Healthy Homes

Community Health Advisory Committee September 3, 2014



Overview

- The connection between housing and health
 - Terms
 - Data
 - National and State trends and programs
- Saint Paul Ramsey County Public Health
 - Where we've been
 - Where we are going
- Discussion

"Healthy Home"

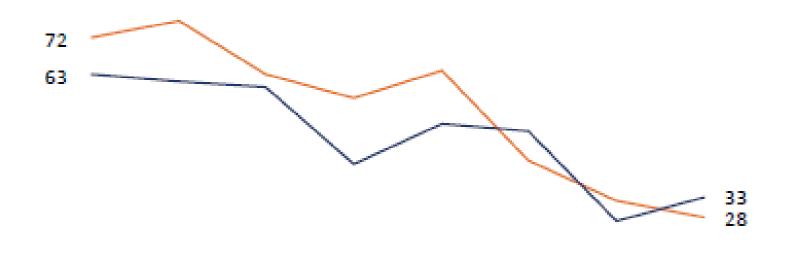
- A healthy home is a home designed, constructed and maintained in a manner that supports the health of residents
 - It is:
 - Dry
 - Clean
 - Well ventilated
 - Pest-fee
 - Contaminant free
 - Safe
 - Maintained

The Healthy Homes Picture for Ramsey County

- Lead
- Asthma
- Radon
- Chemical poisonings
- Unintentional falls
- Carbon monoxide poisonings

Number of children with elevated BLLs reported to Saint Paul-Ramsey County Public Health

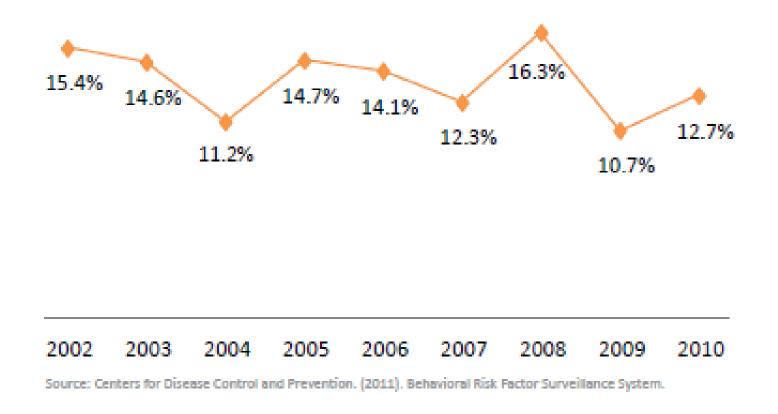
— 10-14 μg/dL ——≥15 μg/dL



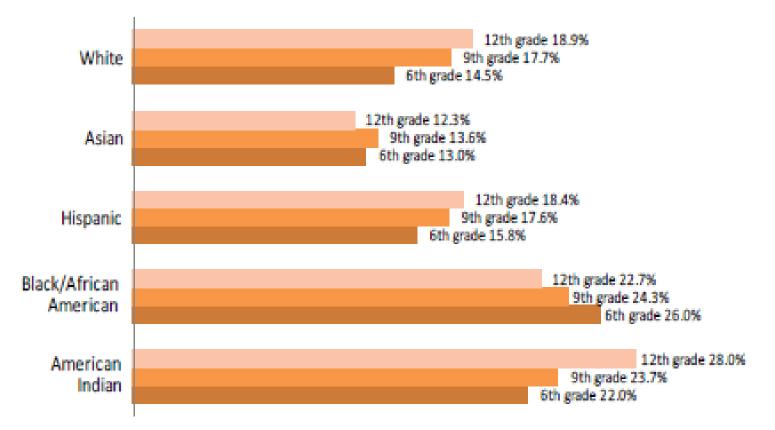
2003 2004 2005 2006 2007 2008 2009 2010

Source: Saint Paul-Ramsey County Public Health, Environmental Health and Family Health Sections.

