

**SANITARY SURVEY CHECKLISTS**



**Water, Sanitation  
and Hygiene (WASH)  
Safety Planning**

**Technical Toolkit  
for Kiribati Schools**

## **DISCLAIMER**

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# 01 INTRODUCTION

## 1.1 PURPOSE OF THE GUIDE

This *Sanitary Survey Checklist Guide* provides a methodical way to identify the factors or features of the existing school WASH system that contribute to an increased risk to the health of school children and teachers. It should be possible for the school community, with a assistance from the facilitator and possibly a health inspector, to answer the checklist questions and see the weaknesses and strengths of their system.

## 1.2 CONTENT OF THE GUIDE

- The guide contains a series of checklists that are based on commonly used World Health Organization<sup>1</sup> and WEDC<sup>2</sup> sanitary survey checklists for water supply, but extends the standard technical sanitary survey in four ways:
- There are checklists for **all three WASH components** - water supply, sanitation and hygiene.
- The questions will identify both **weaknesses** (factors/features that increase risk) **and good practice** (factors/features that provide barriers to risks).
- Each checklist prompts **past-present-future** community-led thinking about what risk factors/features are visible and happening now, and also what has happened before that could happen again, and what new risks might appear in the future.
- In addition to **technical risk factors/features**, questions are also included on risk factors/features related to **attitude and behaviour**, and on the **enabling environment**. These additional types of risk factors can be the cause of significant weaknesses in the WASH system that technical improvements will not fix.

## 1.3 USING THE CHECKLISTS

Working from the description of the school WASH system, take as many of the checklists from the guide as necessary to cover the description of the current system. Each school will need

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1 [http://www.who.int/water\\_sanitation\\_health/dwq/2edvol3h.pdf](http://www.who.int/water_sanitation_health/dwq/2edvol3h.pdf)

2 <http://www.lboro.ac.uk/well/resources/technical-briefs/50-sanitary-surveying.pdf>

to work through at least three checklists, one for each of water supply, sanitation and hygiene.

Each checklist has a set of questions about factors/features that contribute to an increased risk to the health. Each question is written in such a way that a “Yes” answer means it is a sanitary risk factor/feature. A brief explanation of each factor/feature is provided to help understand why this increases (grey-coloured column) or reduces (yellow-coloured column) risk to health. For example:

<b>Risk factor/feature: Source water quality</b>			
<b>1. Is the water supply from a well?</b>			
This is a high risk to health because all well water in Kiribati is assumed to be contaminated.	Yes	The only alternative is rainwater harvesting, which is likely to be less contaminated than well water.	No
<b>2. Is the well within 20–25m of a pit latrine or septic tank?</b>			
This adds to the risk to health because the seepage from the wastewater will further contaminate the well water	Yes	The further away the better. This does not reduce the inherent risk of contaminated well water, but it is good practice reducing further contamination.	No
<b>3. Is this an open well and uncovered?</b>			
This adds to the risk to health because the well water can be further contaminated by rubbish being thrown in the well, or by surface runoff after heavy rain.	Yes	The well is covered/protected, either by a lid over an open dug well, or because it is a drilled bore using a pump to bring the water to the surface. This does not reduce the inherent risk of contaminated well water, but it does provide a barrier to further contamination.	No
<b>4. Is the fencing around the well inadequate to keep animals away?</b>			
Pig and dog faeces dropped near the well can be washed into the well by heavy rain. Animals can fall into the well and not be able to get out, possibly even dying in the well. Animals can damage a bore head.	Yes	Secure fencing keeps animals away from the open well or bore head.	No

The more responses on the good practice yellow side of the table the better. These good practices need to continue. The responses on the grey side of the table are the factors/features that contribute to increased risk to health, and need attention.

## **02** CHECKLISTS

This guide includes sanitary survey checklists for:

### **2.1 NATIONAL INFRASTRUCTURE STANDARDS**

### **2.2 WATER HARVESTING**

- Rainwater harvesting
- Well water

### **2.3 SANITATION**

- Sanitation practices in general
- Dry toilet
- Wet or dry pit toilet or septic tank
- Reef toilet

### **2.4 HYGIENE**

- Handwashing
- Menstrual waste disposal

# NATIONAL INFRASTRUCTURE STANDARDS



The Kiribati Ministry of Education has developed minimum infrastructure standards to be applied to all its primary school education facilities. The standard is to be referenced by all who are involved in the planning, procuring and monitoring of primary school infrastructure, and primary school construction and maintenance activities.

