



*Learning From Experience:*  
Guidelines for locally sourced and  
cost-effective strategies for hygiene at  
home for people with high support needs



# Background to this Learning Resource

These guidelines are the result of a partnership between World Vision Australia and CBM Australia that aims to improve inclusion of people with disabilities in World Vision's Water, Hygiene and Sanitation (WASH) initiatives, including in Sri Lanka. They are based on experiences and observations from World Vision's implementation of the Rural Integrated WASH 3 (RIWASH 3) project in Jaffna District, Northern Province, funded by the Australian Government's Civil Society WASH Fund 2. The five-year project commenced in 2014. It aims to improve the ability of WASH actors to sustain services, increase adoption of improved hygiene practices, and increase equitable use of water and sanitation facilities of target communities within 11 Grama Niladari Divisions (GNDs) in Jaffna District. The project focuses on the most vulnerable groups, including female-headed households and people with disabilities, to address inclusion issues in WASH design, implementation and management.

To support disability inclusion within the project, World Vision partnered with CBM Australia. CBM Australia has focused on building capacities of partners for disability inclusion, fostering connections with local Disabled People's Organisations, and providing technical guidance on disability inclusion within planned activities. World Vision also partnered with the Northern Province Consortium of the Organizations for the Differently Abled (NPCODA) for disability assessment, technical support and capacity building on inclusion of people with disabilities in the project.

## About Us

World Vision is an international Christian development organisation with a long history of community empowerment and development work in Sri Lanka, including supporting large-scale rural WASH programs. World Vision has a strong commitment to social inclusion and seeks full integration of marginalised and neglected members of the community into development programs.

CBM Australia is Australia's largest implementer of disability-specific and inclusive development activities worldwide. CBM is an independent Christian development organisation, whose primary purpose is to improve the quality of life of the world's poorest people with disabilities and those at risk of disability, who live in the world's most disadvantaged societies.

## Contact Us

For further information, please contact us at:

World Vision: [feedback@worldvision.com.au](mailto:feedback@worldvision.com.au) or [srilanka@wvi.org](mailto:srilanka@wvi.org)

CBM Australia: [idresources@cbm.org.au](mailto:idresources@cbm.org.au)

# List of Acronyms

CRPD	Convention on the Rights of Persons with Disabilities
DPO	Disabled People's Organisation. (Note: In Sri Lanka DPOs are disability organisations where the President and Secretary have a disability. It is common for other Board members, staff and voting members to be people without disabilities).
CBO	Community Based Organisation
NGO	Non-Government Organisation
GND	Grama Niladari Divisions
WASH	Water, sanitation and hygiene
RIWASH	Rural Integrated Water, Sanitation and Hygiene
UN	United Nations

# Contents:

Introduction ..... 7

Strategies for hygiene at home for people with high support needs ..... 10

WASH barriers at home for people with high support needs ..... 11

Learning Resource Outline ..... 13

Indoor Commode Chairs ..... 14

Bed Pans and Urinal Bottles ..... 17

Two Person Lifting Sheet ..... 21

Lifting and Walking Belt ..... 26

Bathing Position ..... 29

Bathing Inside ..... 35

Continence Pads ..... 37

Toileting Routines ..... 51

Toilet Training ..... 52

Conclusion: How to apply these strategies through an individualised approach ..... 54

Annex 1: How this learning resource was developed ..... 57

**6** CLEAN WATER  
AND SANITATION



## SDG Goal 6 Target:

By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

# Introduction

The 2030 Agenda for Sustainable Development identifies the need for hygienic sanitation and water access for all.<sup>1</sup> However, many people with disabilities do not have access to these basic rights. The reasons for this are unique to each circumstance, including the physical environment of a person with disability's home, the relationship they have with other members of their household, their economic and social status, their access to assistive equipment, the functional impact of the person's impairment, and the water, sanitation and hygiene (WASH) resources and facilities available within their community.

This resource, based on learning from World Vision's RIWASH 3 project, identifies starting-points which can be used with individuals with disabilities and their families to create and implement practical strategies to remove or reduce such barriers to basic WASH access. The focus is on households that already have WASH facilities such as a toilet and water point, but where a variety of barriers might be preventing or restricting household members with disabilities from being able to access these facilities.

The United Nations Convention on the Rights of Persons with Disabilities (CRPD), the guiding international framework in understanding and approaching disability, states that people with disabilities include 'those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.'

Of key importance to the conceptualisation of disability set out in the CRPD is the understanding that experience of disability arises not from impairments (i.e. problems in body functions or structures) alone, but from the interaction between a person's impairment and the barriers they face to full participation in their community on an equal basis of others.<sup>2</sup>

## Background

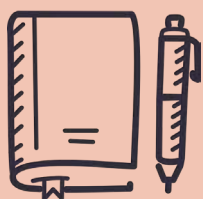
One of the activities of World Vision's RIWASH 3 project has been to build accessible toilets for selected individuals with disabilities in the project areas. By getting to know people with disabilities in Jaffna, and learning about the barriers they experience in accessing WASH, the project also generated valuable lessons for creation of a Learning Resource that outlined locally sourced and cost effective strategies to adapt existing toilets and water points.

World Vision, together with CBM Australia, partnered with Engineers without Borders Australia, Agile Development Group and Northern Province Consortium of the Organizations for the Differently Abled (NPCODA) to trial, document and compile strategies between January – April 2018 in the Jaffna District. The learnings from this process form the basis of this resource. For more information on the methodology used for this process, refer to Annex One.

<sup>1</sup> Sustainable Development Goal 6: Ensure availability and sustainable management of water and sanitation for all, <https://sustainabledevelopment.un.org/post2015/transformingourworld>.

<sup>2</sup> Plan and CBM Australia/Nossal Institute for Global Health, (2015). Practice note: Collecting and using data to inform disability inclusive development. Melbourne, Australia.

This Learning Resource is also informed by the Sri Lankan Disabled Persons (Accessibility) Regulations, No. 1 of 2006 and Ministry of Health, Directorate for Youth, Elderly and Persons with Disabilities (2013) Design Considerations on Accessibility for Persons with Disabilities- referred to throughout the document as ‘the Sri Lankan Standards’. Although the Sri Lankan Standards refer to universal access in public buildings, public places, buildings built by government and places where common services are available, some of these principles are also applicable to making modifications for WASH access within private domestic dwellings when using an individualised approach (refer to the Conclusion at the end of this document for more information).



Due to the methodology used, this learning resource is not a complete or comprehensive list of all strategies that may assist to remove or reduce barriers to WASH access. There are many other important areas to consider that have not been addressed in this learning resource, as they were beyond the scope of learning for this aspect of the RIWASH 3 project. They include: hand washing, insect protection, drinking water and water tank installation.

## Who is this guide for?

This learning resource is designed for use by organisations and individuals who are working directly to address WASH needs in the community. This may include:

- Individuals with disabilities and their families.
- Community development workers
- DPOs.
- Government staff.
- UN agencies.
- CBOs and NGOs.

The Learning Resource provides principles and strategies that can be drawn upon when trying to solve problems of how to remove or reduce barriers to WASH access for people with disabilities. The reader is encouraged to work with individuals and households to problem solve, create and trial what is most suitable for the person, their household and the local social, economic and environmental context. You may want to consider using each of the sections as prompts to identify potential barriers, including those not listed in the Learning Resource. Refer to the Conclusion at the end of this document for suggested steps on how to do this.

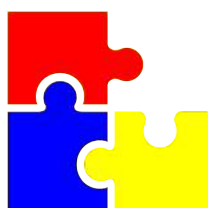
Note: this document should be used in conjunction with *Learning From Experience: Guidelines for locally sourced and cost-effective strategies to modify existing household toilets and water access*.



# How to use this guide

This learning resource encourages the user to take an individualised approach of creating strategies for WASH access that are specific to the person and their environment. It recognises that some of the WASH barriers experienced within households where people have high support needs require a specific approach to provision of support in daily hygiene activities. In such households, the strategies in Learning From Experience: Guidelines for locally sourced and cost-effective strategies to modify existing household toilets and water access alone are not sufficient to result in adequate WASH access. A table of challenges related to supporting a person with high care needs at home, along with strategies that can address each challenge can be found at the start of this document. You can use the table to navigate directly towards the individual strategies that you are seeking. The icons below can also be used to help identify challenges and strategies throughout the document.

## Challenge



## Strategy



For each, key information about the strategy is provided as well as the materials required and examples of how to make items. This may include guidance on measurements, details and dimensions relating to the strategy. Ensure you read this section prior to proceeding with implementing strategies.

There are also a number of icon boxes to assist with key information:

### Potential Hazard



### Take Note



### Skilled Labour Required



## Potential Hazard

Potential hazards are highlighted in green boxes at the end of each strategy and at the beginning of each section. Make sure you read these and consider these potential hazards to ensure that you do not create more barriers or risks for the person and other household members.

# Strategies for hygiene at home for people with high support needs

This guide is focused on addressing challenges related to hygiene and sanitation for people with high support needs. These strategies are relevant to households where members of the household provide a high level of support to a person with disability in daily hygiene and sanitation activities. This includes people who experience urinary or faecal incontinence, and could include tasks such as bathing and managing people's toileting needs.

