

## Millions of health-care facilities lack WASH services

Proper water, sanitation, and hygiene are vital for infection prevention and curbing antimicrobial resistance, yet millions of centres lack even basic facilities. Talha Burki reports.



896 million people worldwide rely on health-care facilities with no water service, according to a joint report by WHO and UNICEF. The authors also noted that 1.5 billion people use facilities with no sanitation, and that every year 17 million women in the world's poorest countries give birth in health-care centres with inadequate water, sanitation, and hygiene (WASH).

The report, which is the first of its kind, offers baseline estimates for national, regional, and global provision of WASH in health care. It also examined waste management services and environmental cleaning, although for cleaning in particular there are very few data. Services were categorised as basic, limited, or non-existent. For water, a basic service implies that there is an improved source such as a piped supply on the premises. For sanitation, it implies that the facilities are designed to ensure that people do not come into contact with excreta and that there are male and female toilets and a dedicated staff toilet. A basic hygiene service means that there are working hand hygiene facilities, either soap and water or alcohol-based hand rub, at points of care and near toilets.

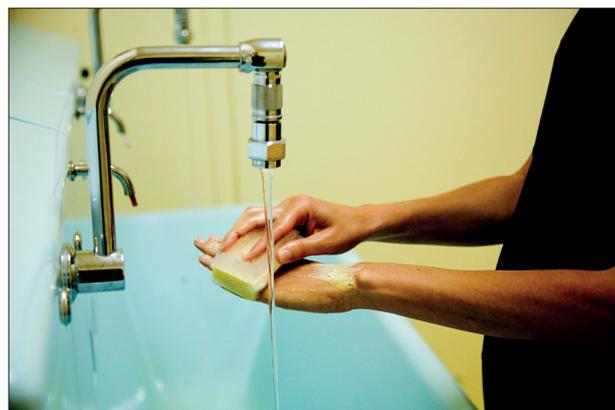
Most countries do not collect data on the basis of the definitions outlined in the report. For global coverage of basic services, there was enough information to provide estimates for only water (75% of health-care facilities worldwide have basic water services). Nonetheless, the available data, which are for 2016, are sufficient to raise concern. One in eight health-care centres has no water service at all, one in five has no sanitation, and one in six has no hygiene services. There is wide variation within countries, regions, and continents. Hospitals tend to be better served than other health-care facilities, and urban institutions do better than

rural ones. Only 30% of health-care centres in Ethiopia have basic water services; in Zimbabwe, the proportion stands at 81%. 64% of centres in China lack adequate hand hygiene facilities.

Moreover, while limited or non-existent WASH services in health care present an obvious danger, basic services do not necessarily equate to safe services. A flush toilet connected to a sewer qualifies as a basic service, for example, but the toilet still needs to be regularly cleaned, and users need somewhere to wash their hands. Even if a facility has piped water, it can still be unfit for consumption. The report cites a 2016 survey in Lebanon, which found that a quarter of health-care centres with basic water services had faecally contaminated water. "If you have water, but you do not have sanitation, then the human waste will get into the water", said Maria Neira (WHO, Geneva, Switzerland). Water supplies can also be interrupted, forcing people to resort to storage tanks, which have an increased risk of contamination.

Neira believes that prioritising access to clean water and sanitation when countries are planning infrastructure for primary care would make a big difference. "WASH has to be something that is properly financed from the beginning", she said. Solutions for waste management need not be costly. "Using simple principles, you can do a lot with very little", explains Didier Pittet (University of Geneva Hospitals and Faculty of Medicine, Switzerland). "It is mostly about education; you train people on the basics, where to discard what, and you spend a bit of money on colour-coded bins."

Pittet stresses the importance of alcohol-based hand rubs. "If health-care facilities really want to make a significant change in the risk of infection transmission, they must



switch to alcohol-based hand rub", he said. "Hand-washing facilities do not improve compliance to hand hygiene, because health-care workers do not always have the time to wash their hands with soap and water." He points out that if water supplies are contaminated, then hand-washing can even be counterproductive, especially if users rinse off the soap and leave their hands wet. Alcohol-based hand rubs can provide an effective transitional solution for institutions that cannot afford to install basic water services throughout, although they cannot act as a substitute for soap and water after using the toilet. "It is a direct way to change the process, it has been proven in developed and developing countries, and you can introduce it to places where there is difficulty in putting in hand-washing facilities", concluded Pittet.

Neira notes that without improving WASH services, it is hard to envisage progress in key areas of health care. "You might have fantastic plans for preventing maternal and neonatal mortality, or on antimicrobial resistance, but you will still have major difficulties unless water safety and sanitation are a strong part of your programmes."

Talha Burki

For the **WASH** report see <https://apps.who.int/iris/bitstream/handle/10665/311620/9789241515504-eng.pdf>