FIRST QUARTER - 2024

WILL COUNTY HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH NEWSLETTER

INTRODUCTION

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

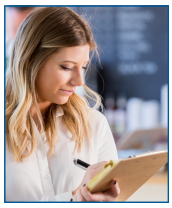
The Environmental Health (EH) Division provides inspections and investigates complaints of public food facilities, private water wells, private wastewater treatment systems, swimming pools and bathing beaches, tanning and body art facilities, and non-community public water supplies. The EH Division participates 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.

Will County Health Department & Community Health Center

Our Programs

FOOD PROGRAM



IDPH FOOD CODE AND 2022 FDA FOOD CODE

IDPH is moving toward the adoption of the 2022 FDA Food Code, as well as changes to the current IDPH 750 Food Code. Food Permit holders, your inspector will discuss any changes that might affect you during your routine inspection.

DON'T LET DELIVERY & TAKEOUT FOODS FUMBLE YOUR SUPER BOWL

Safely serving friends and family during the big game is a win for everyone; don't fumble it this Super Bowl Sunday. February 11 kicks off Super Bowl LVIII, and football fans will be huddling up to watch the big game while enjoying their favorite foods. Whether you're ordering delivery, or preparing and serving food to guests, the U.S. Department of Agriculture's (USDA) Food Safety and Inspection Service (FSIS) has some gameday plans to keep your Super Bowl from being intercepted by foodborne illness. **Please click here for more details:**

PATHOGEN PROFILE - Escherichia coli

Most E. coli bacteria are harmless, but some produce a toxin (Shiga toxin) that can cause serious illness, including bloody diarrhea, blood-clotting problems, kidney failure, and death. Not all of the Shiga-producing E. coli can cause these problems, but the subset called enterohemorrhagic E. coli (EHEC) can.

Like generic E. coli, toxin-producing Shiga-toxigenic Escherichia coli (STEC) are Gram-negative, rodshaped bacteria. Although O157:H7 is currently the predominant strain and accounts for ~75% of the EHEC infections worldwide, other non-O157 EHEC serotypes are emerging as a cause of foodborne illnesses. In the United States a group often referred to as the "big 6" (O111, O26, O121, O103, O145, and O45) accounts for the majority of the non-O157:H7 serotypes isolated from clinical infections and, therefore, is currently a focus of concern.

You might have heard news reports about these EHEC bacteria, such as E. coli O157:H7, when they've caused outbreaks of foodborne illness. EHEC outbreaks have been traced to many kinds of foods; for example, ground meats, unpasteurized ("raw") milk, unpasteurized fruit juice, lettuce, spinach, sprouts, and, commercially manufactured frozen cookie dough. Some people get the less serious form of the infection, which can range from no symptoms to diarrhea that starts out watery, then turns bloody. But the infection sometimes progresses into the life-threatening form of the illness that causes kidney failure and other problems, with children and people with weak immune systems being at especially high risk.

FOOD PROGRAM (CONTINUED)

Cooking ground beef well; washing raw fruits and vegetables under clean, running water; and not drinking unpasteurized ("raw") milk or eating certain cheeses made from it are some of the things you can do to help protect yourself.

- **Mortality:** Patients whose illness progresses to Hemolytic Uremic Syndrome (HUS) have a mortality rate of 3% to 5%.
- **Infective dose:** The infective dose of EHEC O157:H7 is estimated to be very low, in the range of 10 to 100 cells. The infective dose of other EHEC serotypes is suspected to be slightly higher.
- **Onset:** Symptoms usually begin 3 to 4 days after exposure, but the time may range from 1 to 9 days.
- **Symptoms:** Hemorrhagic colitis is characterized by severe cramping (abdominal pain), nausea or vomiting, and diarrhea that initially is watery, but becomes grossly bloody. In some cases, the diarrhea may be extreme, appearing to consist entirely of blood and occurring every 15 to 30 minutes. Fever typically is low-grade or absent.
- **Duration:** In uncomplicated cases, duration of symptoms is 2 to 9 days, with an average of 8 days.
- **Route of entry:** Oral (e.g., ingestion of contaminated food, water, or fecal particles).

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 administers are interested, please contact Sean M. Conners, Director of Environmental Health Services, at sconners@willcountyhealth.org or (815) 727-8846.

RECENT EVENTS IN THE NEWS

Due to recent flooding in late January along the Kankakee River due to ice jams, public water safety in eastern & southern Will County had become a concern and Boil Order Notifications were issued for the affected areas.

After a flood, the physical devastation to personal property and the community is obvious. These tragic consequences can be compounded by injuries or illness, though, if certain precautions are not taken to protect your personal health and safety. In addition to your physical health, you need to take time to consider your mental health as well. Remember, some sleeplessness, anxiety, anger, hyperactivity, mild depression or lethargy is normal. If these symptoms are acute or if they persist, however, seek some counseling.

This information is provided by the Illinois Department of Public Health to help flood victims protect themselves against diseases and other hazards in the days and weeks following a flood. Please click on the links below that provide instructions on what to do during a boil order (for private citizens and permitted food establishments) or after a flood.

- **After the Flood brochure from IDPH**
- **Will County Boil Order Guidance**
- **How to Chlorinate Your Well Brochure**

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RADON PROGRAM

January was National Radon Action Month, and the American Lung Association is encouraging everyone to help save lives by testing their homes for radon and mitigate if high levels are detected.

Radon is the number one cause of lung cancer among non-smokers, according to EPA estimates. 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.

The Environmental Health Division offers Radon Test Kits for sale at all three of our offices for $8.00.

PRIVATE SEWAGE PROGRAM

The Environmental Health Division conducts soil/site evaluations, septic system permitting, inspections on all new and repaired septic systems, sampling of discharging wastewater treatment systems, tank abandonments and pumper truck/dump site inspections. All work must be done by a licensed contractor, and the Will County Health Department works with these contractors to ensure new and repairs on existing systems are done according to code. There are many types of systems in use. This quarter we will describe how Aerobic Treatment Units (ATU) work.

AEROBIC TREATMENT UNITS

The basic setup for this type of system includes an aeration tank, air supply system, final treatment chamber, and discharge. Several additional components may be added to the system, such as a trash tank used to remove materials that will not be decomposed in the aeration tank, and/or additional filtration of the treated effluent prior to final treatment & discharge.

As wastewater flows into the aeration tank, microbes that function in the presence of oxygen work to decompose waste material. Oxygen is supplied by the air supply system. In some systems, small plastic balls are employed. These plastic pieces allow microbes to grow on their surfaces and will move freely through the aeration tank.

From the aeration tank, wastewater then goes through a final treatment. This typically involves disinfection, through chlorination.Tablet chlorinators contain tubes that supply the tablets to a contact chamber, where the wastewater is disinfected.Other potential disinfection processes use ultraviolet light or ozone. Treated water then moves into an underground drainage field or will be surface discharged.