Risk factor/feature: Minimum standards			
1. Does the school water supply fall short of the national standard for rainwater tanks?			
	Yes	The installation of rainwater tanks to provide an alternative water source is recommended at all primary schools.  Rural schools without access to piped water should provide sufficient rainwater tanks to provide 2 litres a day for students and teachers for 60 school days, i.e. 1 x 6,000 litre tank for 50 people.	No
2. Does school sanitation fall short of the national standard?			
	Yes	The following toilet / person ratios have been deemed appropriate for Kiribati conditions:  1 x toilet / 40 girls  1 x toilet / 60 boys.	No



# WATER HARVESTING

## for rainwater harvesting



Risk factor/feature: Water collection			
<b>1. Is the roof or guttering dirty (dirt, leaves, bird faeces)?</b>			
Leaves and branches fall onto the roof and are washed into the storage tank, rotting and adding sediment to the tank, causing bad taste and smell.	Yes	Trees are cut back from the roof, and roof and guttering regularly cleared of vegetation. Using a first-flush diverter that flushes the dirtiest water to waste at the beginning of each rain event then fills the tank.	No
<b>2. Are trees overhanging the roof?</b>			
Overhanging trees give pests access to the roof and guttering, leaving faeces on the roof that will be washed into the storage tank, contaminating the water with disease-causing microbes.	Yes	Trees are cut back from the roof so pests cannot get on to the roof. Using a first-flush diverter that flushes the dirtiest water to waste at the beginning of each rain event then fills the tank.	No
<b>3. Is the roof or guttering in poor condition (rusty, holes, flaking paint)?</b>			
Poor condition or inappropriate roof and guttering material will result in rust and paint being washed into the storage tank, adding sediment to the tank and causing bad taste and smell.	Yes	Keeping the roof and guttering in good condition will reduce the amount of sediment entering the storage tank. Using a first-flush diverter that flushes the dirtiest water to waste at the beginning of each rain event then fills the tank.	No
<b>4. Does the amount of rainfall change throughout the school year?</b>			
Not planning for the amount available, especially when demand exceeds supply, is a risk.	Yes	Conservation messages and practices will assist in times of water shortage. Having a second storage tank will help.	No
Risk factor/feature: Water storage and use			
<b>5. Has the school run out of water before?</b>			
Not having water available is as much a risk to health and wellbeing as having access to contaminated water.	Yes		No
<b>6. Is it more than 12 months since the storage tank was last cleaned?</b>			
Sediment building up in the bottom of the tank will contain microbial contaminants that can be re-suspended when it is disturbed during tank filling or using water.	Yes	Draining the tank and properly cleaning the inside walls and floor, and removing the sediment from the bottom of the tank is recommended. A second tank in series with the first will help to improve water quality. Water is pumped into the first tank where most sediment settling happens. The cleaner water from the top of the first tank flows into the second tank, which is the one water is taken from for use.	No
<b>7. Are there open entry points to the tank?</b>			
Uncovered hatches and unscreened vents allow dirt, leaves and pests to enter the tank, causing sediment build up and microbial contamination in the tank. Storage tanks are ideal breeding places for mosquitos.	Yes	The lid to the tank should always be in place, and vents should be covered with fine mesh screens.	No
<b>8. Does water pond in the area around the tap on the tank?</b>			
Water that spills will be a problem if the area becomes muddy.	Yes	A well-drained collection point, ideally a concrete slab and constructed in a way that people do not stand in the overflowing water, will prevent the tap becoming dirty.	No

<b>9. Is water collected and/or stored for use in just any old small containers or bottles?</b>			
Recontamination of clean stored water is a significant issue when transferring water from one container to another. Dirty and uncovered or sealed storage containers, no matter how small (eg. students drink bottle) are a risk.	Yes	Dedicated drinking-water bottles for each student should be the goal. These need to be cleaned with safe water once a week.  Dedicated “dipping” containers that are kept off the ground will stop water becoming contaminated when transferring it from a larger container that does not have a tap.	No
<b>10. Is the water consumed without treatment?</b>			
For rainwater water, this is a medium risk to health.	Yes	Keeping the roof, guttering and tank clean will reduce the risk to low. Boiling the water before drinking and using clean drinking-water bottles will reduce the risk to very low.	No

