SANITATION SAFETY PLANNING

MANUAL FOR SAFE USE AND DISPOSAL OF WASTEWATER, GREYWATER AND EXCRETA

World Health Organization

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FOREWORD

> "Poverty can never be eradicated, or even greatly reduced, as long as so many millions of people cannot access safe water and so many billions are living in environments contaminated by faeces. Sanitation, together with hygiene, must be given a much higher place in any agenda for future development and must be urgently and frankly addressed."
>
> *Margaret Chan, WHO Director General*

At any given time, nearly half the population of the developing world will be affected by an illness or disease directly linked to unsafe or too little water, poor or no sanitation, or poor management of water resources.

Increasing access to basic sanitation at the household level remains a critical public health intervention for preventing sanitation related disease especially for diarrhoea, intestinal worms, schistosomiasis and trachoma which affect millions of people.

Yet, providing safe affordable sanitation is becoming more complex. Preventing exposure to human waste, especially in dense urban settings, requires safe management of the entire sanitation chain involving multiple actors and exposed groups in the collection, transport, treatment, disposal and use of sanitation waste. Although evidence is limited, global burden of disease estimates for diarrhoea show that this higher level of service is effective and can achieve large health gains over and above what can be achieved with basic sanitation alone.

As pressures of urbanization, demand for food and water scarcity increase, reuse of sanitation waste is becoming more attractive and viable. Many authorities and enterprises are working on sanitation service chain models that make beneficial use of nutrients, water and energy and offset the cost of service provision. These models can offer health benefits by removing excreta from the environment and increasing food production.

However, health concerns are a major challenge for such approaches. Proponents operate in fragmented and unsupportive policy environments that are often weakly linked to health. They also need to overcome negative public perceptions about the risks associated with use and disposal of human waste.

Sanitation Safety Planning is a tool to help sanitation system operators maximise health benefits and minimise health risk of their system. It guides operators to prioritize and target risk management efforts to where it will have the most impact and to improve over time. The outputs can be used to provide assurance to the public and authorities of the system performance based on sound risk based management.

Perhaps most importantly, Sanitation Safety Planning can be used to coordinate efforts of the many stakeholder along the sanitation chain – including departments of health, utilities, private sector, environment and agriculture authorities – to maximise the health benefits of sanitation and stimulate policy dialogue and change.

WHO will continue to promote the principles of risk assessment and management for sanitation systems and the scaling of Sanitation Safety Planning.

Maria Neira
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The manual was developed in conjunction with business models for safe resource recovery and reuse in partnership with the International Water Management Institute (IWMI), Swiss TPH, the Swiss Federal Institute of Aquatic Science and Technology (Eawag) and the International Centre for Water Management Services (Cewas).

The Sanitation Safety Planning approach was tested with national authorities in Hanoi, Viet Nam; Karnataka, India; Lima, Peru; Kampala, Uganda; Benavente, Portugal; and Manila, Philippines under the guidance of a strategic advisory group and with review by experts and practitioners. Contributors are listed below:

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