

## Welcome to "In the Field"

This is my final *In the Field* column. I have decided that it's time to take a break from public health and reconnect with clinical pediatrics, family, friends, and other interests outside of work. Ironically, as I look forward to pursuing new career goals, your articles remind me of all that I am leaving behind. Your work exemplifies the great opportunities underway in environmental health, which has been my passion for the past 13 years.

The public health workforce is changing, bringing in new faces, ideas, and enthusiasm to work alongside seasoned veterans. Our longstanding culture commingles scientific rigor and caring and new colleagues bolster our culture with their creativity, innovation and understanding of new technologies. This improves our ability to address the challenges of an ever changing environment.

Reading this issue reminds me of the dedication, experience and passion that you bring to work every day to protect public health. It's been a privilege to work alongside you. I will miss it and look forward to following your accomplishments from another vantage as you continue to do great things in the field.



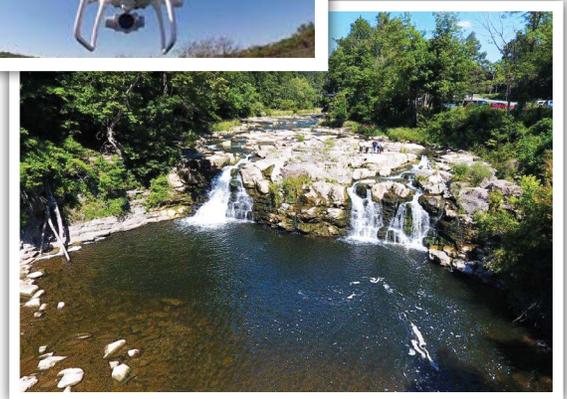
Nathan Graber, M.D., M.P.H., Director  
Center for Environmental Health

## Innovation Goals Drive Experimentation with Drones in Genesee County

Unmanned aerial vehicles (UAVs), also referred to as drones, are limited in most public health settings and practices. Current applications of UAVs in public health have included epidemiology surveillance, emergency management, medical supply delivery, and environmental monitoring. However, these current applications of drones have not been widely adopted by public health agencies. UAVs, as new technology, can have an expanded role in daily public health practice at local health departments.



*The aerial view is the best vantage for rescuers' safe passage to the bottom of "Indian Falls."*



### Airborne Inspections

In 2016, the Genesee County Health Department (GCHD) incorporated the use of drones in routine environmental inspections. A goal of the GCHD is to incorporate new and innovative technologies wherever possible. In keeping with that idea, the GCHD recently purchased a DJI Phantom 4 drone for use by the environmental unit. Two of the environmental staff received official training on how to pilot the drone.

GCHD is unaware of any other county in New York that is using a drone for public health use; therefore there was not a model to follow when planning the GCHD's drone program. In establishing the drone use, the County looked to one of its office goals: to increase the efficiency of public health in the field. One way to do that is to deploy the drone for use during septic system evaluations. The onboard camera and hover capabilities provide a clear and steady image of proposed septic system sites. In 2016, GCHD

has used the drone to inspect the installation process of a new septic system.

The drone was also used by emergency preparedness staff and the county emergency manager to inspect "Indian Falls," which is a popular spot for swimming. The drone provided aerial views for the best route for emergency responders to scale down the falls for search and rescue operations that often take place due to the dangers of swimming at this location.

### Plans to Expand Drone Use

In 2017 GCHD plans to expand the use of its drone into routine environmental inspections, as well as using it to inspect water and cooling towers, provide before and after images of major projects, and enhance mosquito surveillance.

If you would like to learn more about GCHD's drone program please contact Sarah Balduf, Environmental Health Director for Genesee and Orleans County Health Departments at 585-344-2580 ext. 5555.