<b>Risk factor/feature: Community capacity and behaviours</b>			
<b>11. Is the school water supply looked after by untrained people?</b>			
Not having trained people looking after the supply creates a problem if something breaks and needs fixing. The person may not even recognise that something is broken.	Yes	As a minimum, training in the layout of the water supply, and how to clean the storage tank.	No
<b>12. Is there a lack of documented instructions on how to look after the school water supply?</b>			
Not having instructions written down creates a problem if someone unfamiliar with the supply has to look after it.	Yes	As a minimum, instructions for the layout of the water supply, and how to clean the storage tank.	No
<b>13. Is there a lack of tools and materials to maintain and repair the school water supply?</b>			
Not having tools and materials for basic operations and maintenance put the availability and quality of water at risk.	Yes	As a minimum, tools and materials should be available at the school or from the local community for tasks that happen daily or weekly.	No
<b>14. Is there only one person who knows how to look after the school water supply?</b>			
Tasks are not carried out if the one person is away or the person leaves the school.	Yes	Two or more people who know how to look after the water supply and having written instructions will mean the school water supply will always be looked after.	No

# WATER HARVESTING for well water



<b>Risk factor/feature: Source water quality</b>			
<b>1. Is the water supply from a well?</b>			
This is a high risk to health because all well water in Kiribati is assumed to be contaminated.	Yes	The only alternative is rainwater harvesting, which is likely to be less contaminated than well water.	No
<b>2. Is the well within 20–25m of a pit latrine or septic tank?</b>			
This adds to the risk to health because the seepage from the wastewater will further contaminate the well water	Yes	The further away the better. This does not reduce the inherent risk of contaminated well water, but it is good practice reducing further contamination.	No
<b>3. Is this an open well and uncovered?</b>			
This adds to the risk to health because the well water can be further contaminated by rubbish being thrown in the well, or by surface runoff into the well after heavy rain.	Yes	The well is covered/protected, either by a lid over an open dug well, or because it is a drilled and sealed/capped bore using a pump to bring the water to the surface. This does not reduce the inherent risk of contaminated well water, but it does provide a barrier to further contamination.	No
<b>4. Is there protection and drainage around the open well or bore head poor, causing water to pond and stagnate?</b>			
The well does not have a wall above the ground to stop rainwater water draining towards and into the well or bore.	Yes	Protection from contaminated runoff is provided by raised wall around the well. A drainage channel leading away from the well or bore head will prevent ponding of water.	No
The well is not surrounded by a sloping concrete slab at least 1m wide to stop rainwater water draining towards and into the well or bore.	Yes	Protection from contaminated runoff is provided by a concrete slab around the open well or bore head, sloped to drain water away from the opening. The concrete slab is in good condition, no cracks.	No
<b>5. Is the fencing around the well inadequate to keep animals away?</b>			
Pig and dog faeces dropped near the well can be washed into the well by heavy rain. Animals can fall into the well and not be able to get out, possibly even dying in the well. Animals can damage a bore head.	Yes	Secure fencing keeps animals away from the open well or bore head.	No
<b>Risk factor/feature: Water collection</b>			
<b>6. For an open well, are the rope and bucket left in such a way that they may become contaminated?</b>			
If the rope and bucket are dropped on the ground between uses, they will transfer the contamination down into the well next time used.	Yes	The rope is coiled after use and hung off the ground with the bucket, or wound up onto a windlass.	No
<b>7. Is the pump loose or damaged at the point of attachment to the bore head?</b>			
This adds to the risk because water from rain or from pump spill-over will carry contamination down into the bore.	Yes	There should be a watertight seal between the pump and the bore head.	No
<b>8. Does water pond in the area around the hand pump (eg. Tamana pump) where water is dispensed and collected?</b>			
Water that spills will draining back down into the bore. This can be a problem if the area becomes muddy.	Yes	A well-drained collection point, ideally a concrete slab and constructed in a way that people do not stand in the overflowing water, will prevent dirty water draining back down into the bore.	No

