UN WATER
19 November
WORLD TOILET DAY

2022 Sanitation and Groundwater

Factsheet

World Toilet Day 2022: Making the invisible visible

When is World Toilet Day 2022?

19 November 2022.

What is World Toilet Day?

World Toilet Day has been an annual United Nations Observance since 2013. It was first celebrated in 2001 by the World Toilet Organization: www.worldtoilet.org

What is the aim of World Toilet Day?

World Toilet Day celebrates toilets and raises awareness of the 3.6 billion people living without access to safely managed sanitation. It is about taking action to tackle the global sanitation crisis and achieve Sustainable Development Goal 6: water and sanitation for all by 2030.

Who organizes World Toilet Day?

Every year, UN-Water — the United Nations' coordination mechanism on water and sanitation — sets the theme for World Toilet Day. In 2022, the theme is 'Sanitation and Groundwater'. Previous themes can be found here: www.worldtoiletday.info/archives-2022

What happens on World Toilet Day?

Ahead of the day, UN-Water launches a global campaign at www.worldtoiletday.org and on social media with the hashtag #WorldToiletDay. Individuals, organizations, governments, companies, schools and many other actors support the day by using the official messages and assets, or by organizing their own World Toilet Day activities.

What is the theme of World Toilet Day 2022?

The theme of World Toilet Day 2022 is 'Sanitation and Groundwater'.

What is the World Toilet Day 2022 campaign about?

The title of the World Toilet Day 2022 campaign is 'Making the invisible visible'. Please use and adapt the following narrative when talking about World Toilet Day 2022:

> ***Making the invisible visible***
>
> *We face a global sanitation crisis. Today, 3.6 billion people are still living with poor quality toilets that ruin their health and pollute their environment. Every day, more than 800 children die from diarrhoea linked to unsafe water, sanitation and poor hygiene.*
>
> *This year, World Toilet Day focuses on the impact of the sanitation crisis on groundwater.*
>
> *Inadequate sanitation systems spread human waste into rivers, lakes and soil, polluting the water resources under our feet. However, this problem seems to be invisible. Invisible because it happens underground. Invisible because it happens in the poorest and most marginalized communities.*
>
> *Groundwater is our most abundant source of freshwater. It supports our drinking water supplies, sanitation systems, farming, industry and ecosystems. As climate change worsens and populations grow, groundwater is vital for our survival.*
>
> *Safely managed sanitation protects groundwater from human waste pollution. Sustainable Development Goal 6.2 is the world's promise to ensure safe toilets for all by 2030. This means everyone having access to a toilet connected to a sanitation system that effectively removes and treats human waste. But, we are seriously off track to meet this target.*
>
> *We must work on average four times faster to ensure everyone has a safe toilet by 2030. The connection between sanitation and groundwater cannot be overlooked. Time is running out. We must make the invisible visible.*

What are the key messages?

1. **Safe sanitation protects groundwater.** Toilets that are properly sited and connected to safely managed sanitation systems, collect, treat and dispose of human waste, and help prevent human waste from spreading into groundwater.

2. **Sanitation must withstand climate change.** Toilets and sanitation systems must be built or adapted to cope with extreme weather events, so that services always function and groundwater is protected.

3. **Sanitation action is urgent.** We are seriously off track to ensure safe toilets for all by 2030. With only eight years left, the world needs to work four times faster to meet our promise.

What is the global sanitation crisis?

Nearly half the world's population still lives without a "safe toilet". A "safe toilet" is shorthand for a safely managed sanitation system, which means a toilet not shared with other households, that either treats or disposes of human waste on site, stores it safely to be emptied and treated off-site, or connects to a functioning sewer and treatment plant.

People living without access to safely managed sanitation systems use shared facilities or those that do not safely dispose of human waste. Almost 500 million people relieve themselves outside ('open defecation') and 3.6 billion people – nearly half of the global population – are not connected to safely managed sanitation systems, leaving human waste untreated and contaminating communities and water used for drinking, hygiene, recreation and food production.

Urban and rural areas face different challenges. In densely populated urban settings, pit latrines and septic tanks sited close to waterpoints that draw from a shallow aquifer create a potentially serious health risk. In rural settings, mainly due to there being more space, pit latrines and septic tanks can be more easily sited at a safe distance from waterpoints.

This crisis has a profound impact on public health, educational attainment, economic productivity and environmental integrity. For women and girls in particular, the indignity, inconvenience and danger of not having access to safely managed sanitation is a barrier to their full participation in society.

What is groundwater?

Groundwater is water found underground in aquifers, which are geological formations of rocks, sands and gravels that hold water. Groundwater is by far the most abundant source of freshwater globally, supporting drinking water and sanitation systems, food production, industrial processes and the healthy functioning of ecosystems. In many areas, aquifers are close to the surface, making them particularly vulnerable to human-made pollution from the soil and surface water above.

How does inadequate sanitation impact on groundwater?

Groundwater utilization for drinking water is endangered by the uncontrolled disposal of human excreta, especially in densely populated urban settlements, and the absence of sustainable sanitation systems in fast-growing cities and peri-urban areas. These are five areas of concern:

1. **Pit latrines and septic tanks:** In a densely populated community, pit latrines as well as poorly constructed and managed septic tanks can result in significant pollution of shallow aquifers and nearby water bodies. This can lead to disease outbreaks via contaminated waterpoints and harmfully high nutrient loading in water supplies and nearby lakes.

2. **Faecal sludge disposal by landfill:** Where human waste is taken from pit toilets and septic tanks and disposed of with other solid waste in landfill sites without impermeable layers and good effluent management, the potential for groundwater pollution is high.

