

The three-pot water treatment system

Introduction

The simplest method of water treatment is storage in a covered pot. If the water can be stored for at least two days, schistosomes (small larvae which cause bilharzia) will die.

The water will also contain considerably fewer bacteria because these slowly die off as the conditions in the pot are not normally suitable for their survival and multiplication.

This note explains how to use a three-pot water treatment system.

Loughborough University

Pathogens

Pathogens (i.e. disease-causing organisms including some types of bacteria) attached to suspended solids will settle to the bottom of a tank together with the solids, further purifying the stored water.

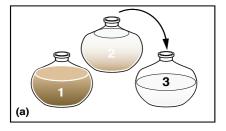
At household level, the simple three pot system can be used to promote settlement during storage.

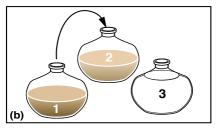
The system

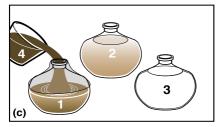
Examine the images in the figure below.

Drinking water should always be taken from Pot 3. This water has been stored for at least two days, and the quality has improved.

Periodically this pot will be washed out and may be sterilized by scalding with boiling water.







Each day when new water is brought to the house:

- Slowly pour water stored in Pot 2 into Pot 3, wash out Pot 2.
- Slowly pour water stored in Pot 1 into Pot 2, wash out Pot 1.
- Pour water collected from the source (Bucket 4) into Pot 1. You may wish to strain it through a clean cloth.

Using a flexible pipe to siphon water from one pot to another disturbs the sediment less than pouring.

About this note

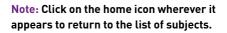
Author:	Brian Reed
Editor:	Rod Shaw
Illustrator:	Rod Shaw / Ken Chatterton
QA:	Bob Reed

Designed and produced by WEDC

© WEDC, Loughborough University, 2017

Water, Engineering and Development Centre (WEDC) School of Civil and Building Engineering Loughborough University Leicestershire LE11 3TU UK

Phone:	+ 44 (0) 1509 222885
Email:	wedc@lboro.ac.uk
Website:	wedc.lboro.ac.uk
Twitter:	wedcuk
YouTube:	wedclboro
	BACK



BACK TO TOP