

ENVIRONMENTAL HEALTH NEWSLETTER

INTRODUCTION

Welcome to the Will County Health Department Environmental Health Division quarterly newsletter.

The Environmental Health (EH) Division provides inspections and investigates complaints of public food facilities, private water wells, private wastewater treatment systems, swimming pools and bathing beaches, tanning and body art facilities, and non-community public water supplies. The EH Division participates in two vector programs: West Nile Virus & Tick Surveillance and provides education materials on radon gas risks as well as radon test kits for sale to the public.

The majority of our programs run all year round, but a few of our programs are seasonal, such as Vector Surveillance, Outdoor Swimming Pools & Bathing Beaches. The intent of the quarterly newsletter is to highlight current topics and events in each of the Environmental Health Division's programs and provide education on those programs.



Our Programs

FOOD PROGRAM

**ILLINOIS DEPARTMENT OF PUBLIC HEALTH FOOD CODE – NEW LEGISLATION – PUBLIC ACT 104-0090**

All certified food service sanitation managers employed by a restaurant must receive or obtain training in basic allergen awareness principles within SB1288 Enrolled LRB104 08358 BDA 18409 b Public Act 104-0090 30 days after employment and every 3 years thereafter. Training programs must be accredited

by the American National Standards Institute or another reputable accreditation agency under the ASTM International E2659-09 (Standard Practice for Certificate Programs). There is no limit to how many times an employee may take the training. Allergen awareness training must cover and assess knowledge of several topics including:

- The definition of a food allergy
- The symptoms of an allergic reaction
- The major food allergens
- The dangers of allergens and how to prevent cross-contact
- The proper cleaning methods to prevent allergen contamination
- How and when to communicate to guests and staff about allergens
- The special considerations related to allergens from workstations and self-serve areas
- How to handle special dietary requests
- Dealing with emergencies, including allergic reactions
- The importance of food labels
- How to handle food deliveries in relation to allergens
- Proper food preparation for guests with food SB1288 Enrolled LRB104 08358 BDA 18409 b Public Act 104-0090 allergies
- Cleaning and personal hygiene considerations to prevent contaminating food with allergens
- Understanding gluten, including sources of gluten, symptoms of gluten intolerance and celiac disease, the importance of gluten-free food preparation and handling, and proper cleaning methods to prevent gluten contamination

The amendment to Public Act 104-0090 was to add “Understanding Gluten” to the list of required allergen awareness training topics which is highlighted above.

Holiday Food Safety

The holiday season is fast approaching and that means lots and lots of parties with good friends, family & food. Let's prepare & practice sound food safety principles and not spoil all the fun with a foodborne illness. Please click on the links below for more information:

[Spooky Safe Halloween Tips from IDPH](#)

[Halloween Food Safety Tips from the FDA](#)

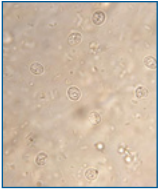
[IDPH Food Safety During the Holidays](#)

Food Safety In-Services Available

The EH Division is available to provide in-person food safety in-services on various topics for primary, middle & high school students and cafeteria staff. The in-service is typically 45 to 60 minutes in length and if school administrators are interested, please contact Sean M. Connors, Director of Environmental Health Services, at sconnors@willcountyhealth.org or (815) 727-8846.

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FOOD PROGRAM (CONTINUED)

**PATHOGEN PROFILE - Salmonella**

Salmonella is a motile, non-sporeforming, Gramnegative, rod-shaped bacterium in the family Enterobacteriaceae and the tribe Salmonellae. Salmonella causes two kinds of illness:

- Gastrointestinal illness, which causes nausea, vomiting, diarrhea, cramps, and fever, with symptoms generally lasting a couple of days and tapering off within a week. In otherwise healthy people, the symptoms usually go away by themselves, but long-term arthritis may develop.
- Typhoidal illness causes high fever, diarrhea or constipation, aches, headache, and lethargy (drowsiness or sluggishness), and, sometimes, a rash. It's a very serious condition; up to 10% of people who don't get treatment may die.

Many kinds of food can become contaminated with the first type, from meats and eggs to fruits and vegetables, and even dry foods, like spices and raw tree nuts. The typhoidal illness usually is associated with sewage- contaminated drinking water, or crops irrigated with sewage-contaminated water. Some pets, like turtles and other reptiles, and chicks, can carry Salmonella, which can spread to anything that comes into contact with the pet. For example, a pet owner can, through unwashed hands, contaminate foods or even his or her own face with Salmonella. This bacterium is hard to wash off of food, even with soapy water, so important measures for preventing foodborne illness from Salmonella include thorough cooking, hand washing, keeping raw foods separated from cooked foods, and keeping foods at the correct temperature (refrigerate foods at 41°F or below). In people with weak immune systems, Salmonella can spread to other organs and cause very serious illness.

Nontyphoidal Salmonellosis (caused by serotypes other than S. Typhi and S. Paratyphi A.)