Percentage of adults with asthma, Ramsey County

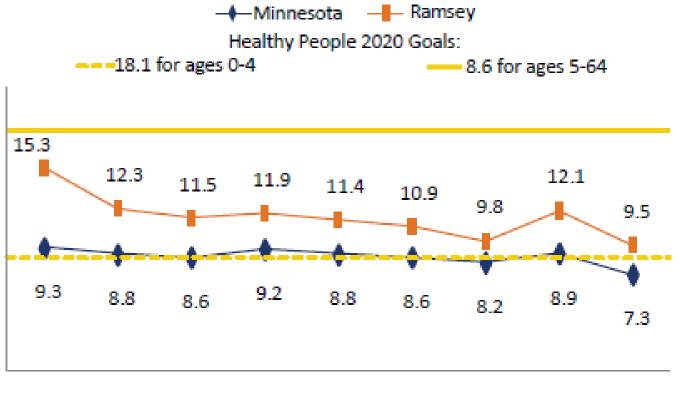


Percentage of youth with asthma, Ramsey County, 2010



Source: Minnesota Department of Health, Center for Health Statistics. (2010). Minnesota Student Survey. Ramsey County [Data set]

Asthma hospitalization rates (per 10,000 population)

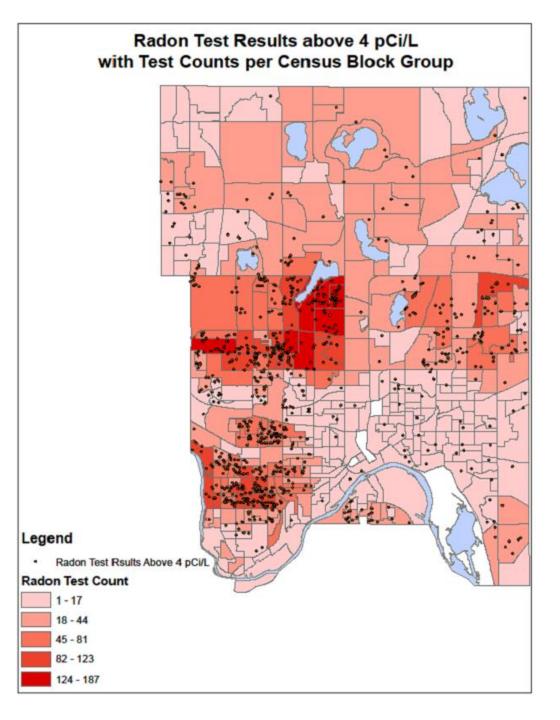


2000 2001 2002 2003 2004 2005 2006 2007 2008-2010*

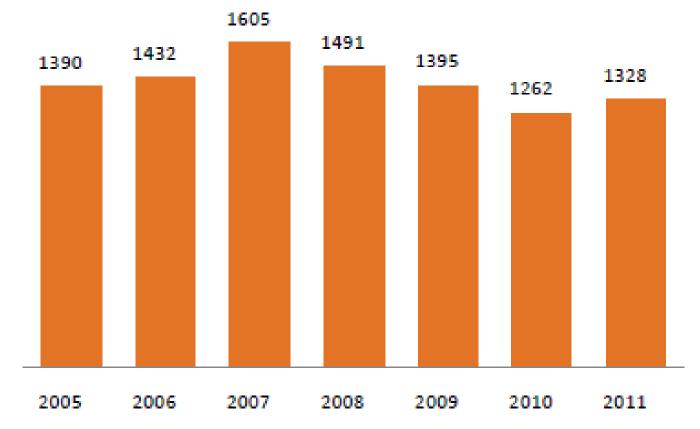
*Data for 2008-2010 only available as aggregate 3 years.

Source: Minnesota Department of Health. (2008-2010). Minnesota Public Health Data Access.

