People around the world drink water from a variety of sources, which may be treated in various ways. Accordingly, drinking-water can be safe or unsafe for consumption. Most of the many diseases caused by unsafe drinking water are infectious diseases, such as diarrhoea, and parasitic diseases. To protect health, safe water is also important for food preparation and personal hygiene. Furthermore, the adequate management of water bodies and reservoirs can play an important role in the control of vector-borne diseases.
More than 2.1 billion people still lacked safely managed drinking-water in 2015, including at least 2 billion people who drink water contaminated with faeces.

Around 263 million people, mostly women, collected water from outside the home from sources more than half an hour away.

About half a million diarrhoea deaths were caused by inadequate drinking-water in 2016, including 178 000 deaths in children aged under 5 years, representing 3.3% of deaths in that age group.

159 million people collected drinking-water directly from surface water sources.
WHAT ARE KEY ACTIONS FOR IMPROVEMENT?

Key actions to improve safe water access include the following (WHO 2003; WHO 2009; WHO 2017):

1. Regulations
Develop and implement drinking water and recreational water quality regulations that include locally relevant health-based targets, promotion of risk assessment and risk management and surveillance.

2. Safely managed drinking-water
Pursue SDG target 6.1 in terms of providing people with access to safely managed drinking-water services (that is, located on the premises, available when needed, and free from contamination).

3. Monitor progress
Develop capacity to monitor progress against national targets.

4. Multi-barrier approach
Minimize microbial and chemical contamination in drinking-water by protecting water sources, applying a multi-barrier treatment system (for example filtration and chemical disinfection), and preventing recontamination during distribution, storage and handling.

5. Interim solutions
Effectively implement targeted interim solutions, such as household water treatment and safe storage, and hygiene promotion in cholera hot spot communities or during waterborne disease outbreaks.

6. Water resources management
Manage water resources in order to reduce health impacts from water related vector-borne diseases.
MAIN WHO ACTIONS

WHO actions on water quality and safety include the following:

Guidelines
Maintain up-to-date WHO drinking-water quality guidelines and guidelines for safe recreational water and facilitate their application into country regulations.

Technologies
Evaluate performance of water treatment technologies.

Tools for water safety
Develop tools for water safety planning and drinking-water quality surveillance.

Country support
Support countries in implementing water safety plans, improving water, sanitation and hygiene (WASH) in health care facilities, and strengthening surveillance and monitoring programmes.

SDG indicators
Report on SDG indicators 6.1.1 (proportion of population using safely managed drinking-water services), 1.4.1 (proportion of population with access to basic services), 3.9.2 (mortality due to unsafe WASH practices), and 6.A.1 and 6.B.1 (allocation of resources and cooperation with partners), as well as other key indicators.

SECTORAL POLICIES INTERACTING WITH WATER

Cooperation with the following sectors may be required to sustainably reduce risks to health:

- Water and sanitation
- Industry
- Agriculture
- Health