- Mortality: Generally, less than 1%; however, S. Enteritidis has a 3.6% mortality rate in outbreaks in nursing homes and hospitals, with the elderly being particularly affected.
- Onset: 6 to 72 hours after exposure.
- Infective dose: As low as one cell, depending on age and health of host and strain differences among members of the genus.
- Symptoms: Nausea, vomiting, abdominal cramps, diarrhea, fever, headache. · Duration: Symptoms generally last 4 to 7 days, with acute symptoms usually lasting 1 to 2 days or longer, depending on host factors, the dose ingested, and strain characteristics.
- Complications: (1) Dehydration and electrolyte imbalance may occur as a result of diarrhea and vomiting. This can lead to death in the very young, the elderly, and the immunocompromised, if not treated promptly. (2) In 2% of culture-proven cases, reactive arthritis (i.e., arthritis from an immune reaction to the infection – an autoimmune response – rather than directly from the infection itself) may follow 3 to 4 weeks after the onset of acute symptoms. Indications of reactive arthritis may include, for example, joint inflammation, urethritis, uveitis, and/or conjunctivitis. (3) Nontyphoidal Salmonella can sometimes escape from the gastrointestinal tract into the body and cause blood poisoning (septicemia) or infect the blood, internal organs, and/or joints (bacteremia). S. Dublin is sometimes associated with this complication.
- Route of entry: oral (e.g., ingestion of contaminated food, fecal particles, or contaminated water).
- Pathway: Penetration and passage of Salmonella organisms from gut lumen into epithelium of small intestine, where inflammation occurs. There is evidence that enterotoxin may be produced, perhaps within enterocytes.

Typhoid Fever (Caused by serotypes S. Typhi and S. Paratyphi A, both of which are found only in humans.)

- Mortality: Untreated, as high as 10%.
- Onset: Generally, 1 to 3 weeks, but may be as long as 2 months after exposure. Duration: Generally, 2 to 4 weeks.
- Infective dose: Fewer than 1,000 cells.
- Symptoms: High fever, from 103° to 104°F; lethargy; gastrointestinal symptoms, including abdominal pains and diarrhea or constipation; headache; achiness; loss of appetite. A rash of flat, rose-colored spots sometimes occurs.
- Illness / Complications: Septicemia, with colonization of other tissues and organs, e.g., may lead to endocarditis. Septic arthritis may occur, in which the infection directly affects the joints and may be difficult to treat. Chronic infection of the gallbladder may occur, which may cause the infected person to become a carrier.
- Route of entry: Oral (e.g., ingestion of contaminated food, fecal particles, or contaminated water).
- Pathway: Penetration and passage of typhoid Salmonella organisms from gut lumen into epithelium of small intestine and into the bloodstream (i.e., septicemia), which may carry the organisms to other sites in the body, where inflammation occurs. There is evidence that enterotoxin may be produced, perhaps within enterocytes.

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RECENT EVENTS IN THE NEWS

POWASSAN VIRUS

The Illinois Department of Public Health (IDPH) is reminding Illinoisans to take appropriate precautions against tick bites after an Illinois resident became seriously ill with Powassan – a tickborne illness that had not previously been detected in this state. IDPH and the local health department are currently investigating whether the resident was exposed to the illness through a tick bite here in Illinois or in a different state. IDPH says the case serves as a reminder to protect oneself against any and all illnesses associated with ticks.

Powassan is a virus that can be spread to humans through the bite of an infected tick; the black-legged deer tick is most frequently associated with Powassan. According to the Centers for Disease Control and Prevention (CDC), initial symptoms can include fever, headache, vomiting, and weakness. Powassan virus can cause severe disease, including inflammation of the brain (encephalitis) or the membranes around the brain and spinal cord (meningitis), and can sometimes be fatal. Symptoms of severe disease include confusion, loss of coordination, difficulty speaking, and seizures. Powassan cannot be spread human-to-human through casual contact.

It's important to protect against tick bites to prevent that and other serious tickborne illnesses, including Lyme Disease, Rocky Mountain Spotted Fever, tularemia, ehrlichiosis, and babesiosis.

IDPH's Director Vohra stresses that people can also "Fight the Bite" by diligently checking themselves, their pets and children for ticks after spending time in areas where ticks live, such as in and near wooded areas, tall grass and brush. Removing ticks within a 24-hour period reduces the risk of potential disease transmission.

Learn more about [Powassan here](#) and learn to [protect yourself from tick bites here](#).

KISSING BUGS

The Illinois Department of Public Health provided a short presentation to local health departments on Kissing Bugs and their relation to Chagas Disease. Kissing bugs are typically found in the southern United States, Mexico, Central America, and South America. Eleven different species of triatomine bugs have been found in the southern United States. Chagas disease, also known as American trypanosomiasis, is a tropical parasitic disease caused by the *Trypanosoma cruzi* parasite, primarily transmitted by kissing bugs. Chagas Disease is spread when a Kissing Bug completes a bloodmeal from an animal or human, the bug defecates, and the parasite is in the feces. Open wounds (such as the recent bug bite), mucous membranes, or ingestion are ways that the parasite can infect a person or dog. Many years later, the parasite can cause heart disease and possibly death. There are few medicines to treat Chagas disease.

