WATER QUALITY
(FAMILY HEALTH; ENVIRONMENTAL HEALTH)

The Healthy People 2010 Initiative reports that

Most people in the United States obtain their drinking water from public water supply systems. EPA has established regulations intended to ensure that community water systems supply safe drinking water to their customers. Compliance with the established regulations is one measure of the public's receipt of a safe water supply, free from disease-causing agents. In 1997, small systems (serving 25 to 3,300 people) accounted for more than 85 percent of the community water systems in the United States but served only about 10 percent of the population. These systems accounted for 91 percent of the violations of the EPA drinking water regulations. According to USGS, 17 percent of the Nation's total population was served by their own water supply systems in 1990, compared with 18 percent in 1985 (http://www.healthypeople.gov/document/HTML/Volume1/08Environmental.htm#_Toc490564706).

Issues and Trends

Here is what the 2010 Initiative says about substances that can affect water systems.

The identification of toxic substances and waste, whether hazardous, industrial, or municipal, that pose an environmental health risk represents a significant achievement in itself. Public health strategies are aimed at tracking the Nation’s success in eliminating these substances or minimizing their effects. Toxic and hazardous substances, including low-level radioactive wastes, deposited on land often are carried far from their sources by air, groundwater, and surface water runoff into streams, lakes, and rivers where they can accumulate in the sediments beneath the waters. Ultimate decisions about the cleanup and management of these sites must be made keeping public health concerns in mind (http://www.healthypeople.gov/document/HTML/Volume1/08Environmental.htm#_Toc490564704).

According to a recent report on drinking water by the New York State Department of Health,

Nearly ninety-five percent of all New Yorkers receive water from public water supply systems in New York State. Public water systems in New York range from New York City, the largest engineered water system in the nation serving more than nine million people, to privately-owned water supply companies serving municipalities, to schools with their own water supply, to small stores in rural areas serving customers water from their own wells. In total, there are nearly 11,000 public water systems in New York State (http://www.health.state.ny.us/nysdoh/water/facts_figures.htm).

Healthy People 2010 and Water Quality

The following chart presents the Healthy People 2010 targets for the objectives pertinent to water quality assessment, along with baseline data for the year(s) indicated. This chapter examines Chautauqua County data for the water quality indicators listed in bold type

<table>
<thead>
<tr>
<th>Objective</th>
<th>ENVIRONMENTAL HEALTH</th>
<th>1995 Baseline</th>
<th>2010 Target</th>
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<tbody>
<tr>
<td>8-5.</td>
<td>Increase the proportion of persons served by community water systems who receive a supply of drinking water that meets the regulations of the Safe Drinking Water Act.</td>
<td>85%</td>
<td>95%</td>
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A. Health Data

1. Water Quality

Two indicators of water quality are (1) percentage of public water supplies in compliance, and (2) percentage of populations served by acceptable water systems.

In Chautauqua County, Health Department data for 2004 show that

- 99.22% of all county public water supplies in were in compliance.
- 99.87% of the county population was served by acceptable water systems.

The Healthy People 2010 target is 95% of residents receiving drinking water that meets the Safe Drinking Water Act. At 99.87%, Chautauqua County is above the 2010 target.

Data Source: Chautauqua County Health Department, Environmental Health Division.

B. Unmet Needs

At this time, Chautauqua County is meeting the water quality needs of its population. A very small percentage of residents (those in systems serving few users) were excluded from the county target of 100% of residents served by acceptable water systems, and 100% of all public water supplies in compliance.

C. Resources in Chautauqua County

- Chautauqua County Department of Health, Environmental Health
- Chautauqua County Hazmat Team
- Chautauqua County Home Rehabilitation and Improvement Coalition (CHRIC): grants to landlords and owners for repairs and maintenance
- Chautauqua County Water Quality Task Force
- 3 Environmental Health Offices: Dunkirk, Mayville, Jamestown
- New York Rural Water Association
- Safe Drinking Water Hotline: 1-800-426-4791
- U.S. Department of Housing and Urban Development
- Western New York Water Environment Association

D. Opportunities for Action

- Expand and improve education about water and water quality — at all levels—a cornerstone of broad prevention efforts.
- Educate and promote information among the public, politicians health professional and school communities that environmental hazards are not limited by political boundaries. A global scope will help develop and achieve effective ways to prevent disease worldwide as well. The United States must work with other governments, non-governmental organizations, and international organizations to help improve human health on a global scale.
- Support work to improve the availability of environmental health data. The Internet has increased dramatically access to environmental information.
- Better dissemination of global environmental health information could reduce the occurrence of water-borne diseases worldwide and also diseases entering with citizens and other travelers
Support environmental health efforts based on scientific evidence. The complex relationship between human health and the acute and long-term effects of environmental exposures must be studied so that new prevention measures can be developed.

Further develop and maintain surveillance systems to track exposures to toxic substances such as commonly used pesticides and heavy metals. To the extent possible, these systems should use biomonitoring data, which provide measurements of toxic substances in the human body. A mechanism is needed for tracking the export of pesticides restricted or not registered for use in the United States.