



Making Sense of “Right to Know” Reports

(sometimes called “Consumer Confidence Reports” or “Water Quality Reports”)

Updated Fall 2002

What is a Drinking Water Right to Know Report?

Water companies must issue Right to Know Reports to their customers before July 1 each year. These reports are required by a law passed in 1996 called the “Safe Drinking Water Act Amendments of 1996.”

Who writes and issues the reports?

“Community water systems” — that is, the public and private companies that provide you your tap water and may send you a water bill — must write and distribute the reports.

Can I trust a report written by the company that supplies my water?

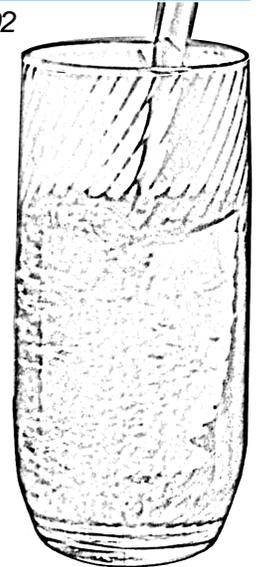
Drinking water testing and reporting, and the drafting of the Right to Know Reports, is done mostly on the “honors system.” State and federal agencies can audit or double-check only a tiny percentage of water tests and reports for accuracy or fraud. Though we believe most of the reports present accurate data, there have been some rare reports of test falsification. “Spin” in presenting and explaining the test results, and about the water’s safety, has been occurring when some drinking water companies try to put the best possible face on their water.

What information has to be included in the reports?

A report is required to include, among other information:

- The lake, river, aquifer (underground water area) or other source of your drinking water;
- A brief summary of the pollution threats to the sources of your drinking water based on investigations called “sourcewater assessments,” that states and water companies are completing over the next few years;
- Information on how to get a copy of the water company’s “source water assessment” or any “sanitary surveys” that have already been done;
- The level (or range of levels) of certain contaminants found in local drinking water, as well as EPA’s enforceable standard (“MCL”) and health-based goal (“MCLG”) for comparison (see “MCL” and “MCLG” definitions below);

- The likely polluter or category of pollution for that contaminant in the water supply;
- The potential health effects of any contaminant detected in violation of an EPA standard (“MCL,” “Action Level,” or “Treatment Technique”) and an accounting of the system’s actions to restore safe drinking water;
- The water system’s compliance with other drinking water-related rules;
- A statement for vulnerable people about avoiding the parasite *Cryptosporidium* because it is thought to be present in so many drinking water sources;
- Information on the health effects of nitrate, arsenic, lead or trihalomethanes when these contaminants are found at levels above half of EPA’s standard (“MCL”);
- Phone numbers of additional sources of information, including the water system and the US Environmental Protection Agency (EPA) Safe Drinking Water Hotline (800-426-4791.);
- Information on how an individual can find out about public meetings where decisions about your water are being made.



My report says our water meets standards and is “safe,” can I believe it?

These reassurances may be true. You should be cautious, however, about accepting blanket statements that water is totally safe — or safe for everyone in the community — even if it meets all standards.

The EPA’s standards have some potential weaknesses:

- Some important contaminants are not regulated, (such as some infectious parasites, some radioactive contaminants like radon, and many pesticides) but still may be in your water.

Campaign for Safe and Affordable Drinking Water

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- Some EPA standards are old and not protective of health. The EPA standard for arsenic, a known cancer-causing agent, has not been updated since 1942; a recent report by the National Academy of Sciences says the current standard is not health protective.
- Some EPA standards may protect the average adult, but may not protect especially vulnerable people—such as some young children, the frail elderly, people on drugs that suppress their immune system (like cancer chemotherapy or transplant patients), or people with AIDS.
- EPA standards are set in a sometimes-political process based on what water treatment plants “feasibly” can do considering treatment costs and technology. Also, a new law could allow weaker standards in the future based on “cost-benefit” analysis. That’s why the right to know reports must list, for purposes of comparison, EPA’s health goals, or “Maximum Contaminant Level Goals” (MCLGs). (See definitions below.)

What are “MCLs” and “MCLGs”, and why should I care?

A “Maximum Contaminant Level Goal”(MCLG) is the level of a contaminant below which the EPA has found there is no known or expected risk to health.

A “Maximum Contaminant Level” (MCL) is EPA’s enforceable standard for drinking water—set in a sometimes political process that is partly based on available treatment and costs, not strictly based on health considerations.

Some MCLGs are much stricter than the MCLs. For example, the MCL for Radium is 5 (picocuries per liter, a measurement of radioactivity) based on treatment costs, but the health goal or MCLG is zero, since there is no safe level of this known cancer-causing contaminant.

Just because the level of a contaminant may be below the EPA’s enforceable standard “MCL,” doesn’t mean that your water is totally safe, if it occurs at a level over the health goal or “MCLG.”