The dignity and privacy of household members who experience incontinence is important, as is the right for all people to participate in their family and community life.

Some of the strategies provided are very personal. Some individuals and households may be reluctant to talk openly about these topics and may be embarrassed or feel shameful about what they do or do not do.

- Be aware of this and be sensitive to the needs of the individual and the household as they arise. It is likely that a relationship between you and the individual and household members may need to form before you can provide advice.
- Take the time necessary to do this and focus on one or two key areas at a time.
- Avoid being forceful or judgemental in suggesting solutions.
- Respect that this is the home of the people with whom you are working, and that some of the challenges around managing hygiene for people with high support needs can be stressful for household members.

This learning resource will not provide solutions to all the hygiene management challenges that people with high support needs and their families may experience, but presents example strategies that may assist in promoting the wellbeing, health and dignity of the person and their family.

The strategies in this document are designed to be used in a context where relationships can be built with household members who provide support. They are not 'quick fix' solutions and should be used as starting points for discussions and problem-solving. Some of these strategies also have important monitoring aspects related to risk. It is important that families receive appropriate support and education about these strategies over a period of time, and are not provided with a product or process without this support.



Privacy and dignity are important in bathing tasks, including transfers to and from bathing areas and during washing, drying and dressing. Ensure that this underpins any strategies that are tried.

# WASH barriers at home for people with high support needs

Some people with high support needs are not able to get to the toilet or bathing area that others in their household use. In some cases, modifications to the home environment could help, but for many this may not be enough.

Some people may have wheelchairs that can be used with assistance from another household member to get to the toilet/bathing area. Modifications to the toilet and water point can help, such as installing ramps or level paths.

However, some people may not have a wheelchair or may not have enough postural control<sup>3</sup> in their body to be able to use the wheelchairs available in their community. In some circumstances, it may not be possible for the person to get to the toilet or bathing area independently.

Some people cannot use their household's bathing facilities because they are not able to sit or stand whilst washing. This sometimes results in the person being placed on the floor for bathing, which can be unhygienic, especially if it is in an area where the toilet is located.



## IMPORTANT HEALTH CONSIDERATIONS

There are many important health considerations around managing incontinence and it is advised to consult with health professionals about strategies.

It is important to look out for the early signs of injury to the skin and pressure sores as well as infections, including of the urinary tract.

### PRESSURE SORES

- It is important to monitor the skin for any redness, swelling or skin breakages that could be an early sign of a pressure sore. Advise individuals and households to seek medical attention immediately if any of these things occur.
- In addition, it is important to change the position of the individual regularly.

### URINARY TRACT INFECTIONS

- A person who experiences barriers to communication may not be able to say when they are feeling pain or discomfort. Advise households to look for other signs of discomfort, such as unusual crying or tremors, that could be a sign of a health condition, such as a urinary tract infection.

<sup>3</sup> Postural control is the ability of a person to control the body's movement related to their posture. This is control of movement primarily around the hips, back, chest, neck and head areas. These central body parts are used to keep a person upright when they are seated or standing. Some people without postural control cannot stay upright in a seat, and may slide sideways or slump and slip forwards when seated.



Consider if the challenge is due to the absence of any wheelchair at all, or the absence of an appropriate wheelchair (e.g. a wheelchair with 90 degree tilt, and adequate head and side supports for a person who cannot hold their body upright when sitting).

- If this is a factor, investigate what services are available in the local community that may assist in the provision of an appropriate wheelchair. If services exist, make a referral and follow up with the organisation after the service has met with the person.
- In circumstances where appropriate wheelchairs are not available or there is no solid path and ramps in place, the only way for a person to access the toilet or bathing area may be to be carried by another household member. Having a safe way to carry a person can assist all members of the household. Lifting processes that are easier and safer, also increase opportunities for people with disabilities to be assisted to move out of bed or out of the house to participate more in family and community life (refer to page 21 'Two Person Lifting Sheet'; and page 26 'Lifting and Walking Belt').

## Learning Resource Outline

Challenge	Strategy
Person is not able to get to the toilet, but is able to control when they release urine or faeces	Commode chair with a bucket underneath
Person gets sudden urges to urinate or defecate, but is not able to get to the toilet quickly enough to prevent an accident occurring	Urinal bottles
	Bed pans
Person requires assistance to get into a bathing chair, commode chair or wheelchair or to get to toilet or bathing space	Lifting sheet
Person requires support to stand up and to walk	Lifting and walking belts
Person is unable to stand or sit on a chair when bathing	Tilted bathing chairs
	Bathing benches
Person cannot regularly access household bathing area	Bed baths
Person cannot control when they release urine or faeces	Disposable continence pads
	Reusable continence pads
A person can control release of urine or faeces sometimes, but not all the time	Create a regular routine for toileting
A person does not use the toilet because they learn differently to others	Toilet training for people who learn differently



# Indoor Commode Chairs



**Challenge:** Person is not able to get to the toilet but is able to control when they release urine or faeces.



**Strategy:** Use a commode chair with a bucket underneath.

## Description of challenge

- If it is not possible for a person to get to the toilet, but they are able to control when they release urine or faeces, then a commode chair and bucket inside the house may be used.
- A commode chair is a seat that is stable with arm rests and a hole in the seat, like a toilet seat. Beneath the hole is a bucket or container where faeces and urine are collected. To prevent smell, flies and spreading illness, the bucket requires a lid.

## Key considerations

- It is recommended that the chair has strong arm rests so that the person can push up and down to assist getting on/off. Arm rests can also provide support to the person to help them stay upright.
- Ensure that the chair has non-slip feet. This can be done by using strongly affixing rubber at the base of the chair's feet.
- Ensure that the hole is an oval shape of at least 150mm x 200mm on the seat and this aligns with the top of the bucket.
- Ensure that the seat is smooth and there are no jagged or rough edges that could cause injury. Rubber or plastic piping or strips can be used to cover edges after the edges have been filed down.



Left: an example of how rubber or plastic piping can be used to protect the skin from rough edges made when cutting a hole in the seat.

## How to make it

- Refer to 'Learning From Experience: Guidelines for locally sourced and cost-effective strategies to modify existing household toilets and water access: Over Toilet Frames.' Commode chairs can consist of over toilet frames with a bucket located underneath the chair. Ensure there is enough space to safely put the bucket under the chair and remove when it requires emptying.
- Ensure that the bucket used under the commode chair has a lid to prevent flies and smells.

## List of materials and equipment

- Strong chair base or box with a sturdy seat with a hole, or an over-toilet frame (refer to 'Learning From Experience: Guidelines for locally sourced and cost-effective strategies to modify existing household toilets and water access: Over Toilet Frames.'
- Tall bucket with lid that fits under the chair.
- Rubber/non-slip feet for chair.



Above: An indoor commode chair can be created by placing a bucket with a lid under an over toilet frame.



- This strategy is often only useful when the person is able to safely and regularly empty and clean the bucket, or there is a household member who can do this. Emptying and cleaning the bucket is often a very difficult task for a person who cannot get to the toilet. For this reason, commode chairs and buckets are often only appropriate where there are supportive household members who will provide assistance in this task.
- It is important that the bucket is emptied into the toilet hole and that it is cleaned. There are hygiene risks if the bucket is cleaned in other parts of the house or emptied onto crops or near water sources. Throwing the waste onto the garden or onto open areas is not safe and may result in illness of household members or others in the community.
- Ensure that the chair is stable. Many plastic chairs with holes in the centre are not very strong. Wooden or welded metal frames with a seat attached may be stronger than using plastic chairs.



# Bed Pans and Urinal Bottles



**Challenge:** Person gets sudden urges to urinate or defecate but is not able to get to the toilet quickly enough to prevent an accident occurring.



**Strategy:** Use a urinal bottle.



**Strategy:** Use a bed pan.

## Description of challenge

- Some people can control when they pass urine and faeces, but cannot get to the toilet in time. This could be due to a mobility impairment, cognitive impairment or the speed at which faecal or urine release happens.
- Bed pans and urinal bottles can be used to hygienically collect the urine and faeces when the person is in bed or seated, and later emptied into the toilet.
- Many people use both bed pans and urinal bottles, as the bed pan is primarily for collection of faeces and the urinal bottle is only for the collection of urine.

 **Strategy:** Use a urinal bottle.

## Key considerations

- Urinal bottles can often be purchased from pharmacies at low cost. One type of urinal bottle is designed for men and looks like a bottle with a handle and a big hole at the top. The other is designed for women and is longer with a long narrow opening on the long side of the bottle. Urinal bottles can be used for urine only, and should not be used for faeces.
- Urinal bottles are particularly useful at night when a person may be at higher risk of falling when they get up from sleeping to move to the toilet.
- Urinal bottles must be emptied into the toilet and washed after use. The person handling the urine bottle needs to wash their hands with soap after emptying and cleaning the bottle.



