

## Chapter 6

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## **APPENDIX A**

# **HOUSEHOLD CONSENT FORM**

## **WATER STORAGE IN RURAL HOUSEHOLDS: INTERVENTION STRATEGIES TO PREVENT WATERBORNE DISEASES**

**HOUSEHOLD NUMBER:**.....

**NAME:**.....

**VILLAGE:**.....

This study will investigate the quality of stored drinking water from various containers in 60 randomly chosen households in the village. Every household will be given a sodium hypochlorite solution (household bleach) which will either be 3.5%, 1.0% or 0% in order to determine the effectiveness of a chlorine based intervention. The other intervention that will be running together with the sodium hypochlorite solution intervention will be the addition of the CDC safe storage container to 30 of the households. This part of the study will determine the effectiveness of the storage container in improving the microbiological quality of the stored drinking water. The household members agree to participate in this study and will at the end of the study each receive 2 CDC safe storage containers for their participation. A group meeting will also be held at the end of the study to inform all the households taking part in the study, the chief of the village, the clinic staff and other relevant stakeholders like the Department of Water Affairs and the Department of Health, of the outcome of the interventions and to find a common goal to improve water quality in rural households. Each household is free to withdraw from the study at any time. Any personal information on the households and the household members will also be kept anonymous. The results of the study will strictly be used for scientific purposes only.

I..... agree to be part of the study.

Sign:.....

Witness:.....



**MADI O VHEWAHOMIDINI: DZI TSHANDUKO DZI NO THUSA  
U THIVHELA U PHADALALA HA MALWADZE A NO  
PHADALADZWA NGA MADI O TSHIKAFHADZEAHO**

**MUDI:**.....

**DZINA:**.....

**KUSI:**.....

Dzingudo dzi khou ita thoduluso kha madi a unwa a ne a vha a zwigubuni mahayani. Ri do nanga midi ya 60 nga mamvate. Mudi munwe na munwe u do wana sodium hypochloride (bleach) (ine yavha 3.5%, 1.0% kana 0%zwi vha zwo sedzana na u sedza kushumele kwayo kha u kunakasi madi). Dzinwe ngudo dzine ra khou ita ndi dza zwigubu zwa CDC zwine ra khou fha madi a 30. Heyi ivha I tshi khou sedza vhudi ha zwigubu zwa CDC ri tshi zwi vhambedza na zwe vha vha vha tshi khou zwi shumisa u vhea khazwo madi. Na zwauri vhudi ha madi a hone (u vha na zwitshili) vhu a fana naa.

Midi yo tenda u dzhenelela kha idzi ngudo ido fhiwa zwigubu zwvhili zwa CDC magumoni a iyi ngudo. Hudo farwa mutangano magumoni a ngudo u ita muvhigo kha vhatu vho dzhenelelaho kha idzi ngudo, Vha-Musanda, manese, vha muhasho wa mutakalo na vhulonda vhatu. Uri vhatu vha hadzimane mihumbulo kha u kunakisa madi a unwa. Munwe na munwe o tendelwa udi bvisa kha dzingudo tshifhinga tshinwe na tshinwe.

Nne:....., ndi khou tenda uvha tshipida tsha idzi ngudo.

Tsiano:..... Thanzi:.....

## **APPENDIX B**

# **PAMPHLETS DISTRIBUTED BY THE DEPARTMENT OF HEALTH AND THE DEPARTMENT OF WATER AFFAIRS ON THE USE OF JIK IN SOUTH AFRICA**

# PREVENT AND TREAT CHOLERA

## DRINK COOL BOILED WATER OR TREATED WATER



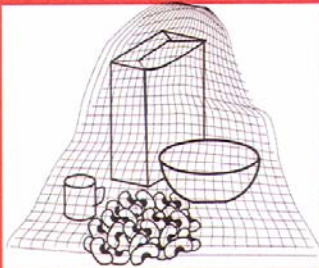
Boil for 1 Minute



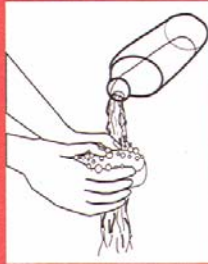
Add 1 teaspoon of Bleach (Jik) to 25 litres of water  
Leave standing for at least 2 hours, but it is best  
to leave it over night, before drinking.



