The Zika virus is primarily spread through mosquito bites. Once a person is infected with the Zika virus, it can spread through blood transfusion, sexual contact, and from mother to child. Zika is not currently found in the continental United States, but U.S. cases are now being reported in returning travelers who have visited affected countries.

The most common symptoms of Zika virus include: Fever, rash, joint pain, and conjunctivitis (red eyes). Approximately 80% of people with Zika experience no symptoms and don’t even know that they have the virus. The illness is usually mild with symptoms lasting from several days to a week. People usually don’t get sick enough to go to the hospital, and they very rarely die of Zika.

Recently, there have been reports of microcephaly in babies of mothers who were infected with Zika virus while pregnant. Microcephaly is a birth defect in which a baby’s head is smaller than expected when compared to babies of the same sex and age. Babies with microcephaly often have smaller brains that haven’t properly developed.

More cases of Guillain-Barré syndrome (GBS) have also been reported. GBS is an uncommon sickness of the nervous system in which a person’s own immune system damages the nerve cells, causing muscle weakness and sometimes, paralysis. The CDC is studying if Zika infection is possibly related to GBS and microcephaly. Currently, the CDC recommends special precautions for pregnant women and women trying to become pregnant.

The best way to prevent Zika is to prevent mosquito bites.

- Use insect repellents on your skin and clothes.
- Wear long-sleeved shirts and long pants.
- Stay in places with air conditioning or that use window and door screens.
- Treat containerized water sources, such as stock ponds, bird baths, and pools with
a larvacidal agent to reduce mosquito populations and breeding.

There is evidence that the Zika virus can be sexually transmitted by a man to his sex partners. The best way to prevent the spread of Zika is to avoid sex or use condoms the correct way every time, especially when having sex with someone who has recently traveled to a country where Zika is present. There is no vaccine to prevent or treat Zika infection.

The following steps can reduce the symptoms of Zika:

- Get plenty of rest.
- Drink fluids to prevent dehydration.
- Take medicine, such as acetaminophen to reduce fever and pain.
- Do not take aspirin or other non-steroidal anti-inflammatory drugs.
- If you are taking medicine for another medical condition, talk to your healthcare provider before taking additional medication.
- For the latest CDC information, please visit our website at audraincountyhealth.org. Or, to obtain larvacidal granules, please contact the ACHD at 573-581-1332.

MEET LARRY TESON, OUR ENVIRONMENTAL PUBLIC HEALTH SPECIALIST

Larry, received his Bachelor of Science degree in Animal Science from Southwest Missouri State University, in Springfield, Missouri. He began work with the Audrain County Health Department in March 2016 as our Environmental Public Health Specialist. For the past 22 years, Larry worked for the Missouri Department of Natural Resources in Jefferson City, Missouri. His wife, Sue, is retired after 32 years with the Natural Resource Conservation Service and the Internal Revenue Service.

Larry and Sue have three children, Renee, a social worker at the University Hospital. Steve, who is the service manager for Peters-Brunner Heating and Air in Columbia, Missouri. Stephanie, a radiology technician at Barnes Hospital in St. Louis. They have four grandchildren, two boys and two girls. Larry enjoys biking, gardening, spending time with his grandchildren, and taking care of his cow/calf operation located in Callaway County.
Audrain County Health Department (ACHD) inspects grease traps and grease interceptors for food establishments through an agreement with the City of Mexico. Food establishments include restaurants, convenience stores, and schools within the city limits of Mexico.

Currently, we inspect approximately 50 establishments. In 2015, ACHD conducted 145 inspections within Mexico city limits. We provide the city with a written summary every month of each site that was inspected and if the site passed or failed.

When conducting a visual inspection, we look for a high water mark in the interceptors, and make sure that the interceptor is working properly. We ask when the interceptor was last pumped. Finally, we verify an establishment has recorded the required maintenance information on a log per City Code.

Grease interceptors are underground and outside the establishments, whereas grease traps are inside and usually hooked through the three vat sink and/or the dishwasher. Grease traps are visually inspected to ensure that they are functioning correctly. We inquire about the cleaning process and ask if enzymes are used. Enzymes are highly recommended for use in grease traps and interceptors because they help keep pipes clean and free of grease buildup. With questions, please call ACHD at 573-581-1332.

Foodborne illness, or “food poisoning”, is a common yet preventable public health problem. This poisoning is caused by contaminated foods or beverages and can be deadly for some people. Each year, one in six Americans get sick from contaminated foods or beverages and approximately 3,000 die.

Of the foodborne illnesses, most are infections caused by bacteria, viruses, and parasites. Poisonous chemicals or other harmful substances can also cause foodborne illnesses if they are in the consumed food. These illnesses have many different symptoms. Nausea, vomiting, abdominal cramps, and diarrhea are common symptoms since the contaminated foods and beverages enter the body through the GI tract.

The CDC, FDA, USDA, state and local health departments, such as ACHD, and food industries play critical roles in all aspects of food safety. Outbreaks and sporadic cases are investigated and each occurrence is tracked in order to hopefully find the source of the illness, whether it be a specific food or beverage or a specific setting, in hopes to decrease the risk of more people getting sick.
What Defines a “Food Establishment:

Any business that sell potentially hazardous food. There are other Food Establishments that are inspected due to various ordinances and requirements.

Potentially Hazardous Food as Defined by the Missouri Food Code:

1. “Potentially hazardous food” means a food that is natural or synthetic and that requires temperature control because it is in a form capable of supporting:
   a. The rapid and progressive growth of infectious or toxigenic microorganisms;
   b. The growth and toxin production of *Clostridium botulinum*, or
   c. In raw shell eggs, the growth of *Salmonella Enteritidis*.

