PRESERVING AND PROTECTING OUR DRINKING WATER

A NYSAC REPORT
W
ater is a finite resource. Between 70 and 75 percent of the earth’s surface is covered with water, but only 1 percent of that is drinkable. While both world population and the demand for freshwater resources are increasing, supply remains constant. Assuring the delivery of safe drinking water is critical to the public health and well-being of all New Yorkers.

Concerns about drinking water quality and contamination are rising in communities across the country. It is important to know who is ensuring the safety of our drinking water, where it comes from, what it should be tested for and how often.

The United States Environmental Protection Agency (EPA) established the public water system supervision program under the authority of the 1974 Safe Drinking Water Act (SDWA). Under the SDWA, EPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. The EPA also regulates how often public water systems monitor their water for contaminants and report the monitoring results to the state and EPA.

The New York State Department of Health (DOH) oversees the supply of drinking water to ensure that it is suitable for people to drink. To assure the safety of drinking water in New York, the DOH in partnership with county health departments, regulates the operation, design and quality of public water supplies.
STATE OR LOCAL: WHICH HEALTH DEPARTMENT OVERSEES WATER SYSTEMS?

Thirty-six counties and the New York City Health Department have some oversight of public drinking water systems within their jurisdiction. Public water systems within the remaining twenty-one counties in the state are directly regulated by the New York State Department of Health (DOH).

The 36 counties with oversight

<table>
<thead>
<tr>
<th>Albany</th>
<th>Chemung</th>
<th>Erie</th>
<th>Niagara</th>
<th>Putnam</th>
<th>Suffolk</th>
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<tr>
<td>Allegany</td>
<td>Chenango</td>
<td>Genesee</td>
<td>Oneida</td>
<td>Rensselaer</td>
<td>Tioga</td>
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<td>Broome</td>
<td>Clinton</td>
<td>Livingston</td>
<td>Onondaga</td>
<td>Rockland</td>
<td>Tompkins</td>
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<td>Cattaraugus</td>
<td>Columbia</td>
<td>Madison</td>
<td>Orange</td>
<td>Schenectady</td>
<td>Ulster</td>
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<td>Cayuga</td>
<td>Cortland</td>
<td>Monroe</td>
<td>Orleans</td>
<td>Schoharie</td>
<td>Westchester</td>
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<tr>
<td>Chautauqua</td>
<td>Dutchess</td>
<td>Nassau</td>
<td>Oswego</td>
<td>Seneca</td>
<td>Wyoming</td>
</tr>
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</table>

The 21 counties regulated directly by the NYS Department of Health

<table>
<thead>
<tr>
<th>Delaware</th>
<th>Fulton</th>
<th>Herkimer</th>
<th>Montgomery</th>
<th>Saratoga</th>
<th>Steuben</th>
<th>Washington</th>
</tr>
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<tr>
<td>Essex</td>
<td>Greene</td>
<td>Jefferson</td>
<td>Ontario</td>
<td>Schuyler</td>
<td>Sullivan</td>
<td>Wayne</td>
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<td>Franklin</td>
<td>Hamilton</td>
<td>Lewis</td>
<td>Otsego</td>
<td>St. Lawrence</td>
<td>Warren</td>
<td>Yates</td>
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Most questions about environmental health concerns in your community can be answered by your county health departments. Please use the following link to see an interactive map for appropriate contact information: http://health.ny.gov/environmental/water/drinking/doh_pub_contacts_map.htm.

To contact your local water supplier, please use this link to see an interactive map for appropriate water supplier contact information: www.health.ny.gov/environmental/water/drinking/pws_contacts/map_pws_contacts.htm.
The 36 counties and NYC with oversight of their public drinking water systems work with the NYS Department of Health and EPA to handle drinking water concerns, if they should arise, and to remedy any unsafe drinking water. The New York State Public Health Law authorizes counties to provide some technical assistance to public water suppliers to help achieve and maintain compliance with federal and state laws and regulations.

Full service county health departments can provide assistance by issuing formal notices and reminders to public water supply owners of all their testing and reporting requirements. Sampling schedules are prepared directly from the Safe Drinking Water Information System (SDWIS) database at the beginning of each year and sent to the suppliers. Counties check regularly that testing is done at various times of the year, since some testing must be performed in certain months.