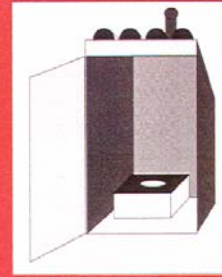
## COVER FOOD



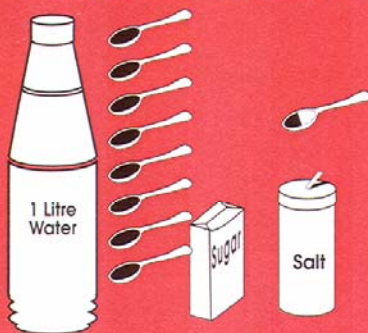
## WASH HANDS WITH SOAP AND COOL BOILED OR TREATED WATER



## BUILD SAFE TOILETS



## TREAT CHOLERA



mix 1l clean water + 8 teaspoons sugar + half teaspoon salt



drink mixture as often as possible

## FOR MORE INFORMATION CONTACT YOUR LOCAL CLINIC



### DEPARTMENTS:

WATER AFFAIRS AND FORESTRY • HEALTH • LOCAL AND PROVINCIAL GOVERNMENT  
• GOVERNMENT COMMUNICATION AND INFORMATION SYSTEM

CP 5 866/011

## KHA VHA THIVHELE KHOLERA VHA DOVHE VHA I ALAFHE

### KHA VHA NWE MADI O VHILISWAHO KANA O SHELWAHO MUSHONGA



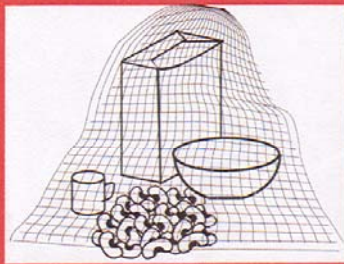
Kha vha vhlise minithi muthihi



Kha vha shelo thispuni nthihi ya Bullishi (dzhiki) kha lithara dza 25 dza madi. Vha a litsho awara mbili, thedzi nni khwine u a litsha vhusiku hahne, phanda na musi vha tshi a nwa.



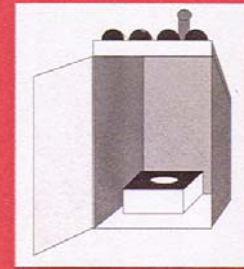
### VHA TIBE ZWILIWA



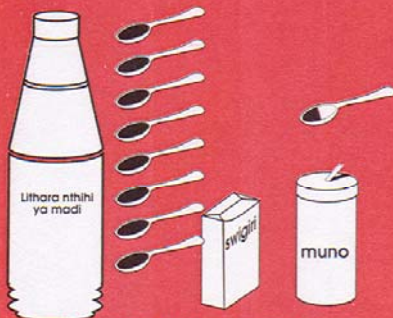
### VHA TAMBE ZWANDA NGA TSHISIBE NA MADI O VHILISWAHO O FHOLAHO KANA O SHELWAHO MUSHONGA



### KHA VHA FHATE MABUNGA O TSIRELEDZEAHO



### KHA VHA ALAFHE KHOLERA



Lithara nthihi ya madi + thispuni dza malo (8) dza swigiti + hafu ya thispuni ya muno



kha vha nwe muvango mu nzhi nga hune vha nga kona

### ARALI VHA TSHI TODA MAFHUNGO NGA VHUDALO, KHA VHA KWAME KILINIKI YA HAVHO



#### MIHASHO

ZWA MADI NA ZWA MADAKA. ZWA MUTAKALO. ZWA MUVHUSO WAPO NA WA PHUROVINTSI.  
SISITEME YA ZWA MAFHUNGO NA VHUDAVHIDZANI YA MUVHUSO

**Fhelisani Kholera**

Ni shele teaspoon ya jik kha litha dza 25 dza madi. Ni ime awara dzine dza swika mbili phanda hauri ni a nwe kana ni bike ngoa.

Arali ni tshi vhona unga no farwa nga kholera, ni mbo di shela teaspoon dza 8 dza zwigiri na hafu ya teaspoon ya muno kha litha ya madi o kunakisiwaho. Ni mbo nwa nga zwituku nga zwituku, ni tshi fhedza ni mbo di ya kiliniki I re tsini na hanu.

