

METHOD FOR COLLECTING DRINKING WATER SAMPLES FOR BACTERIOLOGICAL ANALYSIS

This method is for collection of safe drinking water samples. Only samples collected in accordance with these instructions will be accepted. This test is intended as a microbiological examination of water samples to determine sanitary quality. No chemical analyses will be performed. As pathogenic organisms (i.e. giardia, hepatitis) are difficult to test for the U.S. EPA recommends the testing of indicator species. This test will show if coliform or E.coli bacteria are present in your drinking water. Coliforms occur naturally in the intestines of humans and other animals as well as in surface water or topsoil. Their presence indicates contamination from one of these sources. E.coli bacteria are discharged in the feces of humans or of warm-blooded animals and their presence indicates recent fecal contamination of the water source. No count is done as the U.S. EPA considers water unsafe for drinking if these organisms are present in any number. Christian County Health Department recommends at least twice yearly water sampling (fall and spring) to establish a baseline of information on the water supply as factors impacting the well and the groundwater may change seasonally and from year to year.

DO NOT OPEN BOTTLES UNTIL ALL INSTRUCTIONS HAVE BEEN READ!

Samples should be taken from a smooth-nosed cold water tap, if possible. Avoid samples from leaking taps that allow water to flow over the outside of the tap or from frost-proof hydrants or hot-cold mixing faucets since it is not practical to sterilize these fixtures. A faucet on the side of the structure is often the best choice.

STEP 1. Remove aeration devices and screens from faucets before collection. Open tap fully and let water run for 2 to 3 minutes or until service line is thoroughly flushed.

STEP 2. Flame sterilize the nozzle end of the tap being certain the open end has been well heated. **(CAUTION: SOME FAUCETS CANNOT BE HEATED BECAUSE THEY ARE PLASTIC.)**

OR

Chemically disinfect the tap by rinsing both the inside and outside of the tap with a solution made by mixing ¼ ounce (1.5 teaspoons) of household bleach with one gallon of clean water. If tap cleanliness is questionable, allow the solution to remain in contact with the tap for 15 minutes or increase the strength of the solution to ensure adequate disinfection. Chemical disinfection should be used for plastics or other sites where flame sterilization is not practical.

STEP 3. Flush the tap for an additional 2-3 minutes, then reduce to a gentle flow to permit filling the bottle without splashing. **DO NOT FILL PAST THE BLACK LINE.**

STEP 4. **DO NOT RINSE SAMPLING BOTTLE AND KEEP BOTTLE CLOSED UNTIL IT IS TO BE FILLED.** The bottle contains a chlorine neutralizer in crystal form. They are sterile and ready for use.

STEP 5. Grasp the cap along the top edge and remove. **DO NOT TOUCH THE INSIDE OF THE CAP OR BOTTLE.**

STEP 6. Hold the bottle so water entering it will not come in contact with your hands. Allow water to flow smoothly from tap and fill bottle to the black line.

STEP 7. Replace cap and tighten securely.

STEP 8. Complete form and keep with the sample.

STEP 9. Return water sample to Christian Co. Health Dept. within 20 hours of time collected. Hours: 8:00–12:00 and 1:00-4:00 Monday through Thursday. Samples brought in by 4:00 pm will be set that day, and results will be available the next day at 4:00 pm. NO SAMPLES WILL BE ACCEPTED ON FRIDAY OR ON A DAY PRECEDING A HOLIDAY, as there will not be staff available the next day to read the results.