The Environmental Health Division took this information and created a one-page flyer. The flyer addresses the following topics of concern:

- What do they look like?
- When are they most active?
- Where can they be found?
- How to control Kissing Bugs?
- How is Chagas Disease spread?




The Kissing Bug

Kissing bugs are typically found in the southern United States, Mexico, Central America, and South America. Eleven different species of triatomine bugs have been found in the southern United States.

Kissing Bug Facts

- Kissing bugs have 'cone-shaped' heads, thin antennae, and thin legs.
- They are mainly black or very dark brown, with red, orange or yellow 'stripes' around the edge of their bodies.
- Kissing bugs are mostly active at dusk or night.
- Kissing bugs can be found around woodpiles, debris in the yard, and woodrat nests, but are also attracted to the lights and carbon dioxide associated with human houses and dog kennels.
- Kissing bugs are insects that may be infected with *Trypanosoma cruzi*, the parasite that causes Chagas disease.



Controlling Kissing Bugs

- Seal up your house to keep kissing bugs from sneaking in.
- Keep the area around your house neat. Remove wild animal nests, piles of branches and wood, and trash so that wild animals stay away from your house.
- Turn off outside lights at night if safe. Kissing bugs might fly towards lights and then crawl into a house. Keeping the lights off can keep the kissing bugs from coming near.

If you think you have a kissing bug, email a clear picture of suspected kissing bugs to EH@willcountyhealth.org for identification by IDPH

How is Chagas Spread?

After taking a bloodmeal from an animal or human, the bug defecates, and the parasite is in the feces. Open wounds (such as the recent bug bite), mucous membranes, or ingestion are ways that the parasite can infect a person or dog. Many years later, the parasite can cause heart disease and possibly death. There are few medicines to treat Chagas disease.

More information on Chagas Disease can be found on IDPH website or scan the QR code.




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VECTOR PROGRAM

The West Nile Virus season ended at the start of October 2025 and will restart in May 2026. The Tick surveillance program is ongoing but slows down in the last quarter of the year. The Blacklegged or Deer Tick (*Ixodes scapularis*) is active in wooded terrain with elevation, but not in floodplains. Blacklegged deer ticks need deer/game trails with plenty of leaf litter and their peak activity is March through May and October through November. Below is a picture of the Deer Tick in the larva stage (six legs), nymph stage (eight legs) and male & female deer ticks.



Will County
Health Department &
Community Health Center

RADON PROGRAM

**Radon and Lung Cancer**

November is Lung Cancer Month and Radon Awareness Month is the entire month of January 2026, beginning on Thursday, January 1st. It is a time to raise public awareness about radon, a colorless, odorless radioactive gas that is the leading cause of lung cancer in non-smokers. Overall, radon is the second leading

cause of lung cancer. Radon is responsible for about 21,000 lung cancer deaths every year. About 2,900 of these deaths occur among people who have never smoked. During this month, individuals are encouraged to test their homes for radon, fix any existing problems, and learn about radon-resistant new construction. The Environmental Health Division offers radon test kits for sale at all three of our offices for \$8.00. Please see the information below to learn more about radon.

What is radon?

Radon is a cancer-causing radioactive gas that comes from the natural (radioactive) breakdown of uranium in soil, rock and water and gets into the air you breathe. You can be exposed to this gas in any type of building anywhere in the U.S. but your greatest risk of exposure is in your own home where you spend the largest part of your time. You can't see, smell or taste radon but it is known to cause many thousands of deaths each year from lung cancer. Next to smoking, radon exposure is the second leading cause of lung cancer.

Radon Levels in Will County

Studies by the Illinois Emergency Management Agency's (IEMA) Radon Program, the U.S. Environmental Protection Agency (USEPA) and others show that radon occurs in every county in Illinois, including Will County.

Can I test for Radon myself?

Yes! Radon testing is easy and inexpensive. The Will County Health Department offers home radon tests for purchase at all of its locations. Radon detectors are also available at hardware or home improvement stores.

Radon in Homes

Any home can have elevated radon levels. It doesn't matter whether your house is old or new or whether it has a basement, crawlspace, or slab-on-grade foundation. Most radon enters a home because of air pressure and temperature differentials between the indoors and outdoors. When air is exhausted by natural or powered ventilation, make-up air is drawn in through openings in the foundation from the surrounding soil.

Lowering Radon Levels

Indoor radon levels can be lowered by installing a radon mitigation system that collects radon prior to its entry into the house and discharges it to a safe location. Contact a mitigation system professional licensed by IEMA to reduce the radon levels in your home.

Residents may install a mitigation system in their own home; however, without proper equipment or technical knowledge, you could increase the radon level or create other potential hazards. The cost of an active mitigation system is typically between \$1000 to \$1500 for installation, and the energy cost for running the fan will average around \$100 per year. Since June 2013 the Illinois Radon Resistant Construction Act has required the installation of passive radon reduction techniques during construction.