**Madi ndi Vhitshilo – Water is life.**

DEPARTMENT : WATER AFFAIRS AND FORESTRY

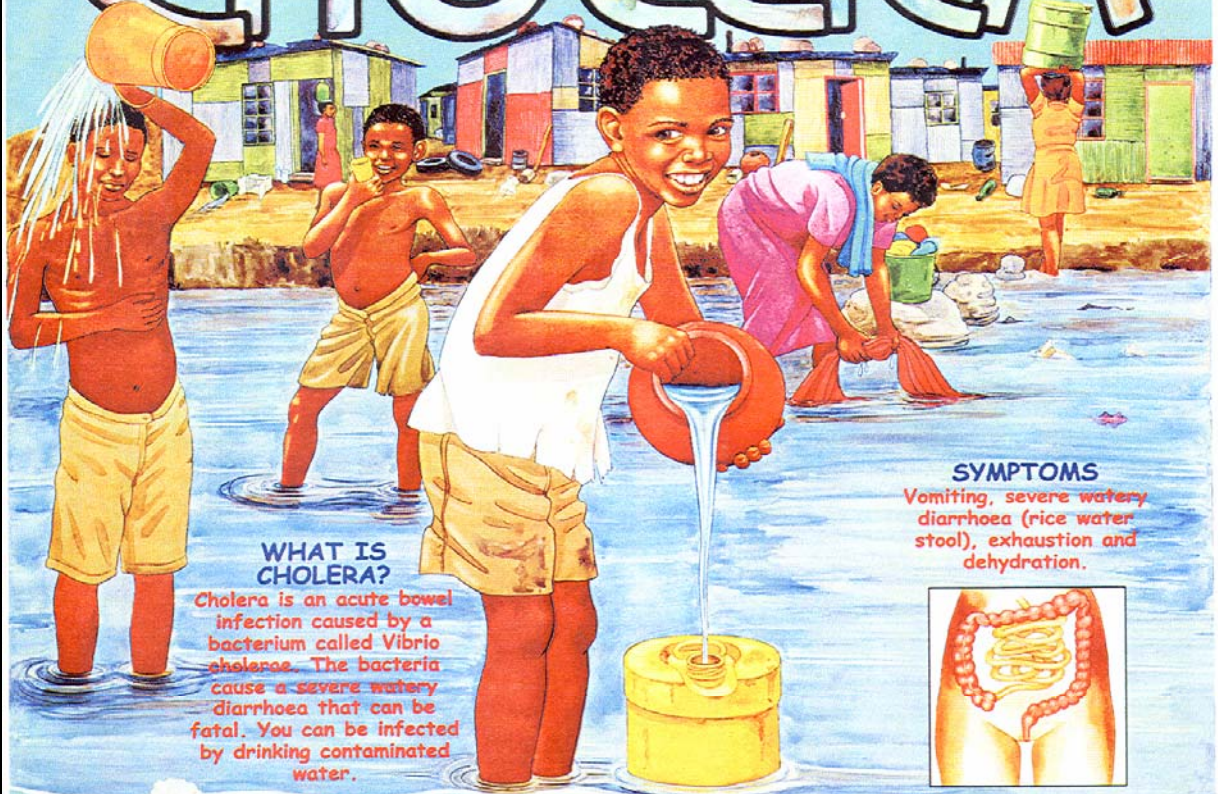
Eskom

UMGENI WATER-AMANI

sappi

RAND WATER

# CHOLERA



## WHAT IS CHOLERA?

Cholera is an acute bowel infection caused by a bacterium called *Vibrio cholerae*. The bacteria cause a severe watery diarrhoea that can be fatal. You can be infected by drinking contaminated water.

## SYMPTOMS

Vomiting, severe watery diarrhoea (rice water stool), exhaustion and dehydration.



## PREVENTION



Children and elderly people are at greatest risk.



Water must be disinfected by boiling it for at least 2 minutes or bleaching it. Add a teaspoon of bleach (such as Jik) for every 20-25 litres of water and leave it to stand for two hours, preferably overnight.



Always cover food from flies.



Wash hands before handling food, eating and after using the toilet.

Toilets should be far away from the river or stream which is used for cooking and washing.



Do not swim in cholera contaminated rivers.

Fruit, vegetables, utensils, clothing and bedding must be washed in treated water (boil water or use bleach) before use.



If you are in a cholera risk area, do not eat uncooked oysters and shellfish.