Above: Male Urinal bottle (left) and Female Urinal bottle (right). Both can be purchased in Jaffna pharmacies for approximately Rs 250 (January, 2018)

## How to make it

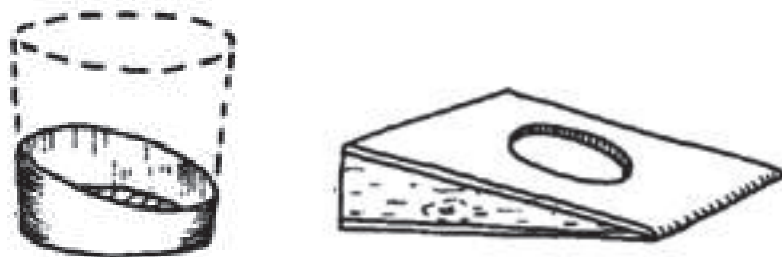
- Urinal bottles must be emptied into the toilet and washed. It is possible to make your own urinal by finding empty (and cleaned) bottles. Some bottles may have a large enough hole to be used as a man's urinal without modification, but it is likely that the bottle may need to be cut or shaped slightly. This will likely be the case for a woman's urinal design. When cutting plastic, ensure that there are no sharp edges. Edges could be filed down and covered with rubber or plastic lining or tubes to prevent sharp points.

## List of materials and equipment

- Prefabricated urinal bottles or bed pans purchased from pharmacy.
- Clean and empty plastic bottles.
- Knife (to cut plastic).
- File to reduce sharp and rough edges.
- Thin rubber or plastic tubes or piping that can be fixed over edges.

## Key considerations

- Bed pans can be used to collect both urine and faeces while a person is lying or seated. It may be possible to purchase a bed pan at a pharmacy, but it is also possible to make a bed pan.
- When using a bed pan, it is good to consider the natural angles of the person's body when they are lying. The angled bed pan wedge (shown below) supports the person's legs in a slightly bent position at the hips whilst lying on their back. Bending at the hips can be a good position for bowel movements.
- The wedge can be placed under the person's legs and buttocks when they need to urinate or defecate. Consider placing a towel or waterproof sheet under the wedge and the person's back and legs to catch leakage. Ensure that the wedge is removed after toileting as it may cause harm to the person's skin if in place for long periods of time.
- The wedge is positioned so that the tall end points towards the feet and the low end towards the head. The tall end has an open space where the bucket can be put in and taken out without moving the person.
- A towel or piece of material can be used under the bucket to help slide the bucket out and to catch any spills that may happen when the bucket is lifted out. Because of the shape of the bucket, it may be difficult to carry the full bucket to the toilet without spillage. For this reason, have a second larger bucket to empty the faeces and urine into. This bucket should have a strong handle and pouring spout. Some people may also wish to put a lid on the bucket when carrying it to the toilet.
- Immediately provide support to clean the person after they use bed pan, if they are not able to clean themselves.
- Immediately empty the faeces and urine inside into the toilet hole and thoroughly wash the bucket inside the toilet area. Wash hands with soap after emptying the bucket.
- If possible, disposable gloves can be worn when providing assistance. Hands need to be washed with soap after the gloves are removed and disposed of.



Above: A simple home-made bed pan with wedge reproduced from Werner, D. (2018). Disabled Village Children: A guide for community health workers, rehabilitation workers and families. Berkeley, USA: Hesperian Health Guides.

## How to make it

- To make a bed pan, cut the top off a bucket at an angle to create a bowl. There should be sufficient depth in the bucket for the collection of urine and faeces and for the bucket to be moved without the contents tipping over.
- The bucket will sit under a wooden wedge base that has a hole cut in the middle. The angle is necessary to be positioned under the body.
- The wedge can be made from wood at an approximately 35 degree angle. Ensure that there are no sharp edges or nails on the wedge. Thin rubber or plastic tubes or pipes could be used around the edge of the hole after it has been filed down.

## List of materials and equipment

- Bucket for under the wedge (to be cut).
- Bucket with strong handle (and lid if possible) to empty bedpan and carry bedpan contents safely to toilet.
- Knife (to cut plastic).
- File to reduce sharp and rough edges.
- Thin rubber or plastic tubes or piping that can be fixed over edges.
- Wood and nails and or/glue.
- Saw (to cut wood).
- Soap to clean hands.



Handling of urine and faecal matter presents health risks. It is important that hand hygiene is followed when assisting a person to use a bed pan or urinal bottle and faecal and urine matter is hygienically disposed of into the toilet. Ensure household members are educated on how to manage the waste and that the products are used to limit the risk of spillage (e.g. empty from small bucket into larger bucket for transfer to toilet, use a lid on emptying bucket, use a towel or material underneath to assist sliding under and to capture spillage).



# Two Person Lifting Sheet



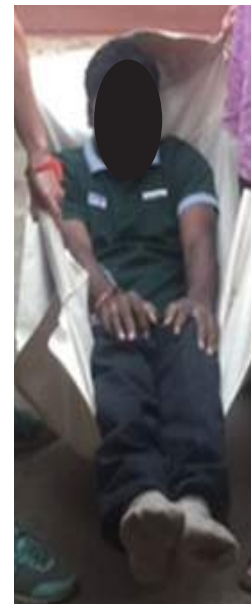
**Challenge:** Person requires assistance to get into the bathing chair, commode chair or wheelchair or to get to toilet or bathing space.



**Strategy:** Use a lifting sheet.

## Description of challenge

- Mobility limitations can impact how a person engages in hygiene tasks. Some people require assistance in moving to a position where they can engage in hygiene tasks, such as bathing or using the toilet.
- A lifting sheet is a strong sheet of fabric with handles which is placed under a person then lifted by two other people to help transfer the person to different places or different positions.
- Lifting sheets can be used to move a person. This could be:
  1. To get onto a commode chair or bathing chair.
  2. To get into wheelchairs, on/off the floor and onto beds and chairs.
  3. To get to toilet or bathing spaces if no wheelchair is available.
- Toilet and bathing spaces also need to be accessible for the person to enter whilst being lifted (e.g. bathing bed in place, clear path, wide doorway, ramp into area).



Above: Lifting the person in a comfortable and safe position using the two person lifting sheet. Ensure the person's head is supported and upright.

## Key considerations

- Two people are required to use a lifting sheet to lift another person. The sheets can be used to lift a person who is lying or sitting.
- When using the lifting sheet, ensure that there are two people holding the two handles on either side. It is important that the two people lift at the same time and communicate with the person being lifted when they are going to lift.
  - This can be done by communicating with the person that they are going to be lifted on the count of three, then counting to three and lifting together on the third count. It is good to practice with a non-human weight before using.
- The person must always be in the centre of the lifting sheet when being lifted.
- Ensure that the people doing the lifting bend their knees while keeping their backs straight.

- Lifting sheets can be slipped under a person who is lying prior to lifting by:
  - Rolling the person on their side and scrunching half of the sheet under the half of their body which is raised.
  - Rolling the person back and then rolling them to their other side.
  - The scrunched portion of the sheet should then be easily reached and pulled out flat so that the sheet is entirely under the person.
  - Adjust as necessary so that the person is in the middle of the sheet and their buttocks in in the dart located at the midpoint.
  - The handles on the sheet should align with the left and right sides of the person. If the handles are at their head and feet it is the wrong way around.
- A similar technique can be used if the person is seated, but this may be a little more difficult.
  - Support the seated person to lean to the left and place the sheet under the left side of their buttocks. Be careful to support them so they do not fall out of the chair.
  - Then support the person to lean to the right and the sheet can be pulled through to be positioned under the person.
  - Adjust as necessary so that the person is in the middle of the sheet and their buttocks in in the dart location at the midpoint
  - Ensure the handles are aligned with the left and right side of the person.