Radon Testing by Census Block Group in Ramsey County

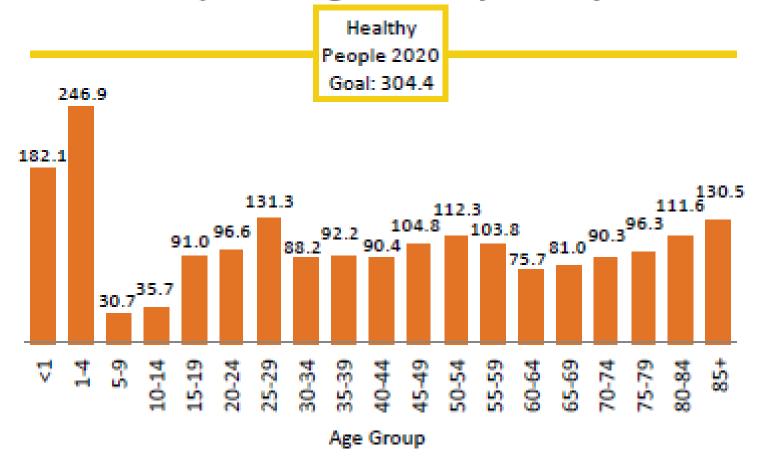


Number of household chemical calls to Poison Control, Ramsey County

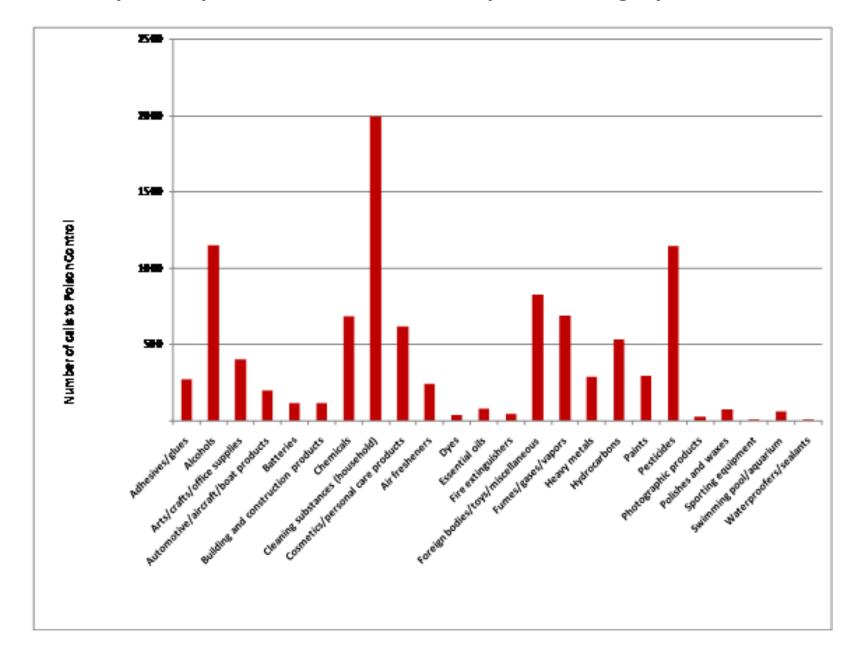


Source: Hennepin County Medical Center. (2012). Hennepin Regional Poison Center/Minnesota Poison Control System. Retrieved from: http://www.hcmc.org/a_z/hpoisoncontrol.htm

Rate (per 100,000 population) of non-fatal unintentional poisonings, Ramsey County, 2006-2011

