

## Welcome to the first issue of CARES Newsletter

Beginning in January 2009, the Communities Actively Researching Exposure Study (CARES) enrolled over 500 participants to study the effects of air quality on children's health and development. The first CARES testing ended in 2014 and in 2017 a new study was launched! The new study recruited CARES teens and their parents to participate in new collection of blood, hair, and toenails, and measurements of motor and brain function.

A BIG Thank You to all those who participated! These newsletters will provide a summary of research study findings and let you know about new research opportunities. If you have suggestions for newsletter stories, please contact Dr. Erin Haynes, at: erin.haynes@uky.edu.

We'd love to hear your suggestions!



# Combined Exposure to Manganese and Lead Impact Child IQ even when Lead is at Very Low Levels

We investigated the effects of exposure to both manganese and lead when East

Liverpool CARES participants were 7-9 years old. We found that children with higher levels of both manganese and lead in their bodies had lower IQ than children who

did not. Surprisingly, the level of lead measured in children's blood was below what is considered a 'level of concern' by the CDC. This indicates that lead exposure—even at very low levels—is dangerous to children especially when they are also exposed to manganese.

No level of lead in the human body is safe. Lead exposure can come from its past use as an anti-knock agent in gasoline, and an additive in paint. Deteriorating lead-based paint is a primary source of lead exposure. For more information

about lead sources and prevention, visit the CDC's lead poisoning prevention page. https://www.cdc.gov/nceh/lead/default.htm.

The CARES research team continues to investigate the impacts of manganese and other exposure on child health and development.

Get access to all of our papers at this link: **bit.ly/cares-findings** or simply point your camera to the QR code at right.



## **Team Member Spotlight**



#### Name:

**Delores Silverthorn** 

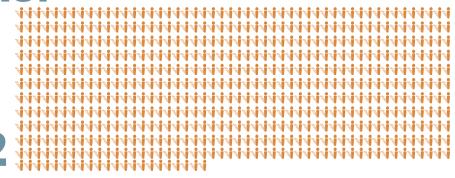
#### Role:

Delores began working as the East Liverpool CARES study coordinator in 2012 after graduating from the Kent State RN program.

#### **Hobbies:**

In her free time, she enjoys gardening, crafts, and spending time with her eight grandchildren.

### **FUN FACT**



teens and parents participated in our most recent study