

### Soap Solution for Hand Washing

Precautions to prevent transmission of COVID-19 include:

- Practicing physical distancing
- Practicing good hygiene, including hand hygiene
- Disinfecting high-touch surfaces

Hand hygiene is an important barrier to the transmission of COVID-19. The World Health Organization (WHO) [advises](#)<sup>1</sup>:

*“Clean your hands regularly. Wash your hands with soap and water, and dry them thoroughly. Use alcohol-based handrub if you don’t have immediate access to soap and water.”*

If soap or hand sanitizer (handrub) are not easily available, it is a simple process to make a handwashing soap solution from laundry detergent. This approach has been evaluated and shown to be [effective for the removal of coliforms from hands](#)<sup>2</sup> compared to bar soap, and for its [acceptability amongst users](#)<sup>3</sup>.

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#### Materials Required

- 1.5 litre Clean plastic bottle (should be food-safe, for example, water or soda bottle)
- 30 grams Laundry detergent
- Clean water

#### Method

1. Fill bottle with clean water (leave 5 centimeters or 2 inches of space)
2. Pour detergent into bottle
3. Shake until detergent is dissolved
4. Drill or punch a hole in the cap
5. Replace cap and use soapy water to wash hands

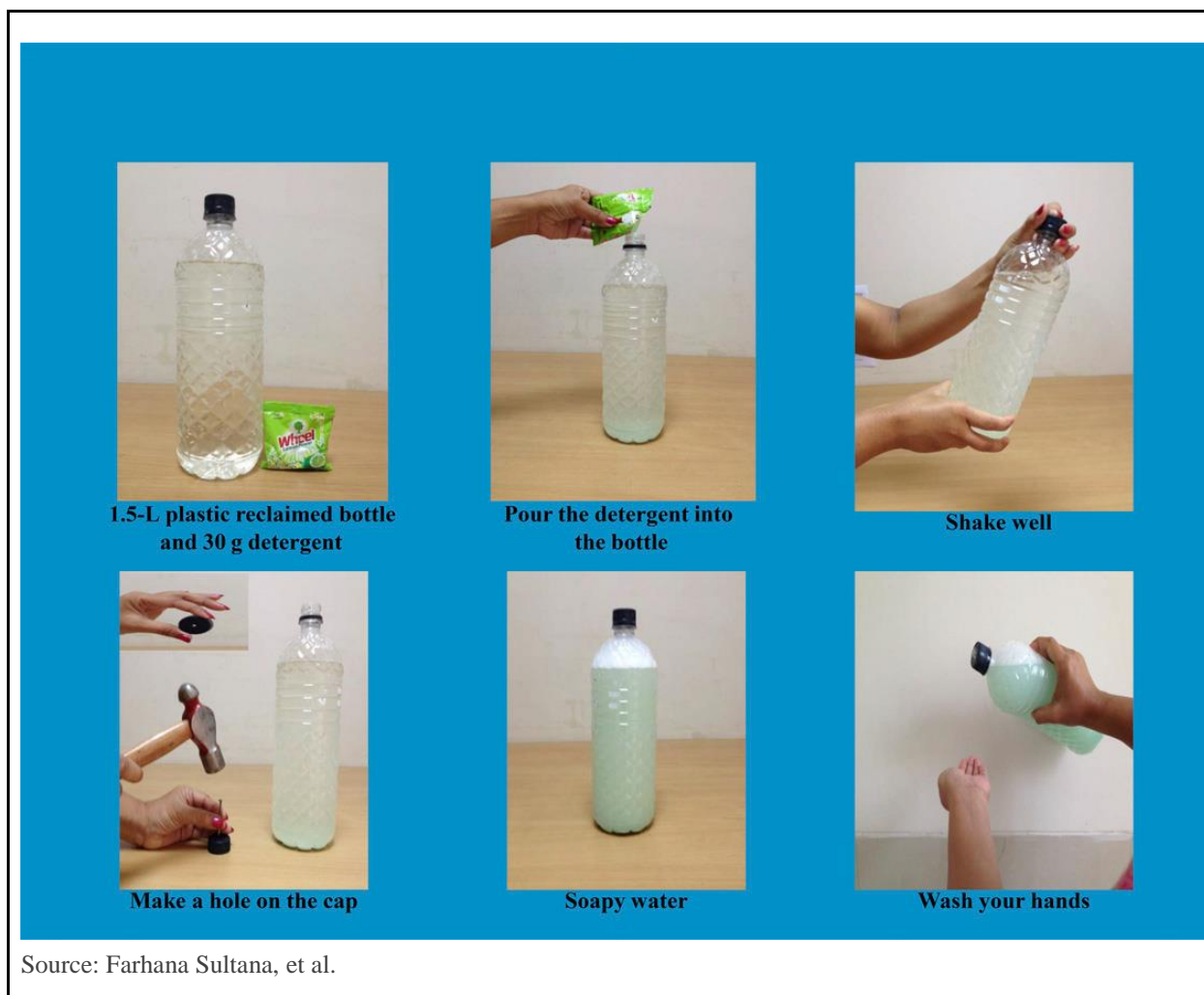
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<sup>1</sup> WHO Clean hands protect against infection  
[https://www.who.int/gpsc/clean\\_hands\\_protection/en/](https://www.who.int/gpsc/clean_hands_protection/en/)

<sup>2</sup> Microbiological Evaluation of the Efficacy of Soapy Water to Clean Hands: A Randomized, Non-Inferiority Field Trial. Nuhu Amin-M. Islam-Nusrat Homaira-Nusrat Najnin-Jaynal Abedin-Sania Ashraf-Amy Pickering-Stephen Luby-Leanne Unicomb-Pavani Ram - The American Journal of Tropical Medicine and Hygiene - 2014

<sup>3</sup> Acceptability and Feasibility of Sharing a Soapy Water System for Handwashing in a Low-Income Urban Community in Dhaka, Bangladesh: A Qualitative Study. Farhana Sultana-Leanne Unicomb-Fosiul Nizame-Notan Dutta-Pavani Ram-Stephen Luby-Peter Winch - The American Journal of Tropical Medicine and Hygiene - 2018

Picture Guide



Quantity of Detergent when Using Bottles of Different Sizes

Bottle size	Quantity of detergent		
0.5 litre	10 grams	4 teaspoons	20 milliliters
0.75 litre	15 grams	6 teaspoons	30 milliliters
1.0 litre	20 grams	8 teaspoons	40 milliliters
1.5 litres	30 grams	12 teaspoons	60 milliliters

*Quantities are approximate and will depend on the detergent used.  
Decrease or increase quantity of detergent if soap solution feels too soapy or not soapy enough.*