

	ACCEPTABLE or SAFE LIMITS	SOURCES	EFFECTS
Total coliform bacteria	Less than 1/100 ml	Bacteria usually from environment such as soil, vegetation, etc.	May cause diarrhea & vomiting
E.coli bacteria	Less than 1/100 ml	Also known as enterococci, typically from feces	May cause diarrhea & vomiting
Nitrate-N	Less than 10 mg/L	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits	May cause infant blood problems
Nitrite-N	Less than 1 mg/L	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits	May cause infant blood problems
pH	6.5-8.5	<p>Measures the acidity or alkalinity, pH scale ranges from 0-14 with 7 being neutral</p> <p>Below 7 is considered acidic and above 7 is considered alkaline</p> <p>Naturally rain water is 5.5 on the pH scale</p> <p>Most water in Maine is below 7 on the pH scale</p>	<p>Strongly acidic or alkaline water is corrosive and can dissolve toxic materials from plumbing (such as copper piping or lead soldering on piping) that can cause health concerns</p> <p>Acidic water dissolves copper leaving a tell-tale blue or green staining on fixtures</p> <p>Corrosive nature can lead to costly repair or replacement of plumbing system</p> <p>Acidic and alkaline water can have an adverse effect on water treatment systems</p>
Turbidity	Less than 5 NTU	Small particles of solid matter, possibly from soil runoff	Water can appear opaque or cloudy

			<p>Sand or lead shavings could be in your water</p> <p>May cause plumbing, hot water tanks, etc. to plug up</p>
Copper	Less than 1.3 mg/L	Natural deposits or corrosion of household plumbing	<p>Short term exposure: Gastrointestinal distress</p> <p>Long term exposure: liver or kidney damage</p>
Iron	Less than 0.3 mg/L	<p>Natural deposits</p> <p>Over 25% of Earth's crust is iron, so it is naturally one of most common reasons for water treatment</p> <p>Iron manifests itself in two forms: Ferric Iron (suspended solid, visible in water) and Ferrous Iron (dissolved solid, colorless until exposed to air)</p>	<p>Water may appear colored, ranging from light yellow to bright orange</p> <p>Stains fixtures and/or clothes</p> <p>Can impart unpleasant taste, often bitter or metallic in taste</p> <p>Will build up in plumbing, sometimes to the point of completely blocking pipes</p>
Manganese	Less than 0.05 mg/L	<p>Natural deposits</p> <p>A relative of iron</p>	<p>Black or brown staining of fixtures</p> <p>Perhaps black-brown string or yarn-like substance in toilet tanks</p> <p>Can impart unpleasant taste, often bitter or metallic in taste</p> <p>Higher levels have been linked to impulse control & short fuse response in children</p>

Hardness	<i>Degree of Water Hardness</i>	<i>Expressed as GPG</i>	<i>Expressed as mg/l</i>	Based on the amount of dissolved calcium and magnesium present in water	<p>Can create scales in cold water piping</p> <p>Heated hard water can build up in water heaters, boilers, and other appliances; and can boost heating bills by as much as 20%</p> <p>Unightly film or scum in tub & other fixtures; usage of more soap is required to clean;</p> <p>Build up on skin & hair; can cause dry skin, brittle hair, skin irritation & clogged pores</p> <p>Graying of whites or loss of brightness in colored laundry; can cut back life cycle of clothing by 35%</p> <p>Calcium & Magnesium will be absorbed by foods cooked in water & foods are more likely to shrink & become tough</p>
	Soft	0-3.5 gpg	0-59.85 mg/l		
	Moderately Hard	3.5-7.0 gpg	59.85-119.70 mg/l		
	Hard	7.0-10.5 gpg	119.70-179.50 mg/l		
	Very Hard	10.5 gpg +	179.050 + mg/l		
Chloride	None per State of Maine 250 mg/L per National Secondary Drinking Water Regulations recommendation		Possible salt intrusion from sea water or naturally occurring deposits in bedrock	<p>Salty taste</p> <p>Well close to road and salts from plowing roads leaching into well water</p>	
Arsenic	Less than 10 ug/L		Natural deposits or from manufacturing or herbicides	<p>May cause cancer/low birth weight</p> <p>May cause bladder, lung, skin,</p>	

			<p>kidney, nasal passage, liver and prostate cancer</p> <p>Recent studies in school-age children have reported association between neurological behavior functions and exposure to arsenic via drinking water</p>
Lead	Less than 15 ug/L	Corrosion of household plumbing or solder, erosion of natural deposits, brass alloy fixtures	<p>May cause brain damage</p> <p>Delay in physical or mental development in children</p> <p>May cause high blood pressure, kidney problems in adults</p>
Sodium	Less than 120 mg/L	Metallic element naturally found and highly soluble	<p>Possible salt intrusion from sea water or naturally occurring deposits in bedrock</p> <p>Salt runoff from plowing roads may be leaching into well water (if well is close to road)</p>
Uranium	Less than 30 ug/L	Natural deposits	<p>May cause kidney problems</p> <p>May effect kidneys & blood pressure</p> <p>Cancer risk is raised</p> <p>Test for radon if uranium is present</p>
Radon	Less than 4000 pCi/L	<p>Natural deposits</p> <p>Radon is a gas</p>	<p>May cause cancer</p> <p>Radon Gas causes lung cancer and</p>

			<p>is linked to stomach, liver and brain cancer</p> <p>Chemically damages your DNA</p> <p>In Maine about 25% of lung cancer deaths have been linked to homes with radon gas in the well water</p> <p>Up to 1/3 of all wells in Maine have radon gas of over 4000 pCi/L</p> <p>10,000 pCi/L of radon gas in water = 1 pCi/L in air</p>
Tannins	None	Comes from vegetation	<p>As little as .02 and will notice tea colored water</p> <p>Causes staining and/or build up on fixtures & in plumbing</p>
Fluoride	Between 0.6 mg/L and 1.7 mg/L	Natural deposits	If too little, increased chance of tooth decay and if too much, stained teeth
Sulfur	None	Hydrogen sulfide gas	<p>Water will smell like rotten eggs</p> <p>Odor will be evident at levels as low as 0.5 mg/L</p>