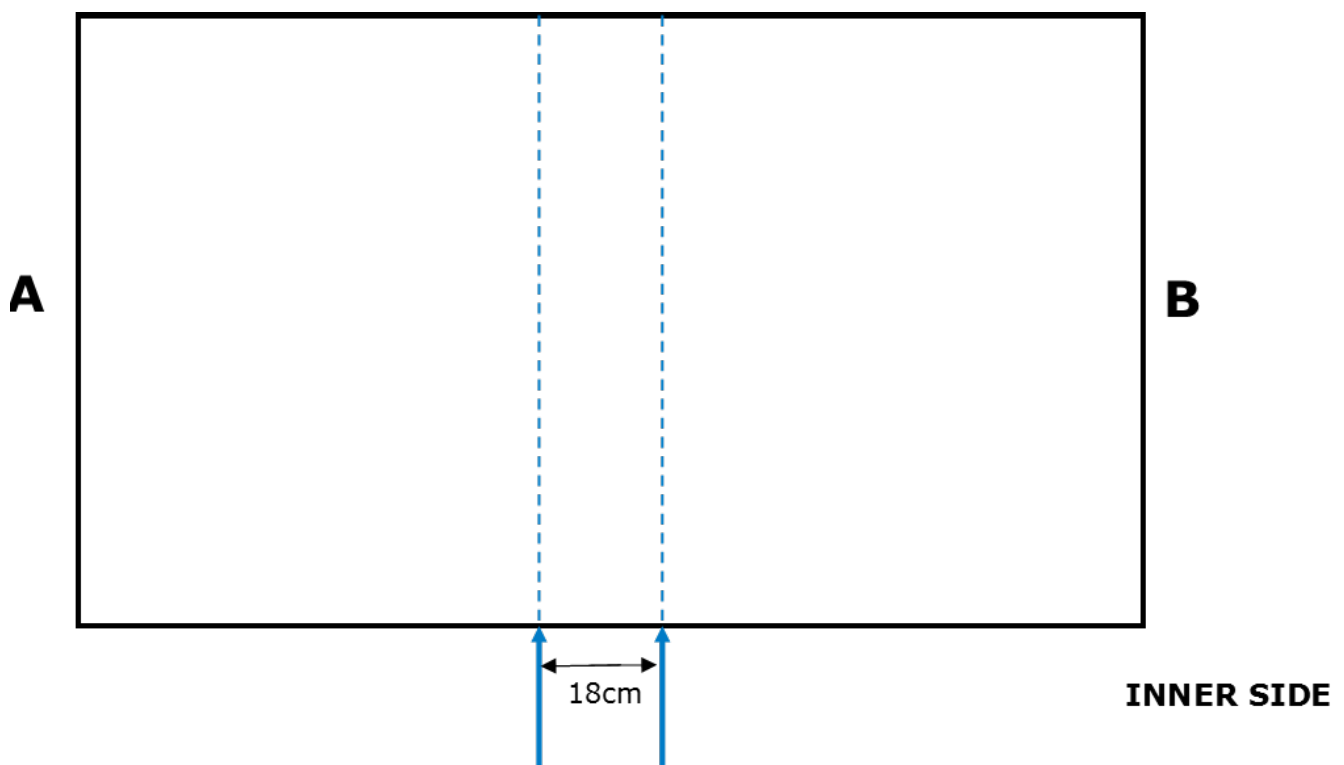
Above: A lifting sheet laid flat. Note the darts of sewn folded material in the centre (see diagram on following pages). The handles are strongly sewn towards the feet and head ends of the lifting sheet. The handles are a looped belt of strong calico stitched into the two layers of the larger calico sheet.

- The dart in the middle of the lifting sheet is very important for creating a seated position for the person when they are lifted. The person should not be lifted lying flat or rigid on the sheet.
  - It can be more difficult to lift a person when their limbs and body are straight and rigid. Bending or hunching forwards in a seated position can help.
  - Some people (including some people with cerebral palsy) may have a reflex response that makes their limbs and body straighten and become rigid. A gentle support to bend at the hips may help stop this reflex. The reflex may also happen when a person is anxious, stressed or angry. Keeping calm and gentle when lifting and communicating with the person about what is going to happen before it happens (even if you are not sure that the person understands) can help the person being lifted to stay relaxed. This relaxed position makes lifting easier and safer. It also supports the dignity and rights of the person being lifted.

## How to make it

- The material used in the sheet must be strong enough to carry the weight of the person. Weak fabric, such as thin cotton, will likely tear and may result in injury.
  - Creating double layers in the lifting sheet can be used to strengthen the sheet. Ensure that the multiple layers are firmly attached to each other and do not come apart during use.
  - Handles need to be stitched strongly to both layers (not only one layer).
- A lifting sheet should be approximately 1.5-2 metres long and approximately 1 metre wide. The length may vary according to the size of the person.
  - The length of the sling must ensure that the head is supported when being used. The head should never be hanging over the edge of the sling. However, it is OK for the feet and lower legs to hang over the edge of the sling (this can assist getting into a seated position).

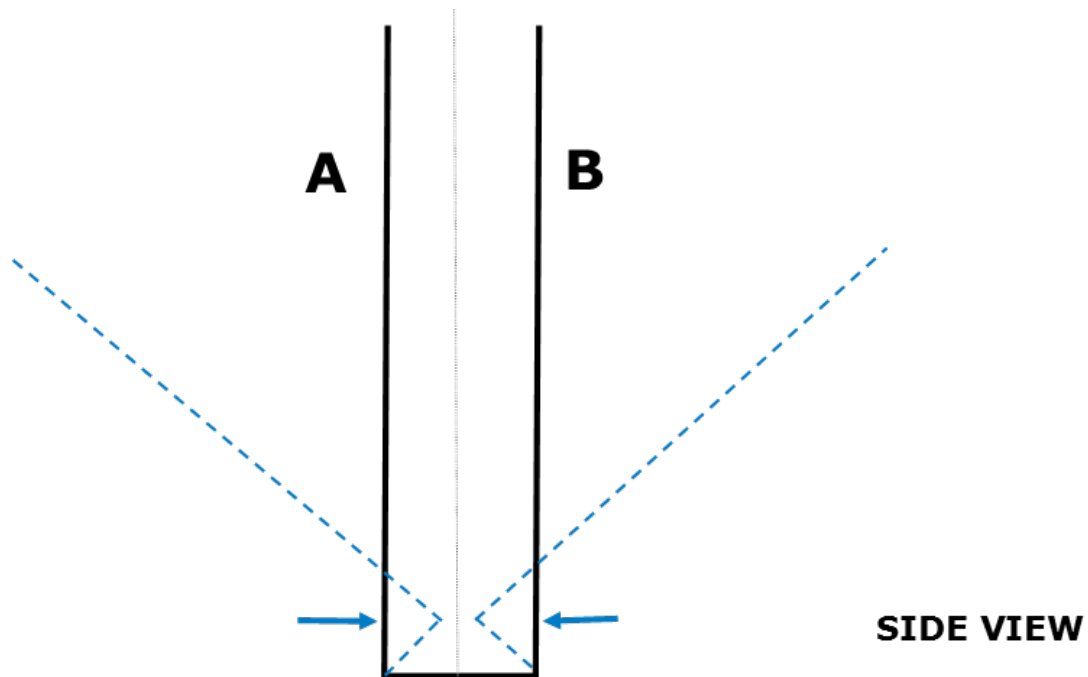
## Lifting Sheet: Stitching a Midpoint Dart



Fold upwards so that side A touches side B.

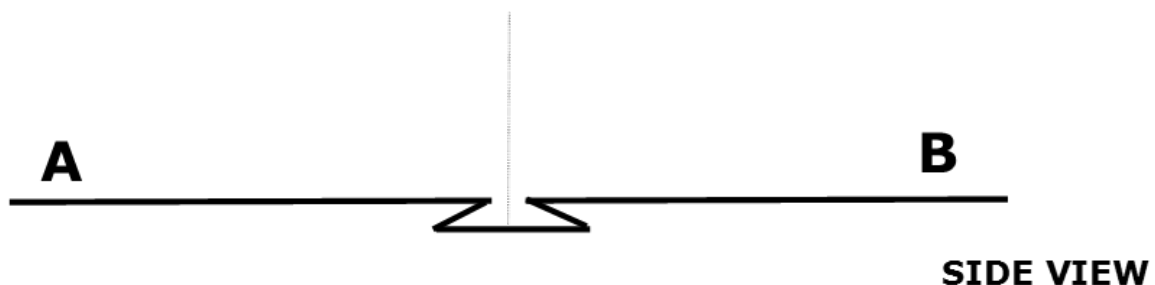
Leave space in between A and B of approx. 18cm.

## Lifting Sheet: Stitching a Midpoint Dart (continued)



Fold sides A and B downwards to meet in the middle of the fabric.

Lay flat and stitch strongly at the ends. The inside of the sheet should have a gentle curve at the mid-point.

