

WATER QUALITY CHALLENGES IN CHINA

Water resources in China

The total volume of freshwater resources in China

2.8 Trillion m³

6 %

of global
water
resources

However, this means that there is only

2000 m³ per person

Which is only

1/4

of the global
average

The current status of poor water quality



23.9%

of shallow
groundwater



25.0%

of lakes



81.6%

of rivers



87.3%

of resevoirs

met the criteria for drinking water supply sources

From 2018 "China's Water Resource Bulletin" by Ministry of Water Resources

In 2018, the Ministry of Water Resources evaluated 1,045 centralized drinking water sources from 31 provincial-level administrative divisions (PLADs) and found that the percentage of water sources for qualified centralized water supply was 83.5%.

The challenges facing safe drinking water:

- 5.5% of reservoir water sources and 16.1% of the lake water sources in China are not compliant with regulation
- Water purification technology is relatively out of date
- Secondary pollution risk because of aging water supply networks
- Byproducts of disinfection affect water quality

The causes of water quality issues

- Discharge of industrial wastewater, domestic sewage, agricultural hazardous pesticides and manure
- newly-emerging contaminants such as perfluorinated compounds (PFCs) and pharmaceutical and personal care products (PPCPs)
- Global climate change and extreme weather events

Implications on public health

- Out of 7.8 million reported cases of national notifiable infectious diseases in 2018, 18.9% were water borne diseases
- Fluorosis due to drinking water: 77,292 villages (2.1% of all villages in China) affected
- Arsenic poisoning due to drinking water: 2,667 villages affected, exposed population 1.6 million.
- Cancer risks: Villages near the Huai River Basin, a river with particularly heavy pollution were found to have higher cancer prevalence than average. There has been correlation shown between areas of heavy water pollution and mortality rates from digestive system cancer.

Surveillance data from the National Health Commission of China in 2018



Actions being taken

- The State Council publicated and implemented the Action Plan for Water Pollution Prevention and Control
- Laws and regulations protecting drinking water sources: "Water" in Article 10, the Regulations on the Prevention and Control of Pollution in Drinking-Water Source Protection Areas, Regulations on the Urban Water Supply, Measures for Supervision and Administration of Drinking Water Hygiene, and the Standards for Drinking Water Quality.
- The Ministry of Ecological Environment and the Ministry of Water Resources are responsible for monitoring the quantity and quality of water in the environment including
- The National Health Commission is responsible for monitoring drinking water quality
- Centralized Water Supply and Rural Drinking Water Safety Projects with 14.3 billion CNY invested by the central government



You can help by



- Opt out of chemical pesticide and fertilizers in your own garden or talk to your community committee about doing so in your compound
- Conserve Water: Using less water means less wastewater that needs to be treated.
- Use less single use plastics
- Make informed food choices: support organic farms which use fewer chemicals
- Reduce food waste
- Consume clothes wisely: the fashion industry is a major water polluter
- Participate in clean-up events for local river
- Spread awareness of the problem to your friends, family, and community
- Stay informed and follow news about what is being done to combat the water crisis

Information from: Shi, Xiaoming. "The Safety of Drinking Water in China: Current Status and Future Prospects." China CDC weekly vol. 2,13 (2020): 210-215.

**COMBAT WATER QUALITY ISSUES BY
LIVING CONSCIOUSLY, CONSUMING
CONSCIOUSLY, AND STAYING
INFORMED!**

@turninggreenorg, @waterislife, @environmentalworkinggroup