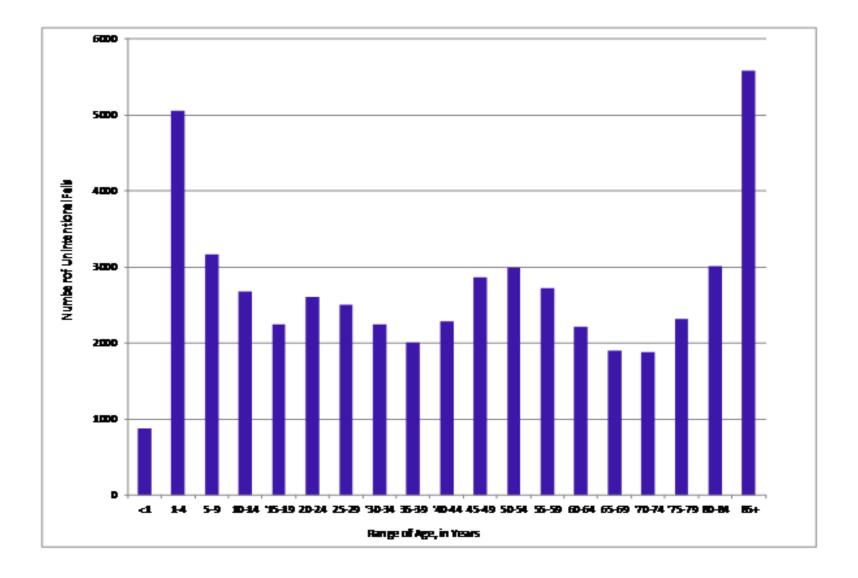


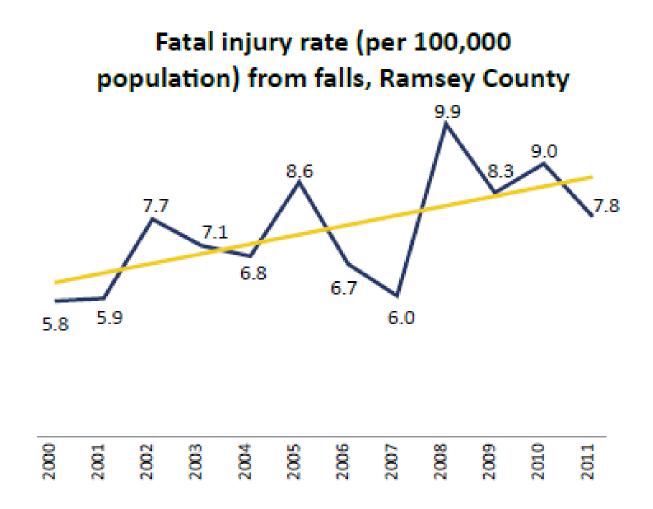
Source: Minnesota Department of Health, Minnesota Injury Data Access System. (2012). Analysis of Hospital Discharge Data. Retrieved from: http://www.health.state.mn.us/injury/midas



Ramsey County Calls to Poison Control by HHW Category, 2005–2011

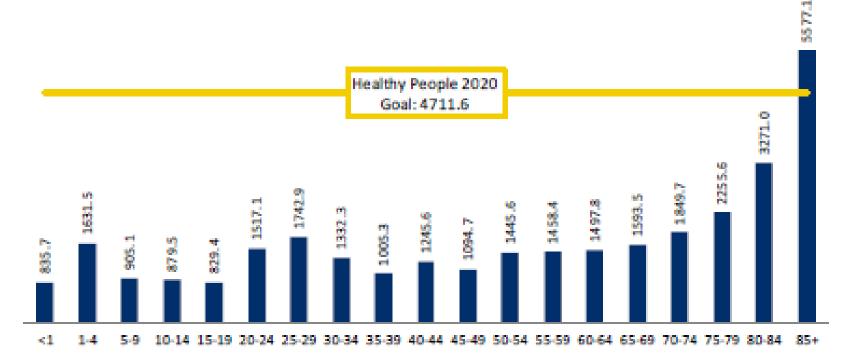
Unintentional Falls, 2007—2011, by age





Source: Minnesota Department of Health, Minnesota Injury Data Access System. (2012). Analysis of Hospital Discharge Data. Retrieved from: http://www.health.state.mn.us/injury/midas

Rate (age-adjusted per 100,000 population) of fall injuries treated in an emergency department, Ramsey County, 2011