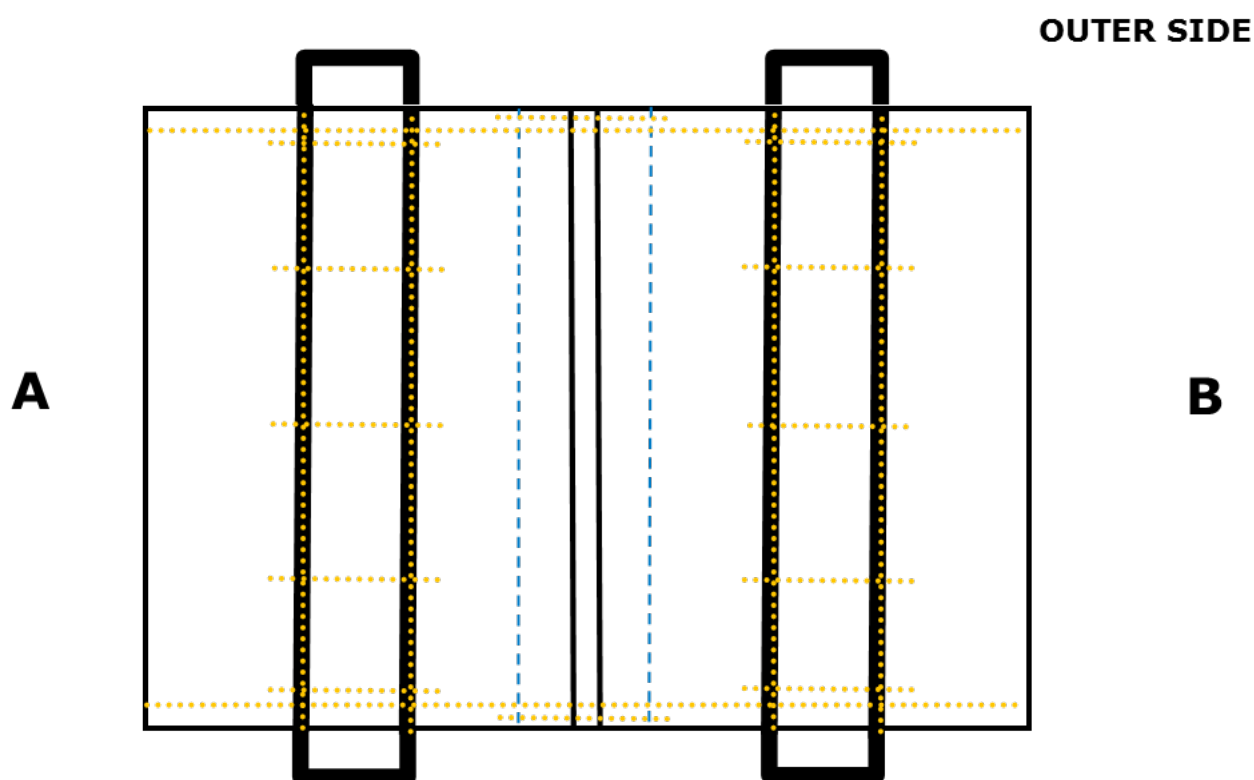


- Reinforcement of any stitching used in the lifting sheet is important. If stitching is weak, it is likely that it will come undone when a person is lifted and this may cause injury.
  - Ensure that thick and strong thread is used in the stitching.
  - The stitching may need to be done by a sewer that works on furniture, shoe making, bag making, sewing coats or uses other materials that are thick.
  - A sewing machine that can sew thick fabrics may be required.
- Install four handles on the lifting sheet. These handles are looped belts of strong material that are strongly stitched<sup>4</sup> across the back of the lifting sheet so that they do not come apart from the sheet when used.
- Insert a sewn dart at the midpoint of the lifting sheet fabric where the person's buttocks will be positioned (see diagram). This creates a seat for the person who is being lifted.

<sup>4</sup> For stitching to be strong, it may be necessary to use an overlocker and/or repeat the stitching line multiple times with strong connection of threads at the end of the stitch.



## Lifting Sheet: Stitching Handles



- ..... Reinforce stitching
- Fabric folded on underside

### List of materials and equipment

- Strong material, such as thick calico or thick tarpaulin.
- Sewing machine and strong thread. Remember to reinforce stitching so that it will not burst or come undone during use.
- Belts of thick and strong fabric that can be sewn across the back of the sheet to create handles, such as calico or woven belting.



- Ensure that the two people lifting communicate with each other and with the person being lifted. If they lift at different times the person may fall out of the sling. If the person being lifted does not know that the lift is about to occur, they may become alarmed.
- It is very important that the stitching of the sling and the material is strong enough to safely lift a person. Although the person is only carried a short distance from the ground with the sling, a broken thread or tear in the sling is unsafe.

# Lifting and Walking Belt



**Challenge:** Person requires support to stand up and walk



**Strategy:** Use lifting and walking belts.

## Description of challenge

- Some people may have difficulty standing up or walking distances independently, but are able to do these things with some help. Being supported to walk short distances and to stand up/sit down can enable people to:
  - Get to the toilet or bathing area.
  - Get up steps into the toilet or bathing area.
  - Get on/off an over-toilet frame, over-toilet bench, bathing bench or bathing chair.

## Key considerations

- When assisting a person to stand up or walk, assistance around the hip area often provides more stability than support to their limbs.
- A lifting and walking belt can be used to provide support around the hip area without grasping the person's limbs. The handles on the belt also provide greater stability for the person being supported and assists the person providing the support to be positioned more safely.
- A lifting and walking belt can be used in two key ways:
  - Assist the person to stand: place the belt around the person's waist. Ask the person to move forwards to the front edge of their seat. Hold two of the handles on each side of the person's body. On the count of three, ask the person to stand. Use the belt to support the person's weight and to help them be more stable.
  - Support the person walking: When a person is standing, hold two handles of the belt with one hand on each side of the person. Walk behind or next to the person providing some stability for the person by holding the belt.
- The lifting and walking belt must be firmly fastened without causing pain or discomfort. Velcro across the width of the belt is used to do this.



Above: Support is provided in standing up from chair whilst wearing the lifting belt around the

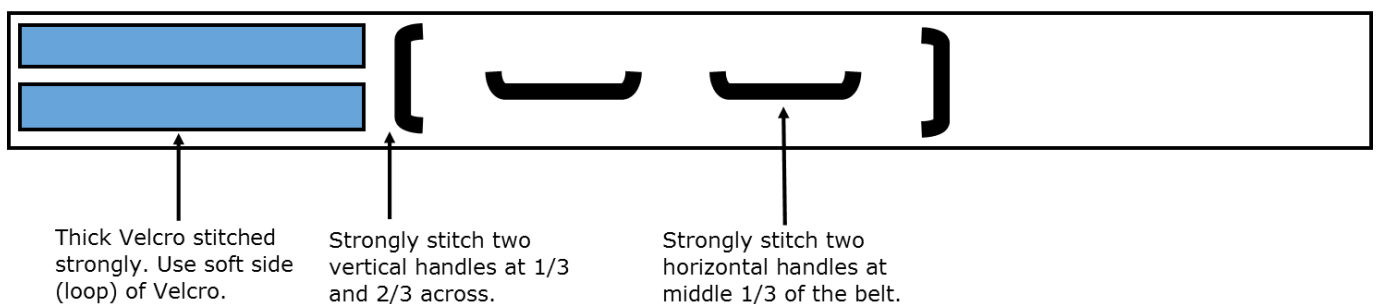


Left: The lifting belting is a thick and strong belt worn around the waist to provide support in standing, sitting and walking.

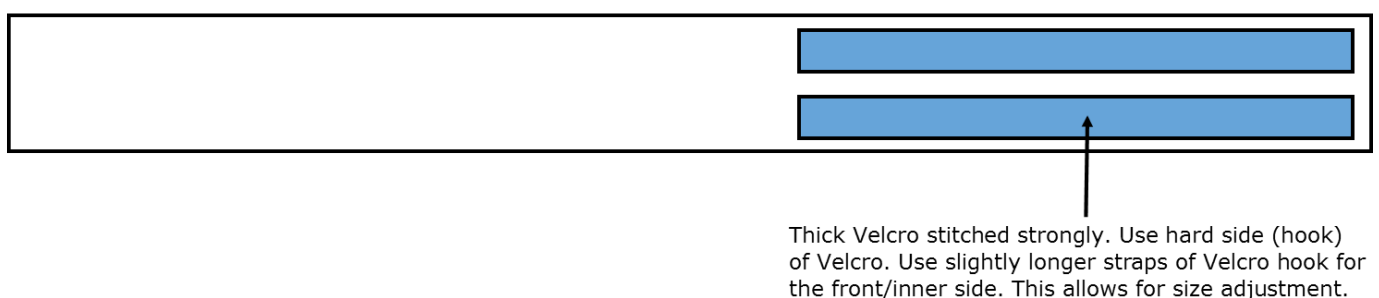
## How to make it

- The belt needs to be made from a long, wide strip of strong material with handles and Velcro fastenings. The material used to make the belt must be strong, such as thick calico or denim. Ensure that the belt is wide enough to distribute weight comfortably. A narrow belt may dig into the person's skin or cause pain.
- The width of the belt should be approximately 15-20cm and the total length should be approximately 110cm-130cm. The size may be different for people of different sizes, in particular the length may need to be longer for larger people and shorter for smaller people.
- Sew the lifting belt strongly:
  - Folding over and layering the fabric may make the belt stronger. Ensure that straps are sewn to all layers if doing this.
- Sew four handles securely on to the belt (see diagram below).
  - Two horizontal handles in the middle at the back and two vertical handles on the sides of the belt before the Velcro starts.
  - The vertical handles should be located approximately where the outer hip is located.

### BACK SIDE



### FRONT SIDE



- Velcro is used across the width of the belt for size adjustment and to ensure that the belt fits well across the person's waist.
  - The Velcro must be wide and strongly sewn onto the inside of the belt. Narrow strips of Velcro may not be sufficient to do this, ensure that the straps are thick and long.
- Reinforcement of all stitching used in the lifting and walking belt is important. If stitching is weak, it is likely that it will come undone and this may cause injury.
  - Ensure that thick and strong thread is used in the stitching.
  - The stitching may need to be done by a tailor that works on furniture, shoe making, bag making or uses other materials that are thick.

## List of materials and equipment

- Thick and strong material such as calico.
- Sewing machine and strong thread. Remember to reinforce stitching so that it will not burst or come undone during use.
- Wide Velcro (at least approximately 5 cm width). Thinner straps can be sewn together to create more width if strongly sewn together.
- Belts of thick and strong fabric, such as calico or woven belts, which can be sewn on the belt to create handles.