*Submitted by Brenden Bedard, Sarah Balduf, Paul Pettit, and Colleen Bober, Genesee and Orleans County Health Departments.*

**JANUARY IS RADON ACTION MONTH**

### Periodic Table of RADON SAFFTY



**GET YOUR HOME TESTED FOR RADON!**



*Mayra Ianakieva (8th grade, Astoria, NY) was the first place winner of the 2016 NYS Radon Poster Contest. Mayra focuses her message on the importance of testing homes for radon. Help spread the word about radon testing during January, Radon Action Month.*

# Rockland County Completes Pedestrian Safety Study

In March 2016, the New York State Department of Transportation (NYSDOT) announced the completion of a Pedestrian Safety Study for Routes 59 and 45 in the Town of Ramapo and the Village of Spring Valley, Rockland County. The study resulted in a series of recommendations for improving pedestrian safety. It was led by NYSDOT with significant assistance from federal, state, county, and local officials with expertise in the areas of public health, law enforcement, and engineering.



*New sidewalks and crosswalks promote pedestrian safety.*

Its recommendations focused on improving the existing infrastructure through engineering solutions and modifying user behavior, of both pedestrians and motorists, through education and enforcement outreach efforts.

## Engineering Solutions

The infrastructure recommendations include:

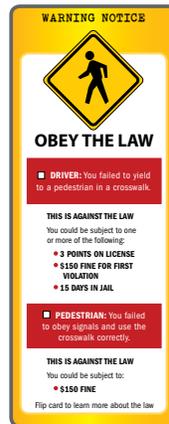
- Improve existing sidewalks and construct new sidewalks.
- Improve existing crosswalks and identify new crosswalk opportunities.
- Upgrade pedestrian signal equipment, lighting and signs.
- Improve transit stops.
- Provide traffic calming (e.g., curb extension at crosswalks, on-street parking, minimum travel lane widths).

The user behavior recommendations include:

- Implement an education campaign, such as “See! Be Seen!”
- Sponsor pedestrian safety events.
- Employ a targeted enforcement campaign.
- Provide local law enforcement officers with specialized training.



*Pedestrian safety warnings and messages in many languages reinforce good crosswalk behaviors.*



NYSDOT has begun to evaluate the engineering recommendations in more detail and is currently developing a project to build missing sidewalks, improve crosswalk markings, and upgrade pedestrian signal equipment along Route 59 as part of the Lower Hudson Transit Link project (the transit component of the New NY Bridge project replacing the Hudson River crossing from Rockland County to Westchester County). Construction of the improvements is expected to begin in 2017.

## Education and Outreach

The Rockland County Health Department in cooperation with local law enforcement implemented a pedestrian safety campaign from July 11 – August 12, 2016 using the state’s See! Be Seen! materials. The County Executive proclaimed August as “Pedestrian Safety and Driver Awareness Month in Rockland County.” With a network of partners, many promotional activities occurred: 55 local buses feature ‘interior cards’ in multiple languages; materials were distributed at Spring Valley’s Farmers’ Market and summer camps; posters were hung in stores, laundromats, libraries, municipal buildings, and WIC offices; and social media messages were shared. The Spring Valley Collaborative members were given materials to post and share. Finally, the Ramapo Police Department gave out 105 warnings in 4 hours on July 25th to drivers failing to yield to pedestrians in crosswalks.

A copy of the study can be viewed and downloaded by visiting the NYSDOT website at [www.dot.ny.gov/Rts59and45PedSafetyStudy](http://www.dot.ny.gov/Rts59and45PedSafetyStudy).

*Submitted by Melissa Jacobson, MPH, Rockland County Department of Health and Sandra D. Jobson, RA, RLA, AICP, NYS Department of Transportation, Hudson Valley.*

# Fall Conference of Environmental Health Directors Report Out

The Hilton Garden Inn in Auburn was the site of the Fall Meeting of the NYS Conference of Environmental Health Directors (CEHD). Breeanne Agett, a public health planner from Chautauqua County, presented on the County’s Tobacco 21 Law, Geoff Snyder provided a review of Madison County’s Individual Water Supply Program, and Sam Rulli presented on Rockland County’s 2016 Drought Response actions. Other speakers included:

- Bill Kappel and Jim Reddy of USGS, who outlined their ongoing Karst Mapping Project.
- Jill Luther from NYSAC, who spoke about her agency’s support for drinking water protection.
- Steven Stich from Ag and Markets and Darby Greco from CEH, who discussed the Food Protection MOU and emerging Ag and Market issues.