My report has lots of numbers in a table that lists both the “Range”and the “Average” level of each contaminant found. Why’s that so important?

Contaminant levels in tap water can vary a lot over time, and sometimes depend on your location in the water system. So the “average” level of a contaminant in your system may be misleading:

- At some times during the year, everyone on the system may be drinking lots more than the yearly “average” for the system. For example, some pesticides like Atrazine may run off of farm fields and contaminate your water at high levels during the spring, but despite these seasonal “spikes,” the average levels year-round may be much lower.

You may often (or usually) drink more of some contaminants than the “system average,” simply because of where you live. For example:

- Lead is found at high levels only at certain locations, due to lead pipes.
- Trihalomethanes (or THMs, the byproducts of chlorine disinfection) vary because they can build up with time as water travels through the pipes, so people living far from the water treatment plant may get much more THMs than people living near the plant. THMs are suspected to cause different types of cancer and are linked to birth defects and miscarriages.
- These differences can be important because some contaminants, such as lead, arsenic, or THMs, at high levels may cause harm even after relatively brief exposures, or “spikes.”

The “Range” column shows that my water sometimes was over the EPA standard (MCL), but it says there was no violation. How can that be?

EPA’s MCLs often are based on “average” levels, based on multiple tests. So, for example:

- The standard for Atrazine is 3 parts per billion (3ppb), based on an average of 4 “quarterly samples” (one sample taken every 3 months for a year). So the Atrazine level can jump well over 3 ppb in the spring runoff season, but may be below that level during part of the year, and still average under 3 ppb for the year. Technically, no violation would have occurred.
- For some contaminants (like trihalomethanes), EPA allows water systems to test at multiple locations and average the test results together (though more testing is supposed to be done where levels are expected to be high). Thus, some consumers may drink water at levels that often exceed the health standard, but technically no violation may have occurred. Some health experts criticize this “averaging” approach as inadequate to protect the public from short-term high level exposures to some contaminants that may harm people.

What is an “Action Level,” and why is it that our water sometimes contains lead at a level over that level, but there was no violation?

EPA has set an “action level”(AL) instead of an MCL for a few contaminants — lead and copper. Exceeding this AL is not a “MCL” violation — it signals a problem and triggers “Treatment Techniques”. **Thus:**

- A water system generally only has to treat to reduce levels of a contaminant like lead if over 10% of the households tested by the system exceed the AL for the contaminant.
- For example, the AL for lead is 15 parts per billion (ppb). If a water company tests 100 homes for lead, generally up to 10 homes can legally exceed 15 ppb before the system is required to treat to reduce lead levels. The highest risk houses are supposed to be tested. Some areas of a community legally can have water containing levels far in excess of the AL, yet there is no violation.

Why does the report have all of these numbers, but no explanation of the health effects of the contaminants found in my water?

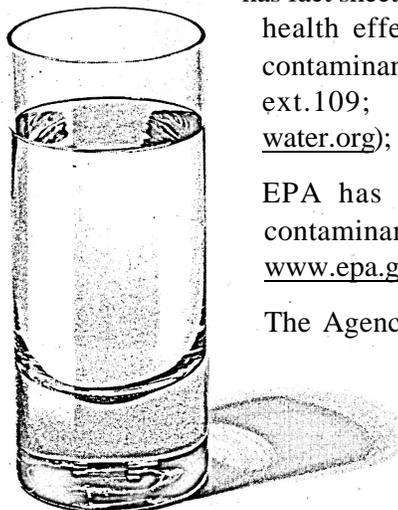
Some water utilities, state, and local officials fought hard against having to disclose the health effects of all contaminants found in your drinking water. With a few exceptions (nitrate, arsenic, lead or trihalomethanes, as noted above) EPA rules don’t require disclosure of the health effects of contaminants found in your water, unless the system violated EPA’s enforceable standard (“MCL”) for that contaminant.

So, how do I find out if this stuff in my water is risky?

The Campaign for Safe & Affordable Drinking Water has fact sheets with summaries of the health effects of some common contaminants (call 202-895-0420 ext.109; www.safe-drinking-water.org);

EPA has information on each contaminant (call 800-426-4791; www.epa.gov/safewater);

The Agency for Toxic Substance Disease Registry (ATSDR) has further info on many chemical



contaminants (www.atsdr.cdc.gov/toxpro2.html);

The National Library of Medicine has free databases (Medline and Toxnet: www.nlm.nih.gov).

My report lists as the “Source of Contaminant” all kinds of pollution sources that don’t exist anywhere near us. How can that be?

Water systems are required to list the probable source of any contaminant they find. If systems don’t know the contaminant’s source, they can simply use some standard EPA language that lists categories or common sources of that contaminant nationally. These may not accurately reflect the situation in your area, or may be so broad as to be hard for you to identify.