<b>9. For a bore with a mechanical pump (eg. solar or diesel), can the water flow back from the storage tank into the bore?</b>			
Unless there is a barrier, either a one-way valve in the pump, or a valve or air gap between the storage tank and the bore head, water will flow under gravity back into the bore. This is a problem if the tank water is contaminated.	Yes	A backflow prevention device will prevent this. The simplest backflow prevention device is an air gap - water drops into the storage tank always above the water level in the tank.	No
<b>10. Has the pump failed before and taken longer than a day to fix?</b>			
A broken or damaged solar panel or broken mechanical pump.	Yes	Having local people who can fix a broken pump, and tools and spare parts, will reduce the time without water.	No
<b>11. Does the amount of water available change throughout the school year?</b>			
Not planning for the amount available, especially when demand exceeds supply, is a risk.	Yes	Conservation messages and practices will assist in times of water shortage. Having a second storage tank will help.	No

<b>Risk factor/feature: Water storage and use</b>			
<b>12. Has the school run out of water before?</b>			
Not having water available is as much a risk to health and wellbeing as having access to contaminated water.	Yes		No
<b>13. If so, did it run out of water because the storage tank was empty?</b>			
The tank could be empty because there was insufficient rain to fill the tank, or there was a mechanical failure to pump water from the bore, or the tank had a serious leak.	Yes		No
<b>14. Is it more than 12 months since the storage tank was last cleaned?</b>			
Sediment building up in the bottom of the tank will contain microbial contaminants that can be re-suspended when it is disturbed during tank filling or using water.	Yes	Draining the tank and properly cleaning the inside walls and floor, and removing the sediment from the bottom of the tank is recommended. A second tank in series with the first will help to improve water quality. Water is pumped into the first tank where most sediment settling happens. The cleaner water from the top of the first tank flows into the second tank, which is the one water is taken from for use.	No
<b>15. Are there open entry points to the tank?</b>			
Uncovered hatches and unscreened vents allow dirt, leaves and pests to enter the tank, causing sediment build up and microbial contamination in the tank. Storage tanks are ideal breeding places for mosquitos.	Yes	The lid to the tank should always be in place, and vents should be covered with fine mesh screens.	No
<b>16. Is water collected and/or stored for use in just any old small containers or bottles?</b>			
Recontamination of clean stored water is a significant issue when transferring water from one container to another. Dirty and uncovered or sealed storage containers, no matter how small (eg. students drink bottle) are a risk.	Yes	Dedicated drinking-water bottles for each student should be the goal. These need to be cleaned with safe water once a week.  Dedicated "dipping" containers that are kept off the ground will stop water becoming contaminated when transferring it from a larger container that does not have a tap.	No
<b>17 Is the water consumed without treatment?</b>			
For well water, this is a major risk to health.	Yes	Boiling the water before drinking and using clean drinking-water bottles will reduce the risk to low.	No

<b>Risk factor/feature: Community capacity and behaviours</b>			
<b>18. Is the school water supply looked after by untrained people?</b>			
Not having trained people looking after the supply creates a problem if something breaks and needs fixing. The person may not even recognise that something is broken.	Yes	As a minimum, training in the layout of the water supply, how to operate and maintain solar panel and pump, and how to clean the storage tank.	No
<b>19. Is there a lack of documented instructions on how to look after the school water supply?</b>			
Not having instructions written down creates a problem if someone unfamiliar with the supply has to look after it.	Yes	As a minimum, instructions for the layout of the water supply, how to operate and maintain solar panel and pump, and how to clean the storage tank.	No
<b>20. Is there a lack of tools and materials to maintain and repair the school water supply?</b>			
Not having tools and materials for basic operations and maintenance put the availability and quality of water at risk.	Yes	As a minimum, tools and materials should be available at the school or from the local community for tasks that happen daily or weekly.	No
<b>21. Is there only one person who knows how to look after the school water supply?</b>			
Tasks are not carried out if the one person is away or the person leaves the school.	Yes	Two or more people who know how to look after the water supply and having written instructions will mean the school water supply will always be looked after.	No



# SANITARY SURVEY CHECKLIST

## for sanitation practices in general



<b>Risk factor/feature: Healthy habits and behaviour change</b>			
<b>1. Has the school yet to start the WASH awareness component of the school curriculum?</b>			
The WASH curriculum is not taught in the school. Children are not aware of, or supported with good WASH practice.	Yes	The WASH curriculum is taught in the school, and children are supported with good WASH practice.	No
<b>2. Has the school not yet started the UNICEF/GIZ Three Star Approach for WASH in Schools programme?</b>			
The school is not aware of what is required to achieve a One Star status that will ensure daily routines promote healthy habits.	Yes	The school has had Three Star training and is working towards or has achieved a One Star status.	No