Above: use Velcro that is wide, at least 5cm if possible.



- A person must always agree to being touched and assisted, particularly if being touched around body parts such as the chest, waist and buttocks. Do not use the lifting belt with a person without their permission.
- The belt must be strongly stitched and made from strong material. It is unsafe to use if it comes apart during use.
- Ensure that the belt fits the person who is being supported. Although the Velcro on the belt allows it to be adjusted to different sizes, some people will require longer or shorter lengths of belt to fit.

### Do not use the belt if:

- The belt slips up over the waist to the chest of the person when being used, it is too large.
- If the belt comes undone during use as there is not sufficient Velcro contact, it is too small.
- The stitching, handles or Velcro on the belt is coming loose.
- The person is pregnant or has any injuries around the abdomen.
- Using the belt causes the person discomfort or pain.

# Bathing Position



**Challenge:** Person is unable to stand or sit on a chair when bathing.



**Strategy:** Use a tilted bathing chair.



**Strategy:** Use a bathing bench.

## Description of challenge

- Bathing can be challenging for people if they cannot stand or do not have the strength in their body to use a standard chair to sit in during bathing tasks.
  - Lying on the floor of bathing areas can be unhygienic and uncomfortable.
  - For hygiene, comfort and dignity it is important for people to bath regularly.
- This strategy applies only to people with significant mobility restrictions and may be suitable for people with very limited control of their sitting posture. If the person has sufficient strength and balance to sit independently then an upright bathing chair may be a more appropriate option.



*There are two strategies for addressing this challenge discussed below.*

*A tilted bathing chair allows the person to be in a semi-seated position. This is beneficial for the person's body as alternating from a lying position is good for the muscles and for breathing. This option may be more complex to make than a bathing bench.*

*A bathing bench provides an option for a person to be bathed in a lying position, but not on the floor.*

*How the person moves, their preferences, the preferences of others in the household, available resources and the physical environment around the toilet and house need to be considered when deciding on the most suitable strategy.*



Reduce risk of injury when using the chair or bathing bench by:

- Not using strapping or restraints, particularly around the head or neck. This can cause significant harm if the person slips/has a seizure and the restraint becomes tightened around a body part, such as the neck.
- Ensuring that the chair or bed has a low centre of gravity and is not easy to tip.
- Monitoring the person's position whilst using a tilted chair or bathing bench. It may be necessary to regularly adjust the person for safety and stability.



## Key Considerations

- Tilted bathing chairs support the person in a seated position halfway between sitting and lying. A tilted bathing chair is a 90 degree seat that is tilted backwards to provide support to a person who has difficulty sitting.
- A person can be lifted (using a lifting sheet) onto the tilted bathing chair. The tilted bathing chair should be low to the ground to reduce the risk of injury if the person falls or has a seizure.
  - If the person cannot sit in a tilted bathing chair, consider making a bathing bench/bed for the person to lie on (refer to page 33 'Use a Bathing Bench'). Avoid placing a person directly on the floor of a bathing area as this can be unhygienic.
- Ensure that the person can bathe in privacy and with dignity.

## How to make it

### Dimensions

- The measurements of the tilted chair will be different for people with different heights, weights and postural control.
- Ensure that the height of the top of the back of the chair extends further than the top of the person's head.
  - A measurement can be taken from the top of the thighs/below buttocks to the top of the head. Add at least approximately 10 cm to this length for the seat back height.
- The dimensions of the frame pictured here are:
  1. Seat Width: 48 cm.
  2. Seat Back Height: 90 cm.
  3. Seat Depth: 35 cm.
- Consider the size of the seat when planning dimensions.
  - For example, wood may reduce the final products dimensions of a welded frame by approximately 3 cm. Measure the width of the seating material before making the frame. Add this to the dimensions of the frame to get the appropriate seat dimensions.
- Making the seat low to the ground decreases the risk of injury if the person falls out of the chair.
  1. Side supports can also assist in preventing falls.
  2. Observe how stable a person is when in the seat. The seat may not be suitable for everyone.



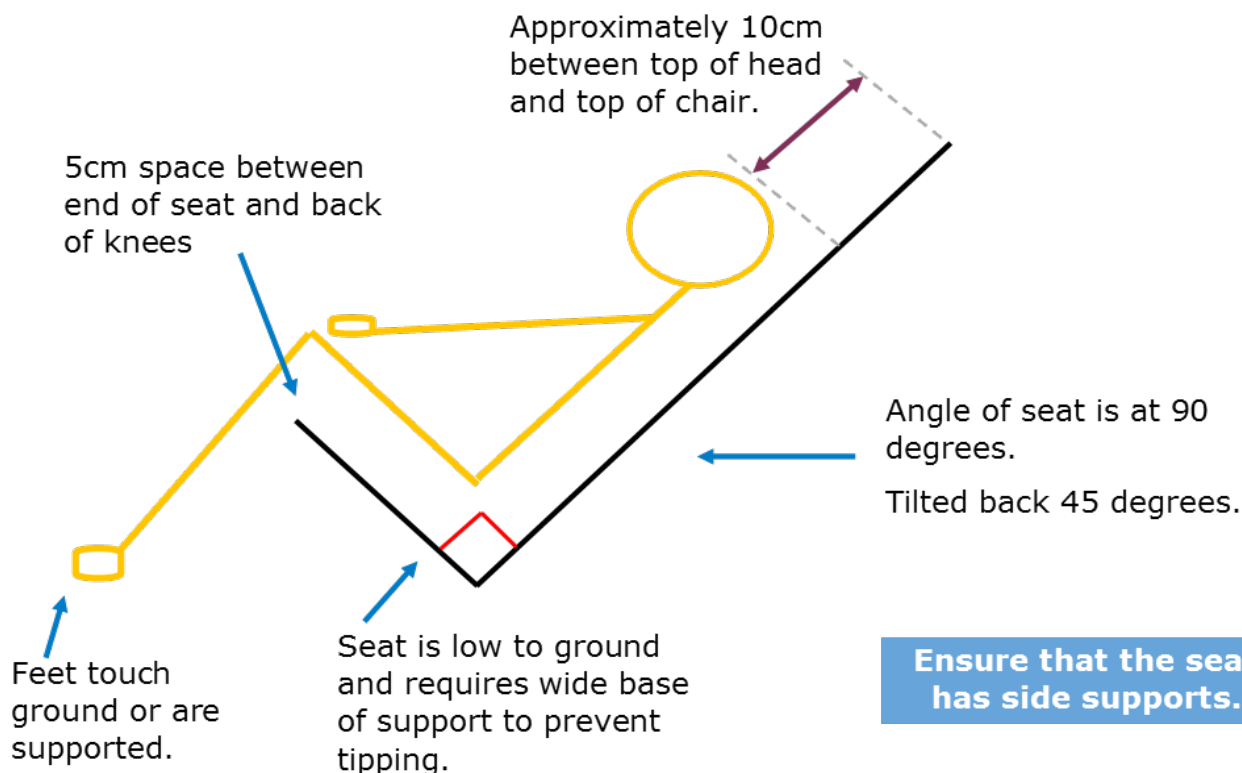
Above: a metal frame for use in making a titled bathing seat. Note the 90 degree seat is tilted back approximately 45 degrees to provide additional support.



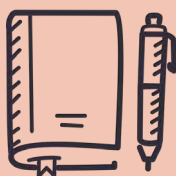
Above: the frame with carpet underlay padding over the metal and removable calico seat.



## Tilted Bathing Seat Design



Above: things to consider in the dimensions of the tilted bathing chair. Note: a similar design may be used to create day chairs for activities such as sitting with family members and for being in an upright position for safer swallowing whilst eating.



• Be aware that using a calico sling as a seat can be helpful to the person be in a seated position, but during bathing it does not provide access to the underside of the body for washing. It is important that the underside of the body is washed. If using a sling seat, this can be done by gently leaning the person forwards. Always ensure that the area on the underside of the body is washed and dried.

- Some people may be more likely to pass faeces whilst seated in this chair because the position of the body can stimulate bowel movements. This may make a sling chair made of calico unsuitable or alternatively, can be managed by taking the person to the toilet prior to use, or bathing immediately after bowel movements. Another option is to make the bottom of the seat into a commode seat, with a hole cut into the seat base. This hole can also be used to wash the underside of the person's body as well as for toileting.

## Materials/safety features

- A metal or wood frame with a strong fabric, such as calico, to provide support to the sides of the body can be used to create a seat that tilts backwards. The chair seat may also be made with wood, bamboo planks or rubber strapping. Ensure there is drainage in the seat so that water does not accumulate.
- If the seat back is tall, it requires a wide base of support for stability. Lowering the chair's centre of gravity can also be done by keeping the seat height low. Although low seat heights may make it harder for some people to stand up/sit down in the chair, it can be beneficial to keep the seat low if the person is being lifted (use the lifting sheet for low height transfers).
- As the chair will be used in a wet area, the feet of the chair should have non-slip rubber covering. Alternative options could be to mount the seat in heavy wood or concrete.
- It is important that the seat material is able to be washed, cleaned and dried between uses. Be aware that material such as calico will get mouldy if it remains damp for prolonged periods of time.