## HOW DOES CHOLERA AFFECT THE BODY?

- People sometimes drink contaminated water containing cholera bacteria.
- These bacteria travel to the small intestine (gut) where they multiply.
- The bacteria destroy the salt balance of the body and dehydration occurs.
- Water is no longer transported across the intestine and is flushed straight out of the body and as a result the person becomes dehydrated.
- If rehydration does not occur immediately it can result in the failure of organs, coma and death.



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### HELPING SOMEONE WHO IS SICK WITH CHOLERA:

- A person can die quickly from loss of body water and salt.
- Quickly give them lots more to drink.
- Make the special drink with sugar and salt (below).
- OR you can use a watery rice or mealie porridge. Mix 1/2 cup rice or mealie meal with 1 litre water and boil for 6 - 7 minutes.
- Children and adults should drink as much as they want but at least one to two cups after each watery stool.
- Continue to feed babies with breast milk and porridge or rice. Also give half a cup of the special drink, slowly by spoon, after each watery stool.

### TAKE PEOPLE SICK WITH DIARRHOEA TO YOUR CLINIC OR DOCTOR.

If a person loses lots of water and feels or looks weak, take her to the clinic or doctor immediately. Give more of the special drink or water on the way. This will help to keep the person alive.

#### A SPECIAL DRINK FOR TREATING DIARRHOEA AT HOME

Take:  
One litre clean  
water

AND  
8 level teaspoons  
sugar

AND  
Half level  
teaspoon of salt



+

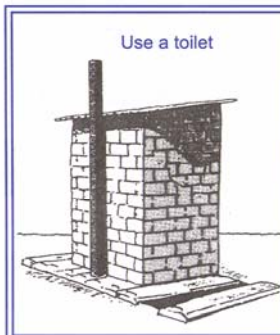


+



MIX ALL THREE TOGETHER AND GIVE THE PERSON TO DRINK

4 Adapted by Department of Community Health, 2001: English



Use a toilet

# Stop

# CHOLERA

Northern  
Province  
Department  
of Health  
and Welfare

Wash your hands



### Sudden watery diarrhoea



people sick and sometimes not.

- Those that do not get sick can carry the germs for a few weeks before the body's natural defences get rid of them.

### HOW DO THE GERMS SPREAD FROM ONE PERSON TO ANOTHER?

- When infected people empty their bowels, the germs come out in the stool (faeces).
- Some stool gets onto a person's hands or into drinking water or food.
- Water or food can look OK but contain the germs. Cholera germs spread to other people who consume this dirty water or food.
- Once inside the body, it can make that person sick.

### WHAT IS CHOLERA?

Cholera germs in the stomach cause diarrhoea. This can lead to rapid loss of body fluids.

### HOW DO WE KNOW SOMEONE HAS THE DISEASE?

- The first sign is watery diarrhoea, sometimes with vomiting.
- The person loses a lot of water very quickly.
- They feel weak and can have cramps in the arms and legs.
- The skin can become cold and wrinkled.
- The person may collapse and die.

### WHERE DO THE GERMS COME FROM?

- Cholera germs live in the intestines of some people.
- Sometimes the germs make

### Dirty water



### HOW CAN WE STOP CHOLERA?

- Make sure that germs do not spread from one person to another.

2

### Wash fruit and vegetables



- Wash your hands each time after you have been to the toilet.
- Wash your hands before eating or working with food.
- Wash fruit and vegetables before eating.
- Build and use a toilet.
- The toilet should be kept clean.
- It should be far from a borehole or stream used for drinking.
- Do not use water unless you know it is clean.

### Boil dirty water



### WHAT WATER IS CLEAN AND SAFE?

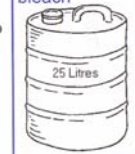
Tap or borehole water is usually safe. Water from rivers or dams is NOT safe.

To make water safe to drink: Boil the water, OR Add bleach (Jik or Javel) to the water as shown below. Use clear water or filter it through a cloth first.

**DANGER: Do not drink pure bleach!**

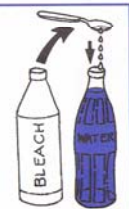
If you need a lot of water, add 1 teaspoon or capful of bleach to 25 litres and wait for at least 2 hours or overnight.

Add 1  
teaspoon  
bleach



If a little water is needed, add 5 drops of bleach to one litre and leave for half an hour before using it.