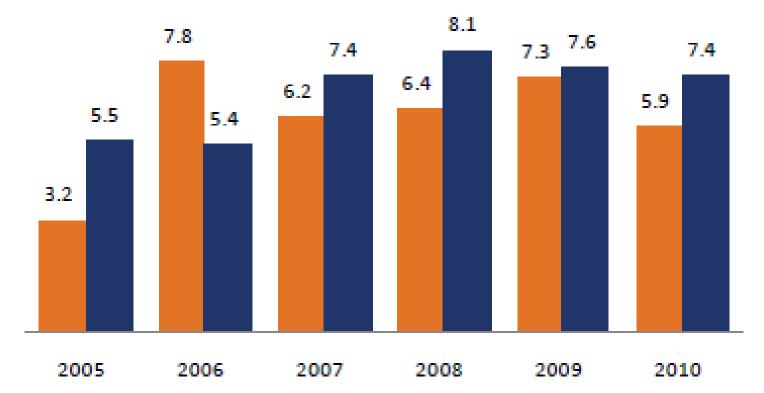


Source: Minnesota Department of Health, Minnesota Injury Data Access System. (2012). Analysis of Hospital Discharge Data. Retrieved from: http://www.health.state.mn.us/injury/midas

Rate (per 100,000 population) of CO poisonings

Ramsey County

Minnesota



Source: Minnesota Department of Health. (2012). Minnesota Public Health Data Access: Carbon Monoxide Poisoning. Retrieved from: https://apps.health.state.mn.us/mndata/co

National and State Trends

- From: Individual health related conditions
- To: Whole house approach
- Federal grants from CDC, EPA and HUD to support and develop a healthy homes approach





Centers for Disease Control and Prevention CDC 24/7: Saving Lives, Protecting People™



Ramsey County

1992: 422 active lead poisoning cases 2013: 33 active lead poisoning cases

– HUD grant #1

- Exhaustive research on only 62 homes
- Identified deteriorated painted window components as being the most dangerous lead risk to children.

– HUD Grant #2

- Demonstrate our window replacement strategy on 231 projects
- Focusing on high risk neighborhoods

– HUD Grant #3

- Implement a "Housing-based" primary prevention program.
- Completed lead hazard control on over 1000 homes occupied by young children at risk to lead poisoning



Program Transformation (2009)

- Significant program modifications include:
 - Evaluation of program procedures and revision
 - Partnership with Child and Teen Check-up program
 - Strengthening partnership with Environmental Health Lead Hazard team
 - Implementing an Electronic Medical Record system
 - Model continues

Asthma

- Previous funding primarily for treatment of symptoms and health care
- Nationally, agencies were seeing the success of lead hazard reduction using housing agencies
- Following the lead example, grant funds were redirected from health agencies to housing agencies

Asthma Grant Funding (2 rounds)

 Define the environmental triggers of asthma which are found in the home

• Determine a strategy that can minimize these environmental triggers

Intervention Product List

- Vacuum cleaner with HEPA filter
- Air cleaner for child's bedroom
- Bed and pillow encasements
- Integrated pest management kit
- Quality furnace filter
- Smoke detector, CO detector
- Household fire extinguisher



Results

- Over 500 homes (700+ children) assessed and completed in Ramsey and Hennepin Counties
- Major statistical improvement in quality of life of affected children
 - Large drop in school and work days missed
 - Large drop in emergency room visits
 - Families, self report, health is much improved