<b>Risk factor/feature: Types of sanitation practices</b>			
<b>3. Is open defecation practised at the school?</b>			
Open defecation contaminates the lagoon water and/or the land around the school. People coming in contact with the faeces-contaminated lagoon water or faeces on the ground are at risk of becoming sick.	Yes	Proper toilet facilities are used to contain the faeces and prevent people coming into contact with faeces.	No
<b>4. Is any type of water-based toilet used at the school?</b>			
These types of toilets pose a risk to the groundwater used for the school and surrounding community water supplies.	Yes	Waterless toilets are used. This type significantly reduces the likelihood of contaminating groundwater.	No
<b>5. Are pit latrine toilets used at the school?</b>			
These types of toilets pose a risk to the groundwater used for the school and surrounding community water supplies.	Yes	Above-ground toilets are used. This type significantly reduces the likelihood of contaminating groundwater.	No

<b>Risk factor/feature: Adequacy of facilities</b>			
<b>6. Is there an insufficient number of toilets for the number of students and teachers, and for male and female?</b>			
The number of toilets is less than required by the National Infrastructure Standard for Primary Schools.	Yes	The number of working toilets meets the requirements of the National Infrastructure Standard for Primary Schools.	No
<b>7. Is the toilet located or built in a form that does not give privacy?</b>			
If the user wants privacy and the location or construction does not provide this, or if the toilet is too far away from classroom, the user will probably defecate elsewhere.	Yes	The toilet is located close enough to the classrooms that the teachers can observe any misbehaviour from a distance, and is built with adequate screening of the user.	No
<b>8. Are the school toilets inaccessible to younger/smaller children?</b>			
There is only one size toilet pedestal. Younger/smaller children struggle to use the toilet without making a mess, or these children defecating elsewhere.	Yes	There are toilets of appropriate size for younger/smaller children and adult-size.	No

<b>9. Are the school toilets inaccessible to students with disabilities?</b>			
Toilets have steps to climb or narrow doors or poor lighting.	Yes	At least one toilet is accessed by a ramp. Doors are wide enough for a wheelchair. Designed with plenty of natural light or an electric light.	No
<b>10. Are there insufficient or inadequate hand washing facilities with soap next to the toilets?</b>			
Children do not wash their hands after going to the toilet, causing a serious risk of making themselves and others sick.	Yes	Fresh water, such as from a tippy tap, and soap are always available near the toilet, and always used.	No
<b>11. Are toilet facilities dirty, smelly or plagued by flies?</b>			
No one is responsible for toilet cleaning. Dirty toilets are unsanitary, and likely not to be used because they are unpleasant.	Yes	Toilet cleaning is a scheduled task. Toilets are cleaned properly and regularly.	No



# SANITARY SURVEY CHECKLIST

## for dry toilet



### Risk factor/feature: Above-ground

1. Does the dry toilet collect both urine and faeces together?			
The solids are too wet for effective breakdown, and the toilet smells and is plagued by flies.	Yes	If the moisture, temperature and airflow are well controlled, the solids will break down to odourless humus. Adding a handful of dry vegetation after each use will help to reduce moisture level.	No

### Risk factor/feature: Disposal of urine and solids

2. Does the dry toilet have urine diversion?			
Disposing of the urine directly to ground risks contaminating the groundwater with nutrients and low levels of disease-causing microbes.	Yes	The urine is diverted into a separate container for disposal away from wells.	No
3. Once the collection bin is full, is the contents emptied straight away?			
The solids will not have broken down to a harmless material; they will contain harmful microbes.	Yes	The bin is stored for at least 12 months before emptying. If the moisture, temperature and airflow are well controlled during this time, the solids will break down to humus that should be free of harmful microbes, which is safe for disposal to land.	No