The Technical Session concluded with NYS DOH updates from CEH Division Director Mike Cambridge and staff.

Several new officers were elected to serve on the CEHD during the next day’s business meeting. Eric Wohlers (Cattaraugus County) was elected as Chairman. Liz Cameron (Tompkins County) was selected as Vice Chair, Isaiah Sutton (Chenango County) was appointed to serve on the Executive Board, and Ed Sims (Orange County) was reappointed for another two- year term.

**NYS Conference of Environmental Health Directors**  
**2017 Spring Meeting**  
**May 15 – 17, 2017**  
 Technical Session & CEH Business Meeting  
 Minnowbrook Conference Center, Blue Mountain Lake, NY.



*Outgoing CEHD Chair Eileen O’Connor was presented with a plaque for outstanding service. Mark Stow, Treasurer, (Chautauqua County) and Anita Gabalski, Secretary, (Glens Falls District Office) were awarded certificates of appreciation.*

# Older Adults and Swimming Risk: Clinton Incident Reflects Trend

March 11, 2015 was a typical Wednesday morning at the Plattsburgh YMCA pool. The lifeguard opened the pool promptly at 5:30 AM, greeting the morning lap swimmers. Among them, a 67-year old doctor and his wife who shared a lane each Monday, Wednesday, and Friday since 1987.

No one would have expected to hear the cry for help, "Bob's in trouble!" Both the doctor and his wife were fit, active swimmers. At 5:58 AM, the doctor had suddenly submerged to the eight-foot depth of the pool.

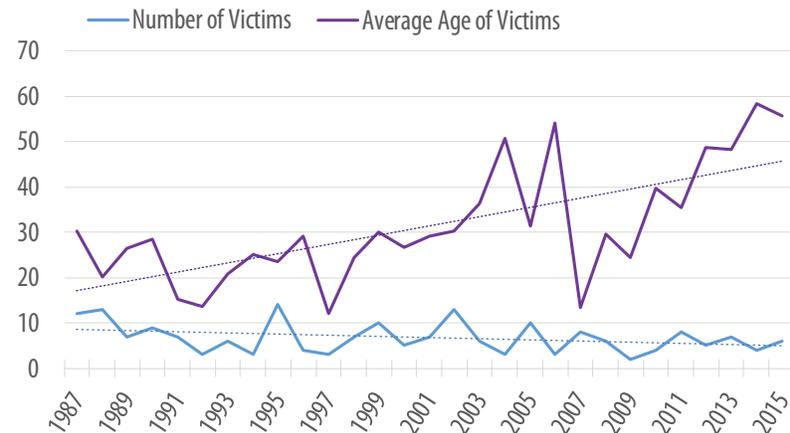
## Textbook Response

Clinton County Health Department's incident report states that the doctor was retrieved by the lifeguard and another patron within about 10 to 15 seconds of being submerged. The doctor was lifted onto the pool deck and turned on his side as the lifeguard attempted to evacuate the pool water from his body. 911 was called, and the facility AED and towels were collected. The lifeguard and the doctor's wife, who happened to be a retired nurse, immediately administered CPR after observing that the doctor was unconscious and unresponsive. He was not breathing and had no pulse. The lifeguard and the doctor's wife applied the AED and continued CPR.

By 6:06 AM, the Plattsburgh Police and the Fire Department EMTs arrived. The EMTs established a breathing tube and bag resuscitation as CPR was administered. They worked on the victim until 6:26 AM, including the application of an intravenous line and four rounds of epinephrine. The doctor was transported to the UVM Network-Champlain Valley Physicians hospital where he was later pronounced dead at 7:05 AM.

