In deciding what additional tests to do, it is best to understand the history of land use at your property and the abutting properties. You may wish to inquire with neighbors, town officials and state agencies. This will help you to focus your list of the less routine items to test.

The less-routine tests may not be performed at all laboratories.

**When To Test**

Recent regulations (still under development) require prospective homebuyers to test the water in a home with a private well before purchase.

Water quality in wells is generally stable, and if a change is going to occur, it occurs slowly. Thus the interval between water quality tests can be once per year for some items and less frequently for others (see chart), provided the well is properly constructed and located in a safe area.

However, the following conditions would prompt more frequent testing:

- Heavily developed areas with land uses that handle hazardous chemicals.
- Recent well construction activities or repairs. HEALTH recommends taking a bacterial test after any well repair or pump or plumbing modification, but only after disinfection and substantial flushing of the water system.
- Contaminant concentrations above state or federal standards found in earlier testing.
- Noticeable variations in quality -- e.g. water quality change after a heavy rain or an unexplained change in a previously trouble-free well (i.e. funny taste, cloudy appearance, etc.).

When taking any sample, HEALTH recommends that it be taken after a heavy rainstorm. These events tend to highlight conditions of improper well construction or poor soil filtration.

**What the Tests Tell You**

Results will reveal the level at which any of the tested substances were found in your water sample. The mere presence of contaminants in well water does not necessarily imply that there is a problem. However, when levels exceed state or federal health standards, you should take steps to correct the situation.

You should contact a licensed well driller/pump installer for any well repairs or replacement. Several methods are available from commercial contractors to treat contaminated water. HEALTH has links to informational documents on the web concerning all common water quality problems and their solutions.

**For More Information**

RI Dept. of Health
Office of Drinking Water Quality
3 Capitol Hill - Room 209
Providence, RI 02908-5097
(401) 222-6867
www.health.ri.gov

This brochure was funded in part by the US Environmental Protection Agency.
Many residential activities, such as the use of fertilizers and pesticides, fueling of lawn care equipment, and disposal of household chemicals can contaminate the ground when done improperly. An improperly maintained on-site residential septic system can pose a threat to your well. That is why taking measures to protect your well from contamination is so important.

**Recommended Tests**

The following tests identify common contaminants found in our state's well water. Although more tests could be added, this list provides a cost-effective, reasonable overview of a well's water quality. It is not necessary to do all of these tests at one time.

#### Standard Analysis

This basic analysis covers the most common contaminants. Some of these contaminants pose health-related concerns, while others only affect aesthetics (taste and odor).

#### Naturally Occurring Radioactive Elements

Dissolved radon is a common well water problem. Presently, there are no federal or state standards for radon in drinking water, only suggested action levels. HEALTH estimates that most private wells in Rhode Island exceed the suggested action levels, so testing for radon is important. Because the dissolved radon gas is released to the air during normal water use, you should consider checking your indoor air radon levels as well.

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**Contaminants & Testing Frequency**

<table>
<thead>
<tr>
<th>Standard Analysis</th>
<th>Testing Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Bacteria</em></td>
<td>Yearly</td>
</tr>
<tr>
<td><em>Nitrate/Nitrite</em></td>
<td>Sodium</td>
</tr>
<tr>
<td><em>Fluoride</em></td>
<td>Every 3-5 yrs</td>
</tr>
<tr>
<td><em>Iron</em></td>
<td>Every 3-5 yrs</td>
</tr>
<tr>
<td><em>Lead</em></td>
<td>Every 3-5 yrs</td>
</tr>
<tr>
<td><em>Manganese</em></td>
<td><em>pH</em></td>
</tr>
<tr>
<td><em>Turbidity</em></td>
<td></td>
</tr>
</tbody>
</table>

*Minimum requirements for property transfer.

Radon Every 3-5 yrs

VOCs Every 5-10 yrs

Naturally occurring radioactive minerals, such as radium and uranium may be dissolved in well water. A Gross Alpha Screen is a simple test to judge whether further testing for radium or uranium might be needed.

#### Volatile Organic Compounds (VOCs)

The most common VOCs come from gasoline compounds (such as MTBE and benzene) and industrial solvents. MTBE can be found in well water even in remote areas.

#### Additional Tests

Circumstances relative to your well may require additional testing not described here. For instance, HEALTH does not recommend routine testing for things like pesticides, herbicides, or synthetic organic compounds, mainly because of the high cost. However, such testing may be warranted, depending on where you live.