## List of materials and equipment

- For sling seats – a strong fabric, such as Calico.
- For panel seats – wood/bamboo planks or rubber strapping.
- For commode seats – wood plank with hole.
- Welded galvanised metal frame or wooden frame. Ensure waterproofing.
- Rubber covering for chair feet.
- Padding, such as carpet underlay or cushion filling, to provide heat protection and provide padding between any potential contact areas between skin and wood or steel. Be aware that the padding may need replacement regularly and may be prone to accumulating mould. If it is possible to get waterproof padding, this is preferred.



Metal will be hot if it is used outside or in hot environments. This may cause it to be too hot to use. Metal can be covered with padding, such as used in carpet underlay, to protect from heat. The padding can also protect pressure areas from being formed.





## Key considerations

- Bathing benches are waterproof benches or beds where people can comfortably lie whilst receiving assistance in bathing tasks. This may be suitable for people with limited or no control of the movement of their bodies.
- Bathing benches or beds can be placed in a private area where the person bathes.
- The height of the bathing bench or bed will depend on the way the person is being transferred and/or the health conditions of the person:
  - If you are using a low two-person sling to transfer the person, then a lower height bench may be easier when lifting the person.
  - If you are using a one-person transfer belt to help lift the person then a bench at seat height may be easier to use.
  - If the person is transferring from a wheelchair or standing up from the bench, then a seat level height (e.g. 400-460 mm) may be appropriate.
  - If there is a risk that a person may fall or have seizures, then it may be more appropriate to have the bench lower to the ground to reduce the risk of injury.
- Some people may need help in getting to the place where the bathing bench is located and getting on/off the bathing bench (refer to page 21 'Two Person Lifting Sheet'; and page 26 'Lifting and Walking Belt').



Above: A homemade bathing bench made of metal with handles and rubber strapping, in Jones, H. & Reed, R. (2005). *Water and sanitation for disabled people and other vulnerable groups: Designing services to improve accessibility*. UK: WEDC, Loughborough University.

## How to make it

- The bench can be made using:
  - A solid frame using materials that can hold the person's weight, such as wood that has a waterproof coating or metal.
  - A solid frame with a sling or strapping attached to a frame.
- The benches can be made with materials such as metal or wood with a water proof coating. If using metal, ensure that it will not heat when being used. Consider lining with rubber or padding to prevent heat transfer. Benches using a sling/strapping need to be made from a strong fabric, such as calico or rubber. The material must be strongly fastened to the frame.
- Be aware that mould may grow on calico and wood if the bench remains damp for prolonged periods of time. Ensure sufficient water flow by making holes or gaps for the water to flow through during bathing. These holes should not be too large so that body parts cannot fall through. Ensure that the holes do not weaken the strength of the material, cause it to break and the person fall to the floor.
- Consider attaching a rail or rope on the side of the bed to help the person reach and roll to clean the underside of the body. This could be a grab rail attached to the wall next to the bathing bench if the wall is strong enough, or it could be part of the bathing bench.
- Make the bathing bench non-slip by using rubber feet on the bench legs.

## List of materials and equipment

- Galvanised/non rust metal (item will require welding), wood (preferably with waterproof paint/coating), bamboo.
- Rubber strapping or strapping made of other strong material, such as Calico.
- Non-slip rubber feet.
- Grab rail or rope.

# Bathing Inside



**Challenge:** Person cannot regularly access household bathing area.



**Strategy:** Use a bed bath method.

## Description of challenge

- Some people can be bathed in a private place while they are lying. This is called a bed bath. This may be in the place where the person sleeps, or in another room inside the house.
- People could have a bed bath because they cannot sit up, or because it is difficult for the person to move to the bathing area. People with high support needs who experience incontinence may need bed baths regularly.
- It is important that a person can have a full bath regularly as well as a bed bath. A bed bath may be a short clean which is an option to consider in between full baths to maintain cleanliness and hygiene.
- Bed baths should not be used to replace a full bath on a permanent basis. The water point or bathing area needs to be accessible even though a person has bed baths so that the person can have a full bath.
- Bed baths may be done in between changing soiled pads, clothing or sheets from episodes of incontinence. It is important that parts of the body which come into contact with urine or faecal matter are kept clean to reduce the risk of infection.
- It is equally important that the person who provides support for the bed bath fully washes their own body, after assisting in the bathing task or handling materials which have been soiled with faecal matter or urine.



- Use soap that is gentle on the skin and intended for human bathing (avoid laundry soap or dishwashing detergent). Skin irritation can leave the skin more vulnerable to infections or sores.
- Always use clean water when assisting a person in their bathing. Do not pour dirty bathing water into or around the mouth or face.
- Look for areas of skin redness or irritations during bed baths. If you see anything unusual, contact the health service immediately. Signs of pressure sores developing are “blanching” (when the skin is pressed and the original colour does not return straight away), redness or skin irritations. It is important to quickly take action in the early stages of pressure sores, not doing so can result in significant pain and illness for the person.

**PRESSURE SORES CAN BE FATAL AND ARE VERY SERIOUS HEALTH PROBLEMS.  
MONITOR SKIN and CHANGE BODY POSITION regularly.**

## Key considerations

This strategy involves washing a person whilst they are in bed. Assistance with a bed bath should be provided by someone with whom the person feels comfortable and safe. A bed bath involves six key steps:

1. Support the dignity of the person by bathing in a private place and ensuring the person is appropriately clothed after the bath and during transfers. Check that the person is comfortable throughout the bath.
2. Fill two buckets of water – one with soapy water, and one with clean water for rinsing.
3. Assist to clean the person's skin with soapy water and clean sponge/cloth: it is good to start with the person's face then hands before bathing other parts of the body, in particular those body parts that may be soiled with faeces or urine. This is important as the mouth and hands are key areas of the body where illness can be spread.
4. Assist to dry the person's skin well – only pat dry, avoid rubbing to prevent skin damage. This includes drying between the toes, the groin, and other parts of the body that may not have contact with the air. Wet areas can be more likely to become infected and more likely to blister or develop sores.
5. Wash the materials/cloths/towels used in the bed bath and immediately hang in the sun to dry (or in a dry, well ventilated area if it is wet season). It is important these are well cleaned and thoroughly dried before using again. Avoid sharing bath towels and cloths between household members.
6. Clean the buckets well. Do not use the buckets for purposes other than bathing. For example, a bathing bucket should never be used in the garden, feeding animals, collecting food or for cleaning up animal waste.

## List of materials and equipment

- Two pieces of material are required for the bathing:
  - A towel or sponge for cleaning the person's body with soapy water and clean water; and
  - A towel or piece of material that can be used for drying.
  - A third piece of material/towel placed under and around the person can also be used to soak up excess water.
- Two buckets dedicated to use only for bathing.
- Two buckets of water are required: 1) one bucket for soapy water for washing, and 2) one bucket with clean water for rinsing.
- Soap for bathing (avoid harsh cleaning products such as dishwashing detergent or laundry soap).
- Clean water.
- Drying line/area.

# Continence Pads



**Challenge:** Person cannot control release of urine or faeces, or both.



**Strategy:** Use disposable continence pads.



**Strategy:** Make reusable continence pads.



## Description of challenge

- Some people may not have control of when and how they release urine or faeces, or both urine and faeces. This is called incontinence.
- Incontinence is not the fault of a person. Incontinence affects many people, although it is often not spoken about.
- It is common for people with incontinence to be able to control the release of urine or faeces some times, but not always. It is important to remember that the person is not making a choice to do this. Others may not have any control over their release of urine or faeces.
- Managing faecal and urine waste can be difficult, stressful and embarrassing for the person with incontinence and for household members who provide support. It is important to remember this when introducing strategies that may help.
  - The goal is to help individuals and households access the best strategies for their situation – it will not remove the task of managing faecal and urine waste or stop the incontinence. The strategies will help individuals and households do this in a way which is healthier, fits into daily routines and promotes the dignity and rights of the person experiencing incontinence.
- Not all strategies are suitable for all people. There are risks associated with some strategies that may contribute to increased risk of pressure sores or infections. These risks need to be balanced against the benefits. These are different in each individual situation.
- Continence pads could be:
  - Pull-up or wraparound pads to collect urine and faecal waste (like nappies/diapers), or
  - Pads that can be inserted into underwear to collect urine waste (like larger and thicker menstrual hygiene pads). Note: pads that can be inserted into underwear are often not sufficient to manage faecal incontinence.
- There are different types of continence pads – some are disposable and others reusable.
- Continence pads can be used at home and can also be helpful if a person is travelling, visiting friends/family or engaging in an activity within the community. Some people may experience urinary urgency (the need to urinate comes on suddenly), and continence pads will be useful for these people when travelling to areas where toilets may not be readily available.



Both reusable and disposable continence pads increase the risk of **PRESSURE SORES**.