It is the water supplier’s responsibility to arrange the sampling through an approved lab, and then make sure the results are sent to the Local Health Department. Counties do not collect samples. It is the supplier of water’s responsibility to schedule and pay for all testing; certify that proper sampling protocols were followed; collect samples in conformance with their official “monitoring plans”; report all results to the Local Health Department; issue any formal public notices as the result of exceeding any drinking water standard maximum contaminant level (MCL); and disclose all results to their consumers in their Annual Water Quality Report. County Local Health Department staff enter all testing data into the SDWIS database to enable both the NYSDOH and EPA to track compliance.
County staff visit water plants to conduct routine inspections, which can include reviewing record keeping practices. Water operators are also required to take certain daily readings, record these on a monthly operating report (MOR) form and submit that to the Local Health Departments by the 10th day of each following months.

In full service counties, if any water supplier violates a monitoring or reporting requirement, the county is obligated to formally cite the responsible party and schedule a hearing in accordance with their established administrative enforcement process (pursuant to authority of Boards of Health or County Commissioners/Directors of NYSPHL Sections 347, 348, 309). These procedures vary from county to county.

In non-full service counties, the NYSDOH district office has jurisdiction for public water system (PWS) program implementation and enforcement, and cites the supplier of water according to the NYS Administrative Tribunal process. County boards of health have the authority to assess penalties, demand corrective actions, and establish time tables for compliance. NYSPHL Section 309 allows a maximum penalty of $2,000 per violation, “to be sued for and recovered by in any court of competent jurisdiction”. If any supplier of water refused to comply with a county Board of Health order, they could be classified as a Significant Non-Complier (SNC) and referred directly to EPA for possible federal enforcement proceedings.

For more on New York State drinking water supply regulations please see: https://www.health.ny.gov/environmental/water/drinking/regulations/

WHERE OUR DRINKING WATER COMES FROM

Drinking water comes from either a ground or surface water source.

- Ground source water is taken from beneath the earth’s surface, usually in an aquifer, which is a natural underground layer, often of sand or gravel, which contains water. Most public water systems with groundwater sources pump and treat groundwater from wells.

- A surface water source is a source of water that is open to the atmosphere and subject to surface runoff. Examples of surface water sources include lakes, rivers, and reservoirs.
Drinking water standards are regulated by the Federal government through the EPA to control the level of contaminants in the nation’s drinking water. The regulations require water monitoring schedules and methods to measure contaminants in water. There are two categories of drinking water standards. Primary, which are legally-enforceable and limit the levels of specific contaminants that may harm health and secondary, which are non-enforceable guidelines for contaminants that may cause cosmetic or aesthetic effects to drinking water.
HOW DO LEAD AND OTHER CONTAMINANTS GET INTO THE WATER WE DRINK?

Since natural levels of lead in New York State water supplies are low, lead in drinking water usually results from the use of lead pipe in water systems or lead based solders on water pipes. Water in the plumbing system can dissolve lead from pipes and solder. This is called leaching. Soft, corrosive or acidic (low pH) water is more likely to cause leaching. Water left standing in the pipes over a long period of time also increases leaching. The longer the water stands in the pipes, the greater the possibility of lead being dissolved into the water. Stray electrical currents from improperly grounded electrical outlets or equipment also may increase the level of lead in drinking water. Pipes that carry drinking water from the source to homes can contribute lead to the drinking water, if the pipes were constructed or repaired using lead materials.

Other sources of contamination occur from aging infrastructure and New York State’s closed manufacturing facilities.

Drinking water that is not properly treated or disinfected, or which travels through an improperly maintained distribution system, may also pose a health risk.

In a report given in 2013 on its most recent needs surveys, the Environmental Protection Agency (EPA) estimated that the funding needed to replace aging drinking water infrastructure in the United States totaled $335 billion.

WHAT IS OUR DRINKING WATER TESTED FOR?