Add 5  
drops  
bleach



3

**KU PFUNA MUNHU LOYI A NGA KHOMIWA HI VUVABWI BYA KHOLERA:**

- Munhu a nga fa hi ku hatlisa hi ku helerwa hi mati ni munyu e mirini wa yena.
- Nyika munhu ya loye swo nwa hlawuleka le swi nga cheriwa tshukela ni munyu (xikombiso).
- KUMBE u tirhisa rhayisi ya mati kumbe mukapu wa mapa. Hlanganisa hafu ya khapu ya rhayisa kumbe mapa na litara yinwe ya mati, uswi virisa ku ringana 6-7 wa timinete.
- Vana na lavakulu va nga nwa hi ku rhandza xinwo lexi, kambe va fanele ku nwa tikhapu timbiri endzaku ka ku chuluka.
- Mi nga yimi ku mamisa vana, yanani mahlweni no nyika vana mukhapu kumbe rhayisi leyo vevuka. Tihelani mi va nyika hafu ya khapu ya xinwo lexi hlawuleka hi lepula endzaku ka nchuluko unwana na unwana.

**VANHU LAVA CHULUKAKA VA FANELE KU YISIWA E KLINIKI KUMBE EKA DOKODELA.**

Munhu loyi a titwaka a hela matimba hikokwalaho ka ku lahlekeriwa hi mati u tala emirini u fanele a yisiwa e kliniki kumbe eka dokodela hi ku hatlisa. Munhu loyi u fanele ku nyikiwa mati ku hlalisa vutomi bya yena.

**XINWO XO HLAWULEKA XA KU SIVELA KU CHULUKA EKAYA.**

Teka:  
Litara yinwe ya  
mati yo basa



+

NA  
swilepulana swa  
nunghu swa  
chukele



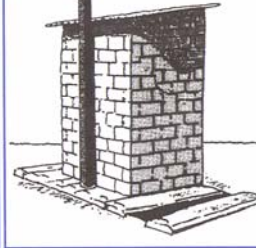
+

NA  
hafu ya  
xilepulana xa  
munyu



**USWI HLANGANYISA U NYIKA MUNHU LOYI A CHULUKAKU LESWAKU A NWA**

Tirhansi toyilete



Yimisa

**KHOLERA**

Northern  
Province  
Department  
of Health  
and Welfare

Hlambani mavoko



Nchuluko wa  
mati wa xihatla



- Xitsongwatsongwana xa Kholera xi tshama e marhumbwini ya vanhu vanwana.
- Nkarhi wunwana kholera yi endla kuri vanhu va vabya, kumbe vanga vabyi.
- Vanhu lava va nga vabyiki va nga tshama na xitsongwatsongwana lexi nkarhinyana ku fikela loko miri wu lwa na xitsongwatsongwana lexi.

**XANA XITSONGWATSONGWANI LEXI XI TLULELA NJHANI?**

- Xitsongwatsongwani xi kumeka eka mahuma ya vanhu lava va nga na xona.
- Xi nga nghena hi le mavokweni kumbe e matini yo nwa kumbe e swakudyeni.
- Mati kumbe swakudya swi nga tikomba swi ri le swinene. Xitsongwatsongwana lexi xi tlulela hi ku nwa mati yo thyaka kumbe swakudya swo thyaka.
- Loko xi ngenile e mirini xi nga endla leswaku munhu a vabya.

Mati ya  
thyaka



**XANA KHOLERA I YINI?**

Xitsongwatsongwani xa Kholera e khwirini xi vanga ku chuluka ku fika laha munhu a heleriwaka hi mati e mirini.

**XANA HI NGA SWI TIVA NJHANI LESWAKU MUNHU U NA KHOLERA?**

- Xikombiso xo sungula i ku chuluka swo-vevuka kumbe (mati); kumbe ku hlanta.
- Munhu yaloye u lahlekeriwa hi mati yo tala hi ku hatlisa.
- Va hela matimba va tihela va khomiwa hi tikirempo e mavokweni ni le milengeni.
- Nhlonge yi nga fika la ha yi titimelaka yi tihela yi khonyana.
- Munhu a nga titivala kumbe a fa.

