

Medical Director's Report Tompkins County Board of Health November 2012

Snapshots of Healthcare Trends

- Consumption of cigarettes and tobacco: An eleven year study reported by the CDC ending in 2011 showed a decline in cigarette smoking, but an increase in consumption of other tobacco products suggesting a switch of product being used.
- Sexually related high risk behavior among adolescents: New data from the CDC shows a decline in high school students engaging in behaviors putting them at risk for HIV and other STD's, with black youths showing a greater decline than other groups in risk behavior. Still, black youths are at a higher level of risks totally, than youth of other groups.
- Diabetes and pre-diabetes detection: The Healthcare Reform Act has provided for increased access to screening with regard to diabetes.

Oil and Gas Exploration-Hydrofracking

Two Cornell professors in the Department of Veterinary Sciences have published a case study on disease in animals with regard to oil and gas exploration. Their conclusion was that health effects are potentially present for the industry and that further study is warranted.

Case studies help to indicate whether or not there may be a problem and often indicate areas of fruitful study using more controlled observations.

Included in their study cohorts was one farm in which animals exposed to pollution from oil and gas explorations were in one area of the farm while other animals were in a separate geographical area. The disease rates, including reproductive rates and stillborn rates, were quite different for the two groups. Their study is available at:

[www.psehealthyenergy.org/Impacts of Gas Drilling on Human and Animal Health](http://www.psehealthyenergy.org/Impacts_of_Gas_Drilling_on_Human_and_Animal_Health).

See Attachment 01: Bamberger & Oswald

See Attachment 02: Gas Wells Chart

Marcellus Shale Hydrofracking – Pre-fracking Testing of Water

At the last Board of Health meeting, I was asked to pursue whether Tompkins County is to be included in the Project SWIFT (See Attachment 03). I initiated an e-mail to the author of the article Judy Holmes.

A reply was received from Professor Lantz:

The short answer to your email is that we are not collecting water samples in Tompkins County, simply because we have limited funds and therefore have elected to focus on the 5 counties most likely to have hydrofracking permitted sometime in the future. We are analyzing the water samples for a broad range of constituents, including major anions and cations, nutrients, metals, isotopes, etc. We are not testing for organic compounds or radionuclides at this time, although we have held onto the samples we have already collected.

I understand your concerns regarding legal issues and the timing of sampling. Our primary goal is to characterize the "natural" (perhaps better described as pre hydrofracking) range of water quality in bedrock drinking water wells in the 5 counties of the southern tier of NYS. We have established a truly random sample of wells, with the goal of having our sample data set be truly representative of the actual population of water quality metrics in the region. We are trying to capture spatial variability in water quality by collecting samples from 100s of wells in the area. In the future, we hope to capture temporal variability in water quality by collecting samples seasonally or quarterly. The temporal component would help us address the issue you raised – whether the water quality data is representative of the conditions over time, rather than only at the time of sampling.

The outcome of this research will be a publicly available database of water quality for the 5 counties (to be available in the coming month or two online), as well as individual water quality results for participating homeowners. While we have discussed the legal implications of our work and how our data might be used in the future, it is not our explicit intent to develop a database for legal action in the future.

Laura K. Lantz, Associate Professor
Director of Graduate Studies
Earth Sciences, Syracuse University
204 Heroy Geology Lab, Syracuse, NY 13244 1070
(315) 443-1196
lklantz@syr.edu

Drinking and Driving Among High School Students Trends Over 10 Years From 1991-2011 Reported By the CDC

Conclusion: Substantial progress has been made during the past two decades to reduce drinking and driving among teens. In 2011, one in ten students (equal to or over the age of 16 years) reported driving after drinking during the past 30 days. Most of those were binge drinkers. Progress still needs to be made in reducing drinking and driving as motor vehicle crashes are still the leading cause of death among teens between the ages of 16-19.

The data showed that over those 10 years the prevalence of self reported drinking and driving dropped by 54% (from 22% down to 10%). In 2011, 84% of those who drove after drinking were binge drinkers. The prevalence ranged threefold across 41 states that reported. The lowest, 4.6% in Utah, the highest, 14.5% in North Dakota. The higher prevalence's were clustered among upper Midwest states and along the Gulf Coast.

Update Influenza Activity from May until End of September 2012

The United States experienced low levels of seasonal influenza activity. There were, though, more seasonal influenza viruses detected during the summer months than compared to previous years. They were first detected in Indiana. Since July a total of 306 cases were reported from 10 states.

Observation: Influenza can be found at most any time of the year. As is typical, it is at a lower level in the summer months. Sporadic outbreaks are sometimes seen.

Prevalence of Testing Positive for Influenza AH1N1 among Frontline Healthcare Personnel

A study done in Queens, during the initial emergence of H1N1, was done at two institutions (Long Island Jewish Medical Center, and Cohen's Children's Hospital). They looked at healthcare workers and compared them to non-healthcare personnel. They found that working in an acute care setting did not substantially increase the risk for virus infection above the risk conferred by community based exposures.

Comment: This is a somewhat small study, and only one study, but the findings are interesting, although somewhat surprising.