EPA has drinking water regulations for more than 90 contaminants. The Safe Drinking Water Act (SDWA) includes a process that EPA must follow to identify and list unregulated contaminants called the Drinking Water Contaminant Candidate List (CCL).

The Safe Drinking Water Act defines the term “contaminant” as meaning any physical, chemical, biological, or radiological substance or matter in water. Therefore, the law defines “contaminant” very broadly as being anything other than water molecules. Drinking water may reasonably be expected to contain at least small amounts of some contaminants. Some drinking water contaminants may be harmful if consumed at certain levels in drinking water while others may be harmless. The presence of contaminants does not necessarily indicate that the water poses a health risk.
Public water suppliers test for a variety of man-made chemicals, naturally occurring contaminants, physical characteristics and microbial pathogens. The type of testing and the frequency may be dependent upon the population served, source water type and/or public water supply type.

County health departments work closely with public water supply owners and operators to assure compliance with appropriate New York State Rules and Regulations that apply to Public Water Systems (PWS).

Samples are taken regularly to analyze for bacteria, inorganic compounds, and organic compounds. If violations of EPA standards are found through routine sampling/testing, water system customers must be notified by the supplier.

If the water has been contaminated by something that can cause immediate illness, suppliers must notify customers within 24 hours of confirmed test results.

If the violation is of less immediate concern, a water supplier must inform customers about the violations either within 30 days or in its next water bill, in its Annual Water Quality Report or by mail within a year.

Community public water suppliers are required to issue Annual Water Quality Reports by May 31st each year to their customers. These reports contain information about the water source, any contaminants found in the drinking water and possible health effects.

Generally, the larger the population served by a water system the more frequent the monitoring and reporting is required.
WHAT IS THE DRINKING WATER CONTAMINANT CANDIDATE LIST (CCL)?

The drinking water contaminant candidate list (CCL) is a list of contaminants identified by the Federal government that are currently not subject to any proposed or promulgated national primary drinking water regulations, but are known or anticipated to occur in public water systems.

Contaminants listed on the CCL may result in future regulation under the Safe Drinking Water Act (SDWA). Federal law requires the EPA to publish the CCL every five years. SDWA specifies that the EPA place those contaminants on the list that present the greatest public health concern related to exposure from drinking water. EPA uses the CCL to identify priority contaminants for regulatory decision making and information collection.

To see the 3rd and most recent finalized CCL please visit the following website: http://www.epa.gov/ccl/regulatory-determination-3.

The EPA published the draft CCL (4th) in February 2015, and took public comment through early April 2015. They are currently reviewing the public comments and anticipate publishing the final CCL 4 in late 2016 or early 2017.

To see the draft CCL 4, including a full list of potential contaminants, please see the following website: www.epa.gov/sites/production/files/2015-02/documents/epa815f15001.pdf.

COUNTY RECOMMENDATIONS FOR REFORM

In response to recent events and NYSAC’s call for a state and local public drinking water integrity taskforce, Governor Andrew Cuomo has announced a series of aggressive water quality initiatives to protect both the public health and the environment. The Governor created a Statewide Water Quality Rapid Response Team charged with identifying and developing plans to address critical drinking water contamination concerns, as well as related groundwater and surface water contamination problems. The Governor also proposed statewide regulations to regulate mulch processing facilities to strengthen oversight and safeguard natural resources.
Counties also request a more streamlined process for notifying the public when violations of EPA standards are found, including, clarification of procedures for notifying the public when water system testing results exceed federal advisories for safe drinking water, even when contaminants are monitored rather than specifically regulated (meaning on the CCL). The public deserves to know what is in their drinking water. All aspects of water testing results should be shared with the public, and notice of contaminants and violations of EPA standards given in a timely manner.

2016 Budget Allocations
The FY 2015-16 State Budget provided $200 million for the Water Quality Infrastructure Improvement Act of 2015 to provide grants to municipalities for the replacement and repair of existing wastewater infrastructure and drinking water infrastructure, over a three year period.

The 2016-17 enacted budget increased the act’s funding from the $200 million approved for 2015, to $400 million.

For further details on the FY 2015-2016 State Budget allocations, visit www.nysac.org/nysbudget.