Why doesn’t my report name any local polluters as contamination sources?

EPA’s rules require water companies to name the likely source of any contaminant found in your water, but it could be that your system doesn’t know who the specific polluters are.

Some water companies that may have a good notion of who’s polluting might decide not to name them — opting instead for the standard EPA categories or sources mentioned above —to avoid the political heat for “naming names.” But if they know who’s polluting, EPA rules say they must name the polluter.

Your water company may not have completed a “source water assessment” — the investigation of pollution sources that all water companies must do over the next few years —or any “sanitary surveys.” Both of these will help the water company identify sources of pollution more exactly, and the information is required to be in your right-to-know reports when either one of these kinds of studies is complete.

My report has a long section warning vulnerable people about *Cryptosporidium* (“Crypto”), but then says it hasn’t been found in our treated tap water. Why all the fuss?

Crypto is a tiny parasite from some animal waste or human feces that’s invisible and notoriously resistant to treatment — it can live after sitting in pure chlorine bleach! It is believed to be present in most surface waters in the United States.

Crypto has caused many disease outbreaks, including the infamous 1993 Milwaukee, Wisconsin waterborne outbreak that sickened over 400,000 people and killed about 100.

Crypto is hard to find in a laboratory (especially in small amounts.) While many water systems find it in their untreated “raw” water, it generally isn’t detectable at the lower levels that occur in finished, treated water. This means that *Crypto* may be present, but laboratory tests can not find it.

Undetectable levels of *Crypto* can cause illnesses. In Las Vegas, Nevada, for example, the Centers for Disease Control & Prevention (CDC) concluded there was a water borne disease outbreak, including some deaths, from *Crypto*, even though it was never found in the tap water.

EPA requires water systems to warn their customers that vulnerable people (such as people undergoing cancer chemotherapy or who have had a transplant, the frail elderly, infants, and those living with HIV/AIDS) are at particular risk from *Crypto* and other waterborne organisms. Infections can be fatal for these “immune compromised” people.

Healthy adults also can get sick from these organisms (symptoms may include nausea, severe cramps, and diarrhea); usually they can fight off the infection.

Vulnerable people can protect themselves from potential *Crypto* in tap water by boiling water for one minute or by using a filter that is certified by the National Sanitation Foundation to remove cysts. These filters must be changed as frequently as directed in order to be effective.

How can I find which polluters may be affecting my drinking water and more about water quality in my area?

Because there are two major federal laws dealing with water — the Safe Drinking Water Act and the Clean Water Act — there are many different programs and thus sources of information on water in your area. The Safe Drinking Water Act seeks to ensure that water is “drinkable,” the Clean Water Act seeks to ensure that water bodies are “fishable and swimmable.” The regulations and programs resulting from both of these laws need to be better linked together; here are some suggestions for how you can begin

to find out more:

- As noted above, EPA’s Safe Drinking Water Hotline is one place to start — 800-426-4791.
- Also as suggested above, find out from your water company if they have done a source water assessment or a sanitary survey or any other review of potential pollution sources. In addition, check:
- Your state environmental or health agency to see whether they have completed an assessment of pollution sources in the source waters used by your water company. For example, states are supposed to do a so-called “Clean Water Act section 305(b) Report,” with supporting analyses, to determine what pollution may be affecting each surface water in the state. You can also find your state’s “Clean Water Act 303(d) Report on “impaired waterways” —or waters suffering from serious pollution problems. States may also have other information available.
- Your EPA region (list at www.epa.gov/epahome/locate2.htm) for source water studies.
- EPA’s “Surf Your Watershed” database (www.epa.gov/surf).
- EPA’s new “Enviromapper” will map all toxic release sites, hazardous waste sites, Superfund sites and water dischargers (www.epa.gov/enviro/html/mod/index.html).
- The U.S. Geological Survey district office in your state (see Blue pages in your phone book, or check <http://water.usgs.gov> for each office and data) and ask them for any studies or other help they can offer in identifying pollution sources for your source water. USGS sometimes can give more objective and less politically charged advice on pollution sources.
- You might also want to look for local, state or regional environmental and public health organizations that are working on water issues. The Campaign for Safe and Affordable Drinking Water can suggest contacts for you. You can also check with the Clean Water Network, a nationwide alliance working for strong federal laws, at www.cwn.org, 202-289-2395.

Campaign for Safe and Affordable Drinking Water

The Campaign for Safe and Affordable Drinking Water is an alliance of over 300 organizations working to protect the nation’s drinking water. The Steering Committee includes representatives from environmental, consumer, public health, HIV/AIDS and religious organizations.

Steering Committee: Clean Water Fund, Consumer Federation of America, Environmental Working Group, National Association of People With Aids, Natural Resources Defense Council, Physicians for Social Responsibility, U.S. Public Interest Research Group, Working Group for Community Right to Know.

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