**XANA XITSONGWATSONGWANI LEXI XI HUMA KWIHI?**

Hlantswa  
mihandzu ni  
matsavu



**XANA KHOLERA HI NGA YIMISA KU YINI?**

- Langutisisa leswaku xitsongwatsongwana lexi a xi tluleli vanwana:
- Hlamba mavoko e ndzaku ka loko u huma e xiyindwanini.
  - Hlamba mavoko u nga si dya kumbe ku khoma khoma swakudya.
  - Hlantswa mihandzu ni miroho u nga si dya.
  - Akani xiyindlwana xo hambukela ka xona mithelamixitirhisa.
  - Xiyindlwana xi fanele ku tshama xi basile

Virisa  
mati ya  
thyaka



- Xiyindlwana xi fanele ku va kule ni laha ku nga ni minkhele ya mati yo nwiwa.
- U nga tirhisa mati loko u nga ri na ntiyiso wa leswaku mati ya basile.

**XANA MATI YO TENGA HI WANI?**

Mati ya le phayiphini ni mati ya le borho ya sirhelekile. Mati ya le milambwini A YA SIRHELEKANGA. Ku sirhelela mati yo nwa: Virisa mati, KUMBE U chela Jik kumbe Javela e ka mati tani hi laha swi nga kombisiwa laha hansu. Tirhisa mati yo basa kumbe u hluta mati hi lapi ro basa loko u nga si ya tirhisa.

NGHOZI: u nga nwi Jik yi ri yoxe!  
Loko u lava mati yo tala, chela xilepulana xinwe kumbe xipfalo xinwe xa Jik e ka mati yo ringana 25 litres, nkarhi wo ringana ti awara ti mbirhi kumbe vusiku byinwe.

Loko ku laveka mati mantsanana, engeta mathonsi ya nthanu ya Jik e ka litre yinwe ya mati, yima nkarhi wo ringana xiphemu xa awara.

Chela  
xilepulana  
xinwe xa Jik



Chela 5 wa  
mathonsi  
ya Jik





## **APPENDIX C**

# **QUESTIONNAIRE**

# THE IMPACT OF WATERBORNE DISEASES IN RURAL COMMUNITIES OF THE VHEMBE REGION IN THE LIMPOPO PROVINCE

## PARTICIPANT IN THIS STUDY:

I am aware that the information obtained through this questionnaire will be treated as anonymous and will be used strictly for scientific purposes. I am free to withdraw from the study at any time.

I ..... agree to be part of this study.

Sign:.....

Witness:.....

## INSTRUCTIONS TO THE INTERVIEWER:

1. Ask questions and match the answer to the choices. Do not give the choices.
2. Write an X in the appropriate box.
3. If there is no match, choose other and ask the respondent to describe.

### **A. DEMOGRAPHIC DATA:**

1. General household information:

1.1. Name of village

---

1.2. House number for future visit (any type of identification)

---

---

2. How many people live in your household?

- 2.1. adult females
- 2.2. adult males
- 2.3. female children <5
- 2.4. female children 6 - 10
- 2.5. female children 11 - 18
- 2.6. male children < 5
- 2.7. male children 6 - 10
- 2.8. male children 11 - 18


3. What is the highest educational standard of the female adult head of the family?

- 3.1. degree
- 3.2. diploma
- 3.3. std. 8 - 10
- 3.4. std 4 - 7
- 3.5. std 1 - 3
- 3.6. grade 1 - 2
- 3.7. not educated


4. How many rooms does your house have?

--

**B. WATER SOURCE**

5. Does the village have a water committee?

yes	no
-----	----

6. What is your main source of domestic water in your village?

- 6.1. rain
- 6.2. dam
- 6.3. river
- 6.4. private borehole
- 6.5. outdoor tap at home
- 6.6. indoor tap
- 6.7. communal tap for < 100 people
- 6.8. communal tap for > 100 people
- 6.9. communal borehole (windmill)
- 6.10. other (please specify)


7. Is water readily available from the source?

yes	no
-----	----

8. If your answer to the above question is NO, state alternative source

- 8.1. buy water
- 8.2. private source
- 8.3. pond
- 8.4. river/ stream


9. Do you pay for water?

yes	no
-----	----

10. How much do you pay for water per month?

10.1. R5.00

10.2. R10.00

10.3. R20-00 or more


11. If the water source is a private communal, how many households use the source?

11.1. 1 - 10

11.2. 11 - 20

11.3. 20 - 50


12. How far is the water source from your house (in meters)?

12.1. 0 (at home)

12.2. 50 - 100

12.3. 100 - 500

12.4. 500 - 1000

12.5. > 1000


13. What time is the water source the busiest?

13.1. morning

13.2. afternoon

13.3. no busy time


**C. WATER COLLECTION AND STORAGE**

14. What type of container do you use to fetch or store water?

14.1. plastic

14.2. unpainted metal

14.3. painted metal

14.4. fibreglass


14.5. stainless steel

--

14.6. other (please specify)