### Risk factor/feature: Community capacity and behaviours

4. Has there been past experience of children not wanting to use a dry toilet?			
If the child has fears about using a dry toilet, then she/he will probably defecate elsewhere.	Yes	School WASH awareness and behaviour change activities are part of the routine.	No
5. Has there been past experience of the toilet becoming blocked?			
Children have thrown things down the toilet and caused it to block.	Yes		No
6. Has it taken longer than a day to fix a blocked or broken toilet?			
If the toilet does not function, children will go elsewhere to defecate.	Yes	Having local people who can fix a blocked or broken toilet, and tools and spare parts, will reduce the time without a working toilet.	No
7. Is the dry toilet looked after by untrained people?			
Not having trained people looking after the toilet creates a problem if something breaks and needs fixing. The person may not even recognise that something is broken.	Yes	As a minimum, how to properly use and maintain toilet, and in particular how to safely change over and empty bins.	No
8. Is there a lack of documented instructions on how to look after the dry toilet?			
Not having instructions written down creates a problem if someone unfamiliar with the toilet has to look after it.	Yes	As a minimum, instructions for how to properly use and maintain toilet, and in particular how to safely change over and empty bins.	No
9. Is there a lack of tools and materials to maintain and repair the dry toilet?			
Not having tools and materials for basic operations and maintenance put the availability and quality of water at risk.	Yes	As a minimum, tools and materials should be available at the school or from the local community for tasks that happen daily or weekly.	No
10. Is there only one person who knows how to look after the dry toilet?			
Tasks are not carried out if the one person is away or the person leaves the school.	Yes	Two or more people who know how to look after the toilet and having written instructions will mean the toilet will always be looked after.	No

# SANITARY SURVEY CHECKLIST

## for wet or dry pit toilet or septic tank



Risk factor/feature: Location			
1. Is the pit toilet dug down to within 1m of the groundwater or the septic tank buried to within 1m of the groundwater?			
Since the groundwater in Kiribati is so shallow, it is assumed all pit latrines and septic tanks will be close to, or into the groundwater.	Yes		No
2. Does the septic tank discharge directly to the ground, rather than through a long field drainpipe?			
Very few of the harmful bugs are killed or removed in the tank; so direct discharge of effluent is no better than a pit latrine.	Yes	Slow drainage of effluent over a large area, as would happen if effluent is discharged through a long field drain, will reduce the number of harmful bugs reaching the groundwater.	No
3. Is the pit or septic tank toilet within 20–25m of a well (school well or nearby village well)?			
The well water will be contaminated by the pit/septic tank seepage. A wet pit latrine will almost continuously contaminate the groundwater. A dry pit latrine will contaminate the groundwater every time the water table rises (flowing rain).	Yes	A pit/septic tank toilet located very close to the sea, and wells more than 20–25m away or only using rainwater harvesting for water, reduces the risk to health.	No
4. Has the school pit latrine or septic tank toilet ever been relocated because it filled up?			
Disused pit latrines and septic tank toilets will continue for some time to contaminate the groundwater.	Yes		No
5. Has it been more than a year since the septic tank was emptied?			
Solids will build up in the septic tank to the point that causes overflow and contamination of the groundwater.	Yes	Solids should be pumped out of a septic tank at least once a year and disposed of in a place that will not contaminate the groundwater or environment.	No
Risk factor/feature: Above-ground			
6. Does water have to be carted to the wet pit or septic tank toilet?			
If water has to be carted to the toilet, children may not bother to flush. The toilet will become dirty, smelly, and insanitary. Children may resort back to open defecation.	Yes	Water is available at the toilet, either from a tap or from a storage container used solely for the purpose of flushing the toilet.	No
7. Does water pond around the toilet area after rain?			
Ponding water will eventually soak into the ground carrying contaminants from the pit or septic tank into the groundwater. The ponded water may become contaminated, which is a risk to health if children come into contact with the ponded water.	Yes	Either there is a drainage channel leading away from the toilet or the toilet is located on higher ground, so rainwater flows quickly away from the toilet area.	No
Risk factor/feature: Community capacity and behaviours			
8. Has there been past experience of the toilet becoming blocked?			
Children have thrown things down the toilet and caused it to block.	Yes		No
9. Has it taken longer than a day to fix a blocked or broken toilet?			
If the toilet does not function, children will go elsewhere to defecate.	Yes	Having local people who can fix a blocked or broken toilet, and tools and spare parts, will reduce the time without a working toilet.	No