According to the incident report, the rescue activities were excellent and no pool safety plan deficiencies were identified. The report cited glare at the deep end of the pool, although this was not identified as a contributing factor. The Certificate of Death

## NYS Drowning Statistics at Pools and Regulated Bathing Beaches



### Older Adults, An Emerging Population at Risk

The dotted trend lines highlight that while the number of annual drownings has decreased, the average age of drowning victims has increased steadily in recent years.

indicated that the doctor experienced sudden cardiac arrest, due to or as a consequence of arrhythmia.

"The victim suffered a sudden extreme medical condition in the pool," explained Judy Ross, Senior Public Health Sanitarian of the Clinton County Health Department and coauthor of the incident report. In fact, with no autopsy it is unknown whether he suffered from water inhalation in his lungs.

### Is There a Trend Behind the Story?

According to Eric Wiegert, who works in recreational water programs in NYS DOH's Bureau of Community Environmental Health and Food Protection, statistics are showing an uptick in the age of drowning victims, even as the number of drownings overall has been decreasing since 1987. "While the doctor may not have drowned, this

story raises questions about how age may increase a person's risk while swimming," he explains.

John Kanoza, Director of Environmental Health and Safety of the Clinton County Health Department suggests that more outreach focused on older swimmers might be beneficial to raise awareness. "Lifeguards could be reminded that older adults might have underlying health issues that increase their risk, regardless of swimming ability." John also reminded us that all people, including older adults, should discuss their physical activity regimes with their health providers, particularly when starting a new activity or when their health status changes.

*Contributed by Judy Ross and John Kanoza, Clinton County Health Department, and Eric Wiegert, NYS DOH Bureau of Community Environmental Health and Food Protection.*

## 2017 ENVIRONMENTAL HEALTH SUMMIT

### Drinking Water Program Implementation & Priorities

March 22, 2017 (all day)

School of Public Health Auditorium  
Rensselaer, NY

Hosted by NYSACHO



## In the Field of Environmental Health

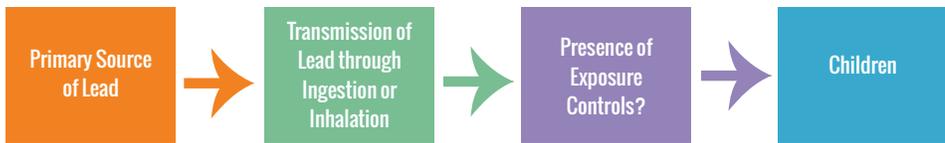
is issued by the NYS DOH Center for Environmental Health

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Back issues of In the Field are posted on the Health Commerce System, or contact us for copies.

Special thanks to our contributors

# Schuyler County Investigates Lead Risks in Unusual Places



*The process Schuyler County used to investigate the risk of lead exposures to children.*

When parents and other adults come home from work and play, what is the chance that they are inadvertently exposing the children in their lives to lead? The Schuyler County Public Health Department conducted an investigation into this issue as it sought to find out what hobbies and occupations in the County carry with them a risk of accidental lead exposure to children. The investigation, carried out in September 2016, focused on the concern that children might ingest lead by inhaling lead dust or consuming lead in water, soil, dirt, or paint chips related to their parents' activities.

Nationally, lead is known to be found in homes, water, toys, and candies, as well as in some hobbies and occupations. Schuyler County designed its investigation to determine what hobbies and occupations were of concern by conducting a qualitative preliminary exposure assessment to find out where the likely sources of lead in Schuyler County were. The investigation looked for sources of lead in the local hobbies and occupations and whether or not there were exposure controls being used. If there were some sources of lead and no presence of exposure controls, a high risk was associated with the exposure. If there were some exposure controls with minimal concentrations of lead, then a low risk was associated with it.

## Home Lead Hazards

At home, the most common risk of lead exposure for children in Schuyler County was found to be in the lead paint removed when construction work is being done on the home. During construction, any lead paint scraped from walls can make its way more readily into children's systems. Collecting and restoring certain antique toys, a hobby common in Schuyler County, was also found to be associated with a small exposure risk.