Elevated Blood Lead Levels and Home Values

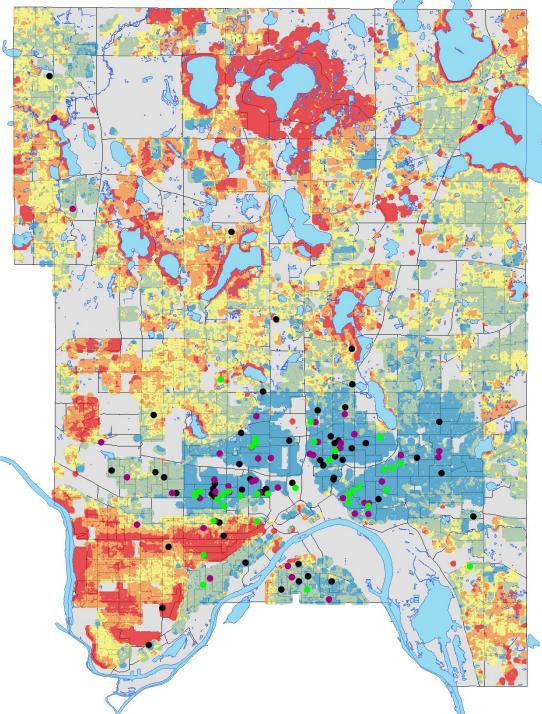
Legend

- 2014 Interventions
- 2013 Interventions
- 2012 Interventions

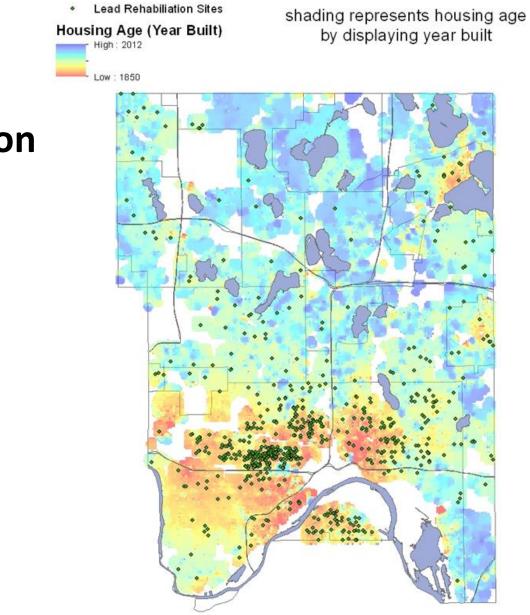
Lakes and Rivers

Estimated Market Value

\$100.00 - \$119,460.76
\$119,460.77 - \$167,205.07
\$167,205.08 - \$214,949.38
\$214,949.39 - \$310,437.99
\$310,438.00 - \$3,043,799.50



Legend



Lead Rehabilitation Sites

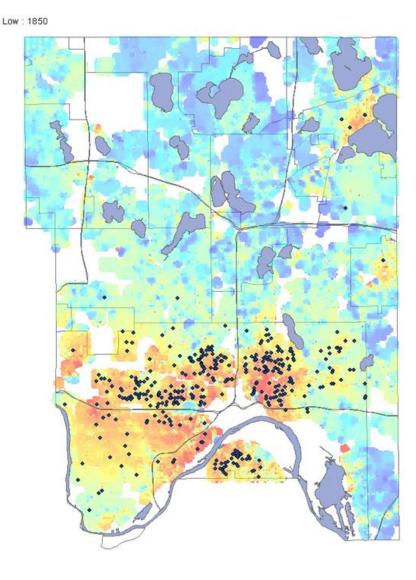
Legend

Window Projects

Housing Age (Year Built) High: 2012

shading represents housing age by displaying year built

Window Replacement Projects



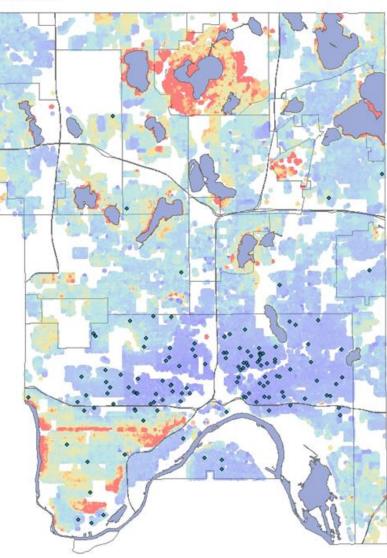
Legend

Healthy Homes Interventions

Estimated Market Value

Highest (above \$3,000,000) Average (\$190,684) Lowest (below \$1,000) shading represents residential property values by displaying the total estimated market value.

Healthy Homes Interventions



Minnesota

- Alliance for Healthy Homes and Communities
- Healthy Homes Strategic Plan, 2012
 - Mission: "Promote, support and provide healthy homes for all Minnesotans"
 - Goals and strategies
 - 2013 Legislature funded future grants