--

15. How big is the container (litres) you use to collect the water with?

15.1. 5 - 10 litre

--

15.2. 10 - 25 litre

--

15.3. 25 - 50 litre

--

16. Indicate the shape of the container

16.1. drum

--

16.2. bucket

--

16.3. bottle

--

16.4. other (please specify)

---



---

17. How do you remove the water from the water source?

17.1. dipping into it with a container (cup/jar)

--

17.2. hand pump

--

17.3. tap

--

17.4. diesel pump

--

17.5. electric pump

--

17.6. use piece of hosepipe

--

17.7. other (please specify)

---



---

18. How do you take the water home? (Transportation)

- 18.1. hand carried container
- 18.2. vehicle
- 18.3. rolling the container
- 18.4. wheelbarrow
- 18.5. use donkey cart


19. How many times do you fetch water each day?

- 19.1. once
- 19.2. twice
- 19.3. thrice


20. Who fetches water?

- 20.1. adults
- 20.2. children
- 20.3. both


21. Do you store water at home?

yes	no
-----	----

22. What is the size of your storage tank?

- 22.1. 20 - 50 litres
- 22.2. 50 - 100 litres
- 22.3. 100 - 200 litres
- 22.4. 200 litres and more


23. What type of storage container do you use?

- 23.1. plastic
- 23.2. unpainted metal
- 23.3. painted metal
- 23.4. fibre glass
- 23.5. stainless steel
- 23.6. glass


24. Is the storage container kept.....?

- 24.1. open
- 24.2. closed
- 24.3. outdoors
- 24.4. indoors


25. How is the water obtained from the storage container?

- 25.1. tap
- 25.2. mug
- 25.3. other (please specify)


26. How often is the storage container emptied or nearly emptied?

- 26.1. daily
- 26.2. weekly
- 26.3. monthly
- 26.4. rarely or not at all




27. How often is the storage container cleaned?

- 27.1. daily
- 27.2. weekly
- 27.3. monthly
- 27.4. rarely or not at all


28. What do you use to clean the storage container?

- 28.1. water only
- 28.2. soap and water
- 28.3. bleach
- 28.4. sand and water


29. Do you treat water used for drinking by .....

- 29.1. boiling
- 29.2. straining
- 29.3. adding chemicals e.g. chlorine tablets
- 29.4. other (please specify)


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**D. WATER QUALITY OF STORED WATER**

30. Is the water clear

yes	no
-----	----

31. Does the water have a smell?

yes	no
-----	----

32. Does the water have any taste?

yes	no
-----	----

33. Does your household use water for each of the following?

- 33.1. drinking
- 33.2. cooking
- 33.3. bathing
- 33.4. laundry
- 33.5. watering the garden
- 33.6. watering animals
- 33.7. home industry/business


**E. ATTITUDES/KNOWLEDGE TOWARDS WATERBORNE DISEASES**

34. Do you know any diseases caused by contaminated water?

yes	no
-----	----

35. Which of the following waterborne diseases have you suffered from?

- 35.1. Cholera
- 35.2. Dysentery
- 35.3. Typhoid fever
- 35.4. Diarrhoea

36. Have any of your children had diarrhoea (loose tummy) at any time in the past six months? (loose tummy = more than 3 stools/day for at least 2 days).

yes	no
-----	----

List their ages:.....

37. What do you think caused the diarrhoea?

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38. For the most severe cases of stomach problems, which symptoms applied in your case?

38.1. Stomach ache

--

38.2. Passing blood

--

38.3. Vomiting

--

38.4. Fever

--

38.5. More than 4 looses stools in 24 hours

--

38.6. Other (please specify)

39. Did you report your health problems to the clinic nurse?

yes	no
-----	----

40. Were you given medication for your health problems?

yes	no
-----	----

41. For how many days did this bout of diarrhoea last?

41.1. 1 - 3 days

--

41.2. 4 - 6 days

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41.3. More than 7 days

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42. How do you think diarrhoea may be prevented?