Other pursuits that were found to include a small risk to children include stained glass making, wood refinishing, target practice, and bullet making. Each of these hobbies carries with it the risk of lead exposure to children, mainly because they require handling lead cane and lead solder. However, the investigation found these risks to be low, because there has been a general

decrease in hobbyists and artisans doing these kinds of activities in the Schuyler County community. Additionally, most of these hobbies are relatively short term, and so do not present a great risk.

## Risks from work

In the workplace, there is some exposure risk to children associated with jobs in the local highway department, auto repair shops, and machine shops. These occupations typically require work with small amounts of lead. If workers in these fields have their uniforms washed separately from their families, there is little to no risk to children. However, some workers do bring home their dirty work clothes, increasing the chance of exposing children.

The investigation also determined that no businesses were doing the following work in the County: art restoration, battery manufacturing, radiator repair, abatement work, furniture refinishing, precious metals refining, lead smelter work, and ceramic work. In counties where these activities do take place, there might be a risk of exposure to children.

Overall, Schuyler County's investigation found that there is a small risk for children to be exposed to lead, because the elimination of lead from most newer products used in hobbies and jobs. In counties different from Schuyler County, however, where different activities might be more prevalent, it is useful to spend some time thinking about, and investigating, what unique risks to children might be taking place.

*Contributed by Elizabeth Watson, Public Health Specialist, Schuyler County Public Health.*

## Resources

### In this Issue

#### **Pedestrian Safety: See! Be Seen!**

[www.health.ny.gov/prevention/injury\\_prevention/pedestrians.htm](http://www.health.ny.gov/prevention/injury_prevention/pedestrians.htm)

#### **Swimming Safety**

[www.health.ny.gov/environmental/outdoors/swimming/](http://www.health.ny.gov/environmental/outdoors/swimming/)

#### **Health Dangers from Lead On the Job**

[www.health.ny.gov/publications/2543](http://www.health.ny.gov/publications/2543)

#### **Lead Poisoning Prevention**

[www.health.ny.gov/environmental/lead/](http://www.health.ny.gov/environmental/lead/)

#### **Radon Information**

[www.health.ny.gov/environmental/radiological/radon/radon.htm](http://www.health.ny.gov/environmental/radiological/radon/radon.htm)

## Seasonal Resources

### **Cold Weather Tips**

[www.health.ny.gov/environmental/emergency/weather/cold](http://www.health.ny.gov/environmental/emergency/weather/cold)

### **Carbon Monoxide Poisoning**

[www.health.ny.gov/environmental/emergency/weather/carbon\\_monoxide/](http://www.health.ny.gov/environmental/emergency/weather/carbon_monoxide/)

### **Supplemental Space Heater Safety**

[www.health.ny.gov/environmental/indoors/heaters/](http://www.health.ny.gov/environmental/indoors/heaters/)

### **Odors & Health**

[www.health.ny.gov/publications/6500/index.htm](http://www.health.ny.gov/publications/6500/index.htm)

### **Drowsy Driving Awareness**

[www.health.ny.gov/DontDriveDrowsy](http://www.health.ny.gov/DontDriveDrowsy)

## Newest Stay Awake! Stay Alive Materials Spotlight Groups at Risk of Drowsy Driving

Anyone who is tired behind the wheel is at risk of falling asleep while driving. Our newest *Stay Awake! Stay Alive!* brochure highlights all groups at risk of driving drowsy.

Order copies of pub 6587 by emailing [ceheduc@health.ny.gov](mailto:ceheduc@health.ny.gov) or view all available materials at [www.health.ny.gov/DontDriveDrowsy](http://www.health.ny.gov/DontDriveDrowsy).

## Who's at risk?

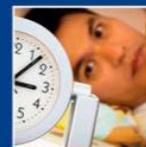
Anyone who is tired is at risk, but the following groups have a higher risk of driving drowsy:



**Commercial drivers, including tractor trailer, tour bus, and public transit drivers**



**People who work long hours or late night shifts**



**People with sleep disorders**



**New parents or caregivers of babies and young children**



**High school and college students, young or newer drivers**