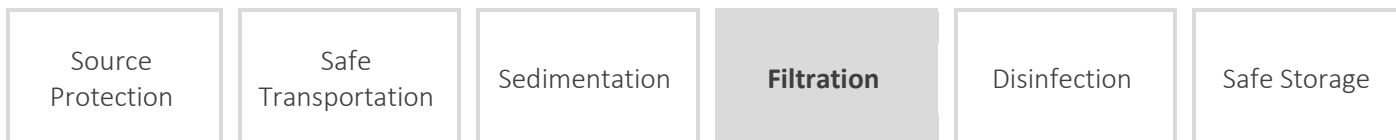


Straining



What is it?

Straining involves pouring water through a clean piece of cloth. Typically, fine and tightly-woven cotton, such as a sari cloth, is used. The cloth is folded eight times into layers, which makes it more difficult for sand, silt, clay, and pathogens to pass through. A sari cloth folded eight times will allow water to pass through but will filter out particles larger than 20–30 µm.

Performance

Microbiological Effectiveness:

Parameter	Effectiveness
Bacteria	Somewhat Effective*
Viruses	Not Effective (<80%)
Protozoa	Somewhat Effective**
Helminths	Very Effective (>99%)**

*A study found this method very effective at filtering plankton to which cholera-causing bacteria were attached. Straining may not be as effective for other bacteria.

**Assumption based on pathogen size. No independent tests.



Other Parameters

Somewhat effective at removing turbidity. Does not remove colour or chemicals.

Source Water Requirements

No specific limits.

Capacity

Volume treated depends on container size. Treatment takes only a few minutes and can be repeated multiple times in one day (using a clean cloth each time).

Lifespan

After many washings, threads of old cloths become soft and loose. This makes the cloth less effective at filtering particles. The cloth should be replaced if holes develop.

Ease of Use & Acceptability

Operation & Maintenance

Users fold a large, freshly cleaned cloth eight times. They securely tie the folded cloth over a clean container, and then pour water through the cloth into the container. The cloth should be washed in clean water between uses.

Repair & Replacement

New cloth must be purchased occasionally.

User Considerations & Preferences

Simple and easy to perform.

Feasibility

Availability

Requires buckets and finely woven cotton cloths. These supplies can be found in most communities.

Cost

Varies; depends on local costs for buckets and cloth.

Size & Weight

Small and easy to transport.

More Information

Details and references: www.hwts.info/products-technologies/98da1115/straining

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