# SANITARY SURVEY CHECKLIST

## for reef toilet



### Risk factor/feature: Location

<b>1. Has there ever been faeces from the toilet washed up on the beach?</b>			
This probably means there is not enough movement of water to quickly disperse the faeces, or the current washes faeces back up onto the beach.	Yes	The faeces always drop into deep enough and moving water	No
<b>2. Is the toilet built on lagoon-side?</b>			
There will be insufficient depth and movement of water to disperse the faeces, especially at low tide. The toilet will contaminate the water that people have most contact – for bathing, food gathering and accessing boats.	Yes	Ocean side reef toilets are less likely to contaminate areas that people come into direct contact.	No
<b>3. Does the toilet overhang above the low-tide mark?</b>			
Faeces sometimes do not drop into water. As the tide comes in, it will wash the faeces further up the beach.	Yes	The toilet is below the low tide mark, and faeces will always drop into water to be dispersed by the waves and current.	No

### Risk factor/feature: Above-ground structure

<b>4. Is the walkway or platform unstable or unsuitable for young children?</b>			
Young children may be too scared to go out on the walkway, especially during windy weather. There is a real risk they could fall off the walkway into the water.	Yes	A sturdy construction and including handrails on both sides is an improvement.	No

# SANITARY SURVEY CHECKLIST

## for handwashing



### Risk factor/feature: Effective washing

1. Do children sometimes not wash their hands, especially after going to the toilet?

This is a major risk factor for spreading disease throughout the school.	Yes	Children are supervised in hand washing.	No
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2. Has the school ever run out of soap?

Hand washing is less effective without the use of soap.	Yes	Cleaning hands is much more effective when soap is used.	No
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3. Are basins of water used for hand washing?

Hand washing water will become contaminated with what is washed off children's hands. Germs will be spread between children.	Yes	The water is not reused. A Tippy Tap or similar device is used, providing fresh water for each wash.	No
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### Risk factor/feature: Disposal

4. Is the used water simply discharged to the ground?

Disposing of the used water directly to ground risks contaminating the groundwater with low levels of disease-causing microbes.	Yes	Filtering the dirty water through a drum of sand before disposing of it to the ground will remove some of the contaminants.	No
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# SANITARY SURVEY CHECKLIST

## for menstrual waste disposal



### Risk factor/feature: Location

1. Is the toilet located or built in a form that does not give privacy?

When an adolescent girl or woman needs privacy and the location or construction does not provide this, she may decide not to go to school while she is menstruating.

Yes

There is a dedicated and private toilet area for use by menstruating adolescent girl or women.

No

### Risk factor/feature: Disposal

2. Covered containers in the toilet area for disposing of used sanitary products are not available?

If there is nowhere hygienic to dispose of used sanitary products, the products will either be discarded just anywhere (a health risk for others), or not to go to school while she is menstruating.

Yes

Covered containers are available in the toilet area for older girls and women.

No

3. There is no solid waste management facility or collection and safe disposal practice at the school?

Containers become full of used sanitary products and the area becomes smelly and plagued with flies.

Yes

Daily collection and safe disposal of the contents of used sanitary containers.

No

4. Water to wash in private is not available?

It is not possible to wash out stained clothes, used sanitary products or personal washing for odour control.

Yes

A private space with a water supply and drainage is available. Clothes drying space may also be available.

No

## REFERENCES

FRESH (2004) Tools for Effective School Health. Water and Sanitation: A Checklist for the Environment and Supplies in Schools. <http://www.unesco.org/education/fresh>. United Nations Educational, Scientific and Cultural Organization.

MoE (2011) National Infrastructure Standards for primary Schools (Edition 3.1, July 2011). Ministry of Education, The Republic of Kiribati.

UNICEF (2012) Water, Sanitation and Hygiene (WASH) in Schools. UNICEF, New York.

UNICEF (2013) Field Guide: The Three Star Approach for WASH in Schools. UNICEF/GIZ, Programme Division/WASH, New York.

WEDC (2015) Technical brief 50. Sanitary surveying. <http://www.lboro.ac.uk/well/resources/technical-briefs/50-sanitary-surveying.pdf>. Water, Engineering and Development Centre, Loughborough University, UK.

WHO (1997) Guidelines for Drinking-Water Quality, 2nd edition, Volume 3 - Surveillance and control of community supplies. Section 8, Legislative, regulatory, policy, and basic management aspects. [http://www.who.int/water\\_sanitation\\_health/dwq/2edvol3h.pdf](http://www.who.int/water_sanitation_health/dwq/2edvol3h.pdf). World Health Organization, Geneva, Switzerland.