In 1974, the Safe Drinking Water Act was passed to aid in the protection of human health and welfare. The Safe Drinking Water Act and its amendments included federal standards for drinking water contaminants. Enforcement of these standards resulted in the requirement of water suppliers to test for contaminants, install new types of filters, adopt appropriate methods of treatment and to notify consumers of any violation of the standards. Such regulations are not in place for private water supply sources. Ultimately, private water well owners are responsible for the quality and safety of the drinking water they and their family use.

Many contaminants have no taste, color or odor. Thus, you cannot rely on your own inspection of a sample to let you know if it is safe to drink. Laboratory analysis of drinking water can provide information on the most common and most likely contaminants.

At a minimum, testing for bacteria and nitrate is strongly recommended on an annual basis. However, for coliform to be a reliable indicator of safe water, testing at least three to four times per year is recommended. Additional or more frequent testing should be sought when events occur such as:

Flooding or spills that could cause contamination
Frequent or unexplained illness
Changes in water color, taste or appearance
Other evidence that water quality may have changed is observed.

Good wellhead protection may provide the best defense against sources of contamination. The following 12-point checklist offers guidelines to aid in wellhead protection.

**12-Point Check**

**Do at least once a year:**

Check to see that well casing is free of cracks or other leaks from water table to at least 1 foot above the ground surface or highest flood level.

Check that the sanitary seal is secure and watertight and is a KDHE-approved type.
Make sure the ground slopes away from the well for at least 15 feet in all directions.

Shock chlorinate the well and water system.

Test water and compare the results with analysis records. Maintain a file of test results, records and information about the well.

Always:

Have a licensed driller or knowledgeable landowner do all the work on the well or well casing and be sure well meets all current construction standards. All construction, reconstruction and plugging measures are regulated by Kansas Department of Health & Environment Article 12 and Article 30. For further information, contact your local Environmental Health Department or extension agent.

Find and fix the cause of any change in water taste, color or odor. Shock chlorinate the well.

Maintain 50 feet (100 preferred) of open space between the well and any buildings, waste system, parked vehicle, equipment, compost or other contamination source.

Store chemicals such as fertilizer, pesticides, oil, and fuel or paint at least 100 feet down slope.

Properly plug all abandoned wells and other holes not used in the last two years and plug all unused cesspools and septic tanks.

Prevent backflow and back-siphonage by maintaining an air gap above the container you are filling or by using an adequate backflow prevention device.

Shock chlorinate the well after any service work on the pump, well or water system.