3. **Irrigation with untreated wastewater:** Farms and municipal authorities sometimes use untreated wastewater for irrigation. This poses a major health risk for farmers and consumers of leafy vegetables irrigated with this untreated wastewater, as well as when practised near unprotected public water wells and human settlements.

4. **Sewerage outfall:** In towns and cities where sewers are used to take away effluent, the arrangements for wastewater disposal and reuse are often inadequate, with significant pollution risks for the aquifers under land or rivers where the sewage is dumped.

5. **Climate change impacts:** In areas with intensifying rainfall, pit latrines, septic tanks and open sewers can get flooded, spreading human waste into soil and surface water. Conversely, in areas with worsening drought, sanitation systems such as pour-flush latrines may become unusable, forcing people to relieve themselves outside.

How do sanitation solutions protect groundwater?

Safely managed and properly sited sanitation protects humans and groundwater from the pathogens in faecal waste. A safe and sustainable sanitation system begins with a toilet that effectively captures human waste in a safe, accessible and dignified setting. Either, the waste then gets stored in a tank, which can be treated on-site where liquid waste infiltrates to soil and solids may be emptied later by a collection service. Or, it is transported away by a sewer connected to a treatment plant and then safely disposed of or reused. Safe reuse of treated human waste can capture greenhouse gas emissions for energy production and provide agriculture with a reliable source of water and nutrients.

Sustainable sanitation systems need to be able to withstand more frequent floods, droughts, changes in water availability and sea level rise brought on by climate change, so that services always function and groundwater is protected. In areas experiencing water scarcity and decreasing groundwater availability treated wastewater can be used to recharge aquifers and replenish groundwater supplies.

Groundwater protection zones are vital, as part of a context-specific, integrated approach to ensuring sanitation systems, land use planning and water abstraction do not adversely impact the quality and quantity groundwater resources, particularly in areas where aquifers are close to the surface.

Why should we care about groundwater pollution?

Remediation of groundwater pollution caused by humans is often a long and difficult process. This increases the costs of processing groundwater, and sometimes even prevents its use. Exploring, protecting and sustainably using groundwater will be central to surviving and adapting to climate change and meeting the needs of a growing population.

Why is solving the sanitation crisis important?

Having access to safely managed sanitation services, in combination with safely managed drinking water services and good hygiene facilities and behaviours, is the foundation of public health and therefore essential for the realization of all other human rights. Toilets drive improvements in health, gender equality, education, economics and the environment. Particularly for women and girls, toilets at home, school and at work help them fulfil their potential and play their full role in society, especially during menstruation and pregnancy.

What can decision-makers do about sanitation and the link to groundwater?

The connection between groundwater and sanitation has always been critically important but not fully recognized. We must protect groundwater from pollution and use it sustainably, balancing the needs of people and the planet.

Groundwater's vital role in water and sanitation systems must be reflected in policymaking. Furthermore, under the SDG 6 Global Acceleration Framework, particularly in the areas of governance, capacity building, data and information, the link between groundwater and sanitation needs to be strengthened through inclusive policy and its coordinated implementation. In order to achieve that, groundwater- and sanitation specialists, policymakers and practitioners must all increase their cooperation.

Action on sanitation – why is it urgent?

Sustainable Development Goal 6 is to ensure availability and sustainable management of water and sanitation for all by 2030.

SDG target 6.2 is to "achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations."

At present, the world is seriously off track to meet SDG 6.2. Today, 3.6 billion people still live without safely managed sanitation services.

The latest data show that, on average, governments must work four times faster to meet the promise of SDG 6.2 within the next eight years. UN-Water is encouraging the world to take action through the SDG 6 Global Acceleration Framework and the specific accelerators for sanitation set out in the *State of the World's Sanitation* report.

The World Toilet Day 2022 campaign calls on decision- and policymakers to accelerate progress on sanitation and to ensure the connection between sanitation and groundwater is reflected in legislation and related guidelines at all administrative levels, from international and national to local.

Key facts:

- 3.6 billion people live without access to a safe toilet. (WHO/UNICEF 2021)
- 494 million people still practise open defecation. (WHO/UNICEF 2021)
- The lack of water quality data for over 3 billion people means that they are at potential risk because the health of their groundwater, rivers and lakes is unknown. (UN-Water 2021)
- Globally, at least 2 billion people use a drinking water source contaminated with faeces. (WHO 2019)
- Groundwater accounts for approximately 99 per cent of all liquid freshwater on Earth. (UN-Water 2022)
- Groundwater provides half of all water withdrawn for domestic use, including the drinking water for the vast majority of the rural population. (UN-Water 2022)
- Every day, more than 800 children under five years old die from diarrhoea linked to unsafe water, sanitation and poor hygiene. (WHO 2019)
- Every $1 invested in basic sanitation returns up to $5 in saved medical costs and increased productivity, and jobs are created along the entire service chain. (Hutton et al. 2015)

Links:

#WorldToiletDay

World Toilet Day 2022 website:
www.worldtoiletday.org

UN World Water Development Report 2022:
www.unwater.org/publication_categories/world-water-development-report

WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP):
washdata.org

UNICEF and WHO State of the World's Sanitation report:
www.unicef.org/reports/state-worlds-sanitation

SDG 6 Data Portal:
www.sdg6data.org

SDG 6 Global Acceleration Framework:
www.unwater.org/publications/the-sdg-6-global-acceleration-framework

UN 2023 Water Conference:
sdgs.un.org/conferences/water2023

UN-Water Summit on Groundwater 2022:
www.groundwater-summit.org

United Nations website:
www.un.org

UN-Water website:
www.unwater.org