



# Environmental Public Health Tracking

USING EPHT DATA AND RESOURCES TO MAKE A DIFFERENCE

## Missouri EPHT Links Carbon Monoxide Poisonings to Community and Infrastructure Indicators

---

### What was the problem/situation?

One of the primary goals of the Environmental Public Health Tracking (EPHT) program is to link environmental data with health outcomes. While EPHT has been able to gather important health and environmental data, linking the two has proven to be challenging. As a result, EPHT has struggled to show stakeholders its true value and potential.

### How was Tracking involved?

During the fall of 2012, the Missouri EPHT team compiled previously gathered data on Carbon Monoxide (CO) hospitalizations and Emergency Room (ER) visits along with new community and infrastructure variables. These variables were then used, through regression techniques, to estimate the affect that a community and its structure have on the number of CO poisonings requiring treatment.

The Missouri EPHT program found that median household income, type of heating fuel used, and the percent of households with limited access to vehicles all were associated with treatment for CO poisoning at a statistically significant level. However, the percentage of rural housing and people with limited English skills was not statistically correlated with the number of treatments for CO poisoning. In addition, while there is a seasonality component to the number of CO poisonings, with winter seeing the most and summer the least; the analyses also showed that those poisonings that do occur in the summer tend to be more severe and require higher rates of hospitalization.

### What action was taken to resolve the problem?

By completing these analyses, Missouri EPHT was able to show if and how the community and infrastructure impacts the number of CO hospitalizations and ER visits. The team communicated these findings with data stewards and other programs that are responsible for messaging. The CO program is now able to target specific audiences with newer, focused messaging.



**The National Environmental Public Health Tracking Program**  
*Missouri Environmental Public Health Tracking (EPHT) is a program within the Missouri Department of Health and Senior Services and is funded by the Centers for Disease Control and Prevention. EPHT is part of a larger initiative to establish Environmental Public Health Tracking systems at the national and state levels.*