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43. Have your family suffered from stomach ache in the last six months?

yes	no
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**F. SANITATION**

44. What type of toilet does the household have?

- 44.1. In-house flush
- 44.2. Outdoor flush
- 44.3. Bucket system
- 44.4. Pit latrine
- 44.5. Other (please specify)


45. How many people use your toilet?

- 45.1. 1 - 5
- 45.2. 6 - 10
- 45.3. More than 10


46. If your household does not have a toilet, where does your family normally defecate?

- 46.1. Neighbours
- 46.2. Hole dug in the yard
- 46.3. Other (please specify)


47. Are there times when the toilet is unavailable and household members relieve themselves in the vicinity of the house?

yes	no
-----	----

48. Did your household have any problems with the toilet in the last four weeks which made it necessary to use other toilet facilities?

yes	no
-----	----

49. How is water including waste from flush toilets disposed of?

- 49.1. Pipeline to sewage works
- 49.2. Septic tank
- 49.3. Poured into yard in the vicinity of house
- 49.4. Poured outside yard
- 49.5. Other (please specify)


50. How do you dispose of your domestic rubbish?

- 50.1. Rubbish is collected
- 50.2. Dump in the yard
- 50.3. Bury in the yard
- 50.4. Dump outside the yard
- 50.5. Bury outside the yard
- 50.6. Burn
- 50.7. Other (please specify)


51. For how long do you store solid waste in the house before taking it outside?

- 51.1. Daily
- 51.2. Weekly
- 51.3. Monthly
- 51.4. Rarely or not at all


52. How often is solid waste removed from the outside of your house?

- 52.1. Daily
- 52.2. Weekly
- 52.3. Monthly


53. Is there a problem in your area of people dumping solid waste?

yes	no
-----	----

54. Do you keep the following animals at home?

54.1. Cat

54.2. Dog

54.3. Poultry

54.4. Pigs

54.5. Goats

54.6. Cattle

54.7. Other (please specify)


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55. What do you use to clean your baby's anus/buttocks?

55.1. Water and hand wash

55.2. Cotton wool

55.3. Toilet paper

55.4. Washing rag

55.5. Newspaper


56. List occasions when you usually wash your hands each day

56.1. Before eating food

56.2. Before preparing food

56.3. After toilet use

56.4. After waking up in the morning

56.5. After cleaning baby's buttocks


57. Do you have soap in your household?

yes	No
-----	----

58. Where do you keep soap for washing your hands after using the toilet?

58.1. In the toilet

58.2. In the yard

58.3. In the bathroom

58.4. In the kitchen

58.5. In the bedroom


**G. ECONOMIC IMPACT**

59. How often have children in your household been ill with diarrhoea the past 6 months?

A. How often did you take these children for medical care?

B. How far are medical services from your home?

C. How do you get to the medical services?

D. How much does it cost you to get to the medical services

E. How much does the medical treatment cost you each time?

F. How many days did you have to stay away from work to take children for medical care?


60. How often have adults in your household been ill with diarrhoea the past 6 months?

A. How often did you take these ill adults have to go for medical care?

B. How much does the medical treatment cost you each time?

C. How many days did ill adults stay away from work because of this illness?


61. What is the total monthly income of your household?

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## H. OBSERVATION

62. How are the water containers covered?

- 62.1. No cover
- 62.2. Tightly
- 62.3. Loose
- 62.4. No containers


63. What is the hygienic condition of the yard?

- 63.1. Clean
- 63.2. Dirty
- 63.3. Very dirty


64. Fly count in yard

- 64.1. Numerous
- 64.2. Many
- 64.3. Few
- 64.4. None


65. What is the hygienic status of the kitchen?

- 65.1. Clean
- 65.2. Dirty
- 65.3. Very dirty


66. Fly count in kitchen

- 66.1. Numerous
- 66.2. Many
- 66.3. Few
- 66.4. None




67. What is the general condition of the latrine?

67.1. Faecal matter in the toilet

67.2. Toilet paper available

67.3. Toilet is ventilated

67.4. Smell of urine

67.5. Presence of flies


68. Is there a place for washing hands next to the toilet?

yes	no
-----	----

69. Cleanliness of children?

69.1. Hands

69.2. Face

69.3. Clothes


70. Garbage container in house?

70.1. None

70.2. Closed

70.3. Open


71. Are there a lot of flies in your kitchen during the day?

71.1. No

71.2. Usually/ almost always

71.3. Occasionally


72. Does your toilet attract flies during the day?

72.1. Almost never

72.2. Occasionally

72.3. Usually