2. “Potentially hazardous food” includes: an animal food that is raw or heat-treated; a plant food that is heat-treated or consists of raw seed sprouts; cut melons; cut leafy greens; cut tomatoes or mixtures of cut tomatoes that are not modified in a way so that they are unable to support pathogenic microorganism growth or toxin formation; and garlic - in - oil mixtures that are not modified in a way so that they are unable to support pathogenic microorganism growth or toxin formation.

Types of Food Establishments Inspected in Audrain County:

<table>
<thead>
<tr>
<th>Type of Food Establishment</th>
<th>Number of Entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restaurants</td>
<td>36</td>
</tr>
<tr>
<td>Public and Private Schools</td>
<td>11</td>
</tr>
<tr>
<td>Retail Grocery Stores</td>
<td>13</td>
</tr>
<tr>
<td>Convenience Stores</td>
<td>17</td>
</tr>
<tr>
<td>Institutions</td>
<td>9</td>
</tr>
<tr>
<td>Catering and Seasonal</td>
<td>7</td>
</tr>
<tr>
<td>Bars/Taverns</td>
<td>6</td>
</tr>
</tbody>
</table>

Effective January, 2015, Audrain County Food Ordinance 14 - 1 went into effect. One of the main changes in this ordinance was that Food Establishments that carry or serve potentially hazardous food shall be inspected two times a year. In 2015, 213 inspections were conducted as compared to 144 inspections in 2014.

While conducting food establishment inspections, the primary focus is on risk factors, such as but not limited to, hand washing stations, proper food hot holding, proper food cold holding, sanitizer mixing, hot water temperatures, thermometers, and food contact surfaces. Many of these violations can be corrected on the spot, however any critical or priority violation must be corrected within 72 hours or less, if deemed necessary. Non-critical or core violations, such as torn seat cushions, minor wall damage, and non-food contact surfaces may have more time allotted for corrective action.
Child Care Facilities: Environmental Health Sanitation Inspections

Audrain County Health Environmental Services conducts annual sanitation inspections for child care centers, group child care homes, license-exempt facilities and family home child care providers that are licensed by the State of Missouri.

The sanitation guidelines for these facilities are very in-depth and structured. The heart of the matter when inspecting is evaluating the risk factors and ensuring basic good practices are in place. Risk factors include but are not limited to, general sanitation; environmental hazards including preliminary lead testing; proper hot water temperature, food protection, cleaning and ensuring appropriate sanitizing methods are being followed.

One of the most important good practices is following proper hand washing by staff and the children. The role of the inspector is not only to evaluate child care facilities but to educate the providers. Audrain County has 6 - child care centers, 1 - group home, 1 - license-exempt facilities and 19 family home child care providers.

With any questions, please call ACHD’s EPHS at ACHD: 573-581-1332.

Mosquito Season’s Near

The Audrain County Health Department has requested and received a grant to provide small supplies of Mosquito Bits®, a biological mosquito control (larvacidal agent) available for Audrain County residents. The product kills mosquito larva before they mature into troublesome adults, minimizing the spread of breeding, biting, and disease spreading mosquitoes. Mosquitoes aren’t just a nuisance anymore; they’re a serious health risk.

Remember to always follow directions when applying any pest control.

Mosquito Bits®

Mosquito Bits® are a highly selective microbial insecticide effective against mosquitoes in a variety of habitats. When spread over the surface of containerized water, the Mosquito Bits® release a biological mosquito larvicide at the water’s surface. Mosquito Bits® (larvicide) gradually settles in the water where it is eaten by mosquito larvae growing there, killing the larvae before becomes an adult. Mosquito Bits® may be used in all types of containerized standing water sites where mosquito larvae grow. The treatment will induce a quick kill within 24 hours.

Product Label:

MSDS:

If you are a resident of Audrain County and are having problems with mosquitoes, we welcome you to stop by our office at 1130 South Elmwood Drive, Monday through Friday 8:00 AM to 4:00 PM to pick up a supply. You may also call 573-581-1332 for more information. Supply is restricted to one unit per household per season and proof of residence is required.
The Mission of ACHD:
To protect and promote the public health and community well being of the residents of Audrain County.

The Audrain County Health Department is for everyone in our community.
Office hours: Monday through Friday, 8 am - 4 pm
Our services include: Blood Pressure Screening, WIC, Foot Clinic, Immunizations, STI, Pregnancy, and TB Skin testing, Birth and Death Certificates, Environmental Public Health Services, and much more.

ACHD’s On the Move...

Congratulations to the following staff for professional development accomplishments:

- Greta Hopke, RD earned her IBCLC as an International Board Certified Lactation consultant.
- Sarah Palmer was recently accepted into the Environmental Health program at Columbia College.
- Linda Spurling earned her SHRM-CP credential upon passing the national Human Resources certification exam.
- Katie Swaim renewed her CPN credential, as a Certified Pediatric Nurse.
- Linda Spurling & Sandra Hewlett became nationally certified in Everbridge, an Emergency Response System.
- Sandra Hewlett earned her re-certification as a Fellow in the American College of Healthcare Executives.
- 5 ACHD staff became certified as American Cancer Society Fresh Start smoking cessation facilitators: Jodi Elliott, Sandra Hewlett, Linda Spurling, Katie Swaim, and Becky Wieberg.
- 5 ACHD staff earned certification as infant/child car seat safety technicians: Jodi Elliott, Lawanah Gillette, Brandi Meyer, Sarah Palmer, and Emily Stotler.
- Chris Newbrough became certified as a Ham Radio Operator.