COMMONLY ASKED DRINKING WATER QUESTIONS

Why should I test my drinking water?

Approximately 23 million U.S. citizens rely on their own private drinking water supplies. Most of these supplies are drawn from ground water through wells, but some households also use surface water or cisterns. These households must take special precautions to ensure the protection and maintenance of their drinking water supplies.

How often should I test my drinking water and what kind of testing should I have done?

Private water supplies should be tested annually for nitrate and coliform bacteria to detect contamination problems. They should be tested more frequently and for more potential contaminants, such as radon or pesticides, if a problem is suspected or if circumstances change (ex. flooding, broken piping, etc.).

Where can I have my drinking water tested?

The Vanderburgh County Health Department Laboratory (VCHD) accepts drinking water samples from private well water sources only for bacteriological analysis (coliform/E.coli) at a cost of $20.00 (cash or check only made out to VCHD-no debit or credit cards). VCHD does not test City of Evansville water for private citizens. Other testing can be provided by a certified environmental lab such as Microbac Laboratories, their number is 812-464-9000. Call for pricing/testing information.

What do I need to collect a sample for bacteriological analysis at the Vanderburgh County Health Department Laboratory?

Anyone using the VCHD Laboratory must purchase a "kit" from the lab prior to sample collection. This "kit" includes a sterile water collection bottle and a request form. If your system has a chlorination system, notify the lab so that the proper collection bottle is used. The request form must be properly completed (gray area filled out) and returned to the lab with the sample.

Where and when can I purchase a drinking water bacteriological analysis collection "kit"?

A collection "kit" can be purchased from the VCHD Laboratory Monday through Friday from 8:00AM to 4:00PM with the exception each day of 12:00-12:30PM when we are closed for

lunch. The VCHD Laboratory is located at 420 Mulberry St. Evansville, IN 47713. Our phone number is 812-435-5568.

How do I properly collect the sample?

All during specimen collection, care must be taken to avoid contaminating the specimen. Thoroughly wash your hands with soap and hot water. Select a non-aerated or non-screened faucet. The bathtub faucet is often used. Decontaminate the faucet with a bleach and water solution (10 parts water to 1 part bleach). After decontamination, allow the water to run freely for at least 5 minutes to flush out pipes and fixtures. Reduce the water flow. Remove the plastic seal on the collection bottle. Carefully unscrew the bottle cap. Do not touch the inside of the cap or bottle with your hands!! Fill the bottle to the top of the straight side of the bottle. Replace the cap and tighten.

How quickly do I need to return the properly collected sample to the laboratory?

A sample should be delivered to the VCHD Laboratory within 2 hours of collection. If this is not possible, the sample can be refrigerated, but no sample will be accepted if 24 hours has passed since collection or if the sample has been unrefrigerated for greater than 2 hours.

When can I submit the sample for testing?

Samples are accepted Monday through Thursday, 8:00AM-3:30PM with the exception each day of 12:00-12:30PM when we are closed for lunch. We do not accept water samples for testing on Friday.

How long does the bacteriolgical analysis take?

The test takes 24 hours.

Explain the bacteriological test.

The bacteriological test includes a presence/absence determination of coliform bacteria in the sample after 24 hours of incubation. If coliforms are present, then the sample is examined for the presence/absence of *E. coli.*

What are coliform bacteria?

Coliform bacteria are the primary indicators of contamination from animal pets, rodents, stormwater runoff and human sources. They are widely distributed on plants and in soil, water and the intestines of humans and animals.

What is *E. coli*?

E. coli is a type of coliform bacteria that is part of the fecal flora of both humans and lower animals. Some strains of *E coli* can cause severe and life-threatening disease.

What are the criteria for a satisfactory bacteriological test?

The absence of coliforms and *E coli.*

What is an unsatisfactory bacteriological test?

The presence of coliforms or coliforms/*E. coli* in the sample.

What does an unsatisfactory result tell me about my drinking water?

Coliform bacteria. although not always disease causing themselves, indicate the possibility that other harmful organisms may be present in your water.

E. coli, a type of coliform bacteria, present in drinking water indicates recent sewage or animal waste contamination. Sewage may contain many types of disease-causing organisms.

How does *E. coli* get in my drinking water?

Since it is found in human and animal waste, rainfall, snow melt or any other type of precipitation may cause it to be washed into creeks, rivers, streams, lakes and groundwater. When these waters are used as sources of drinking water and the water is not treated or inadequately treated, *E. coli* may end up in drinking water.

What should I do to make my drinking water safe?

If your drinking water is unsatisfactory, it will be necessary to decontaminate your well or cistern. The Vanderburgh County Health Department will provide you with a chlorination procedure. If the system has been left sitting for a long period of time, it can sometimes take more than one chlorination procedure to clean the system. If repeated chlorinations do not correct the problem, it may be necessary to look for an underlying problem causing the contamination (ex. cracked pipe). A permanent decontamination system can also be installed for continuous protection Possible choices include chlorine, ultra-violet, or ozone.

How will I be notified of my test result?

You will receive your results according to the information provided on the request form. Results are placed in the mail the same day the test is completed. We will call you if your test fails.

Do the following to protect your drinking water by protecting your ground water supply:

- **Periodically inspect exposed parts of the well for problems such as cracked, corroded or damaged well casing, broken or missing well cap, and settling and cracking of surface seals.**

- **Slope the area around the well to drain surface runoff away from the well.**

- **Install a well cap or sanitary seal to prevent unauthorized use of, or entry into the well.**

- **Disinfect drinking water wells at least once per year with bleach or hypochlorite granules according to manufacturer's directions.**

- **Have the well tested once a year for coliform bacteria, nitrates, and other constituents of concern.**

- **Keep accurate records of any well maintenance, such as disinfection or sediment removal, that may require the use of chemicals in the well.**

- **Hire a certified well driller for any new well construction, modification, or abandonment and closure.**

- **Avoid mixing or using pesticides, fertilizers, herbicides, degreasers, fuels, and other pollutants near that well.**

- **Do not dispose of wastes in dry wells or abandoned wells.**

- **Do no cut off the well casing below the land surface.**

- **Pump and inspect septic systems as often as recommended by your local health department. VCHD recommends every 3-5 years.**

- **Never dispose of hazardous materials in a septic system.**

Website for well information: http://www.in.gov/isdh/23258.htm