



# FACT SHEET

OFFICE OF DRINKING WATER & MUNICIPAL ASSISTANCE – ENVIRONMENTAL ASSISTANCE CENTER 800-662-9278

## INSECTS IN YOUR WATER WELL

Every well owner wants a clean, safe, and reliable drinking water supply. Well owners should protect their water supplies from insect infestation by preventing their access into the well. Illness-causing bacteria and viruses can be carried into the well by insects.

Some older style well caps have a gap between the cap and the well casing pipe. Earwigs and other insects can gain access to the well through this gap. Once inside the well, insects often build nests. They can fall into the water and can be drawn into the pump intake when the pump starts. Ground up insect parts can wind up in a glass of drinking water or they can be trapped by the screen in a faucet aerator and not appear at the tap.

Earwigs find the moist interior of a well casing more to their liking than most other insects. They are brown insects about one inch long and one-quarter inch wide. They are recognized by having a fierce looking tail pincer. Earwigs are scavengers on dead animal and decaying plant matter. Some species are predators and others feed on live plants.

They are primarily active at night and find shelter during the day in damp, cool places like woodpiles or under vegetation.

### How to check for insects

First, remove sink faucet aerators to check for insect parts. If your water system has a cartridge-type filter, it should be thoroughly inspected. An easy way to check your well for earwigs is to remove the well cap (turn off electricity to pump beforehand) and shine a flashlight down the casing pipe. Earwigs will be seen scurrying on the inner wall of the well casing pipe. Even if you don't see any earwigs, look for cocoons or cobwebs on the underside of the well cap or inside of the casing. They are a sign that your well is vulnerable to insect infestation. Modern well caps have screened air vents and tight seals to keep out insects. If your well was installed after 1985, it should already have an insect-proof cap.

### How to stop insects from entering a well

- ✓ Remove debris such as woodpiles and vegetation from around your well casing. (**DO NOT** use insect sprays in or near your water well.)
- ✓ Install an insect-proof well cap. Michigan well drilling contractors and pump installers are registered to perform this type of work.
- ✓ Inspect the wellhead (cap, screened vent, and casing) at least annually to make sure the cap is securely attached to the casing and has not been damaged.

### Treating an infestation

1. Flush pressure tank and hot water tank to remove insect parts.
2. Remove insect parts from filters, faucet aerators, sink hand sprayers, showerheads, and other water using devices with a screened opening.
3. Hire a well drilling contractor to disinfect the well and water system with a chlorine solution. Chlorine will kill bacteria that have been brought into your well by earwigs or other insects.

Sometimes it is necessary to disinfect the well more than once. In severe infestations, a well drilling contractor must remove the accumulated insects from the bottom of the well. Bailing or blowing with compressed air is necessary before a safe bacteriological water sample can be obtained.

## **Bacteriological water test**

Coliform bacteria are intestinal organisms that come from septic systems, animal waste, or surface runoff. They can enter a water well through faulty or deteriorated well construction. Earwigs and other insects carry coliform bacteria into a well. These indicator bacteria normally do not cause illness in healthy individuals, but they signal the possible presence of harmful bacteria.

A positive test doesn't automatically mean that insects are in your well. If insects have been observed within a well that tests positive for coliform bacteria, they are likely to be the source of the bacterial contamination.

An annual water test for coliform bacteria is recommended. However, if the taste or clarity of the water suddenly changes, testing should be done immediately.

*For information or assistance on this publication, please contact the Office of Drinking Water and Municipal Assistance, through the DEQ's Environmental Assistance Center at 800-662-9278. This publication is available in alternative formats upon request.*

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