burden of developmental intellectual disability
- 3% of ischaemic heart disease
- 3.1% of stroke



WE KNOW THERE IS A PROBLEM. NOW WHAT?



LIVE LEAD FREE QC

Goal:

Reduce lead poisoning in the Quad Cities (Iowa-Illinois) area.



FUNCTIONS OF LIVE LEAD FREE QC

- Conducting research
- Seeking funds for the mitigation or abatement of lead
- Community collaboration
- Identifying and selecting homes for remediation or abatement
- Providing funds for the remediation or abatement of lead
- Sharing non-confidential information with health care providers
- Education



WHAT CAN I DO?

PRO-LAB

LEAD IN PAINT

PRUEBA DE DETECCIÓN DE PLOMO EN PINTURA

TEST KIT

PRO-LAB

Pb LEAD RESULTS

Am I at Risk?
Although the use of lead-based paint (LBP) was banned in 1978, over 57 million homes still contain some lead according to The Department of Housing and Urban Development (HUD). Lead based paint can be on windows, doors, wood trim, walls, cabinets, porches, stairs, railings, fire escapes, old furniture (cribs), and even children's toys. As lead-based paint cracks and peels, paint chips are loosened and ingested by children.

- **Safe and Easy to Use**
Seguro y fácil de usar
- **Detects Poisonous Lead in Paint and Dust** / Detecta plomo venenoso en pintura y polvo
- **Fast Certified Lab Results**
Resultados rápidos certificados de laboratorio

PROTECT YOUR FAMILY!

DOWNLOAD THE PROLAB TEST KITS APP

Download on the App Store | ANDROID APP ON Google play

OPTIONAL LAB ANALYSIS \$40
Análisis de laboratorio opcional \$40
EXPEDITED SERVICE AVAILABLE
Servicio acelerado disponible

FUNDING FOR LIVE LEAD FREE QC

Secured:

11 Properties; \$182,725;

- Scott County: \$175,000 (FY19 and FY20)
- Scott County Regional Authority: \$50,000 (2020)

Partnership:

- City of Davenport Programs \$554,079
 - Programs, Owner-Occupied Rehab, Urban Homestead, Dream Projects
 - 50 projects
 - 1 Joint project; \$25,000 Davenport, \$48,000 LLFQC (Above)
- Moline and Rock Island Programs and leadership

Seeking funding from:

- Regional Development Authority
- Scott County Regional Authority
- Churches/Civic Clubs/Non-Profits
- Homeowner Contributions
- Donations

Each home costs
between \$10-20,000
on average to
remediate.



HOW CAN YOU GET INVOLVED?

- Educate clients/public about dangers of lead and how Live Lead Free QC can help
- Financial contributions

CONTACT US:

<https://www.liveleadfreeqc.org/>

info@liveleadfreeqc.org

