

# Nitrates: A Growing Threat to Public Health in Illinois

## Nitrate levels are rising in Illinois Public Water Systems

The federal Safe Drinking Water Standard requires public water systems to keep their water below 10 ppm of nitrate to prevent Blue Baby Syndrome.

However, new research is finding increased health problems for people drinking water with only 5 ppm of nitrate, half the drinking water standard.

Even short periods of nitrate exposure at 5 ppm can cause:



**Methemoglobinemia in Babies\***  
causing them to get less oxygen.

Populations with chronic exposure have been found to have:



**Increased Birth Defects\***  
1 in 100 of Limb Deficiencies  
2 in 100 of Spina Bifida  
1 in 100 of Cleft Palate



**Increased Rates of Cancer\***  
2 times of Thyroid Cancer  
1 time of Bladder Cancer  
2 in 100 of Ovarian Cancer

## Illinois Public Water Since 2010

54 communities have exceeded the safe drinking standard.

528 communities have exposures at high nitrate levels

67 communities chronically exposed to high levels of nitrate



Building treatment facilities to remove nitrates from our drinking water costs hundreds of thousands to millions of dollars for Illinois communities. The costs don't stop there. Every year tens to hundreds of thousands of dollars are spent to operate these plants.

## Prevention Costs 1/4 of Removal

\$4/lb Nitrate to prevent through conservation agriculture

(Illinois Natural Area Reduction Strategy)

\$13 /lb Nitrate to remove through water treatment

## Agriculture is Both the Source and the Solution to our Nitrates Problem



Not enough farmers are using these conservation practices to meet our water quality needs while we continue to under fund the local programs and agencies that help them accomplish this.

- Illinois needs to fully fund our Soil and Water Conservation Districts (SWCDs).
- Illinois needs to stop leaving millions of dollars on the table by not participating in federal programs like the Conservation Reserve Enhancement Program (CREP).



As nitrate levels in our water continue to rise, this problem will only get worse. Illinois needs to protect our drinking water today.



\* For more information, visit [www.illinois.gov/health/press-releases/2016/06/01/060116-nitrate](http://www.illinois.gov/health/press-releases/2016/06/01/060116-nitrate) and please write: CH2016