1. The moisture of the faecal and urine waste next to the skin may increase the likelihood of a sore or wound forming. It also increases risk of infection if a sore or wound is present.
2. The thickness of the pad can create pressure points on the skin and cause friction on the skin which increases the chance that a sore will form.
3. The risk of pressure sore formation is reduced by regular monitoring and immediately changing of pads when they are soiled with either urine or faeces.
4. The risk is also reduced by comprehensive and hygienic cleaning, drying and monitoring processes of the person's skin and of the reusable pads.
5. Medical attention should be sought immediately if there are any early signs of redness or prolonged irritation of the skin, as this could be indicative of an early stage pressure sore.

Both reusable and disposable continence pads increase the risk of **URINARY TRACT INFECTIONS**.

1. This is because the urine and faecal content is held close to the skin. Bacteria from the urine and faeces can come into contact with the urinary tract and cause an infection.
2. Regular monitoring and immediate changes of soiled pads can reduce this risk. Reusable pads must be hygienically cleaned and dried prior to re-use.
3. This risk can also be reduced by communicating with the person and watching for any behaviour that may indicate discomfort. This could include:
  - Unusual crying, fevers, new tremors or other indicators of pain or discomfort.
  - Smelly, cloudy or bloody urine as well as a change in urine frequency, such as more overnight urination, and pain or burning feeling during urination.
  - Appearing to be confused or acting strangely, as the infection can have a sudden effect on the brain.
  - Dizziness or light-headedness, which could increase the risk of falling, particularly for older people.
4. Medical attention should be sought immediately if there are signs of an infection, and the use of the pads should be discussed with a health professional to ensure monitoring for urinary tract infection.

 **Strategy:** Use disposable continence pads.

## Key considerations

- Disposable pads are often single use so are likely to be clean prior to use and can be disposed of immediately, which may be beneficial in reducing the risk of infection for the person who wears them.
- Some households may prefer disposable pads because there is potentially less handling of urine and faecal waste than what is required for use of reusable continence pads. However, disposable pads are expensive and many families may not be able to afford them for ongoing use.
- Where disposable pads end up when they are discarded can also cause problems.
  - Immediately burning the used pad is likely the most hygienic way to discard the pad, but this has health and environmental impacts related to the burning of trash and potentially synthetic materials.
  - Collecting used pads throughout the day/over several days for mass burning or disposal can also be problematic, as the faecal and urine waste is stored and accumulated, potentially in an open area over a period of time.
  - Many used disposable pads end up in rubbish piles that may potentially create exposure risks for other humans. Animals may also go into rubbish piles looking for food and then transfer urine and faecal waste matter to other parts of the community, including around households.
- Disposable pads are often available at pharmacies, although access may be limited outside of urban centres.
- *Note: menstrual hygiene pads are much thinner than what is required to manage urine and faecal waste. These are not suitable for continence management. However, continence management pads may have the dual use of managing menstrual blood as well as faeces and urine.*

## List of materials and equipment

- Purchased disposable pads.
- Buckets with fastened lids (e.g. screw top or clips) for dirty disposable pads being stored for disposal.







## Key considerations

- Reusable pads may require a higher cost initially, but are significantly cheaper to use in the long term than disposable pads.
- If made from cotton or another breathable material, reusable pads may be better for contact with the skin than disposable pads made of synthetic materials.
- Reusable pads require cleaning that may present some hazards to health and hygiene.
  - It is important that a rigorous cleaning process is followed, including the emptying of faecal and urine waste directly into the toilet hole, and isolated comprehensive cleaning processes and materials for the dirty pads. This will require access to cleaning products, such as Dettol or bleach, which may be expensive.
  - There is a risk of reusable pads not being cleaned and dried thoroughly, which may foster the growth of bacteria that contributes to increased risk of infection – either of the skin or the urinary tract.
  - Households supporting people with incontinence must be diligent in the cleaning process in order for reusable pads to be suitable, which is not always an easy task as it may be time and labour intensive.
  - Some households may prefer cleaning reusable pads, rather than cleaning open distribution of faecal and urine waste around the person throughout the day as the pad contains the faecal and urine waste and may assist in managing odours inside the house.



Above: Reusable continence pads made by DeafLink Tailors in Jaffna, Sri Lanka.



- Reusable pads can be purchased commercially, however access is limited in many places.
- It is possible to make reusable continence pads. It is likely that a tailor or sewer will need to make these pads. They may need to have a sewing machine and needle that can sew through thick material, hence approaching tailors that make bags, upholstery, shoes, jackets or curtains may be a strategy to ensure that they have the appropriate tools to make the pads.
- It is very important that the size of a reusable wraparound pad is correct for the person. If it is too tight, areas of pressure may form on the skin that contribute to pressure sore formation and circulation may be reduced. If it is too loose, the wraparound pad may slip off and/or faecal and urine waste may leak.
- In considering the size of the reusable wraparound pad, it is important to consider both the waist band of the pad and the leg holes.
- Some people may benefit from a moisturiser or barrier cream to help the skin. Consider local products that are safely used with infants.
  - a. Ensure that the moisturiser or barrier cream does not irritate the skin. It may be preferable that it has no perfumes or colouring.
  - b. The skin should routinely be monitored for any signs of irritation.
  - c. **STOP** cream use immediately if there is **BROKEN SKIN OR WOUNDS**.
  - d. Such creams or lotions are prevention measures only and should be used under the supervision of a health professional. They may also be too expensive for many families.
- See the following page for instructions on how to make wraparound pads.

## List of materials and equipment

- Materials for construction of reusable pads (see instructions below).
- Sewing machine and sewer/tailor that can sew through thick material to make the pads and can adjust the pattern size to fit different body sizes.
- Three buckets for dirty pads to be washed in (first rinse, soak, and rinse).
- Disinfectant (e.g. Dettol), washing detergent, washing brush.
- Small shovel or tool to scrape faecal content into toilet.
- Area for drying.



Above: Ongoing access to cleaning products is essential for the use of reusable continence pads.

## How to make it

There are four layers that are required in making a reusable continence pad. These are:

### LAYER 1: OUTER LAYER

This layer is visible when the person wears the pad. It can serve the purpose of aesthetics (colours and patterns can be better than white), but it also serves to protect the pant from outside environmental elements – being the last layer to hold everything in and the layer that comes into first contact with the air.

It is helpful if this layer is made from fabric which is:

- Breathable.
- Thick, but not as thick as towelling or jacket material.
- Strong.
- Durable.
- Age-appropriate colours and patterns of the user's choice.

Examples of suitable material:

- School uniform material, used for making school skirts and shorts in warm climates (often cotton and polyester blend).
- Soft but thick cotton (can be coloured or patterned).



*Above: thick cotton used to make school uniform skirts may be appropriate for the outer layer.*

### LAYER 2: WATERPROOF LAYER

This layer is the component of the pad that prevents urine or faecal waste from leaking into the outer layer of the pad. It is quite important, but can also be problematic in that it will likely need to be synthetic. This layer may limit the ability of the skin to breathe through the fabric, but it will also prevent the person from becoming wet outside of the pad. This layer may require sewing with a machine that can sew through plastic type materials. Note that not all sewing machines may be able to do this, depending on the thickness and qualities of the material used.

It is helpful if this layer is made from material which is:

- Waterproof.
- Not too thick that it is rigid, but not too thin that it will break during wear or during sewing.

Examples of suitable material:

- Plastic table cloths/aprons, sheets of plastic from hardware or carpet laying stores.



*Above: sheet plastic from a furniture upholstery/carpet store that could be used for the waterproof layer. The blue sheet at the rear could be preferred due to it being strong, but slightly thinner and easier to sew than the thicker plastic.*

### LAYER 3: PADDING/ABSORBENT LAYER:

This layer is responsible for soaking up liquid content. This is important to remove moisture from the skin as much as possible. The material used in this layer needs to be absorbent and washable. Criss-cross or diamond stitching may be used to assist in keeping the absorbent layer in place together with the innermost layer. A sewing machine that can stitch thick material is required for this. It is important that the padding/absorbent layer extends in between the legs to the front of the pad and high up onto the back to the top of the pad at the rear.

It is helpful if this layer is made from material which is:

- Absorbent.
- Washable.
- Cotton (if possible).
- Can be layered or has adequate thickness to absorb approximately 500-700ml of fluid.

Examples of suitable material:

- Medical gauze, available from pharmacies and often used in wound dressing or bandaging. This is often sold in large rolls at a low cost, but requires multiple layers in order for sufficient absorbency.
- Absorbent cotton cleaning cloths (unused and clean). These will likely need multiple layers in order for sufficient absorbency.



*Above: absorbent medical gauze can be layered multiple times and sewn together make an absorbent padding layer.*

### LAYER 4: INNERMOST LAYER

This layer is the layer that is in contact with the skin. It is important that it does not irritate the skin nor cause any friction on the skin that could result in sores. The fabric should be breathable and soft. The fabric should also draw moisture away from the skin and soak up the fluid from the urine and faecal waste into the absorbent layer. A good test is to pour liquid on to the fabric and watch how the liquid is absorbed.

It is helpful if this layer is made from material which is:

- Pure cotton (low irritants for the skin and breathable).
- Is used in other products to draw away moisture (e.g. towels or cloths).
- Soft and gentle on the skin.
- Thick enough to absorb liquid.
- Clean and previously unused material that is as sterile as possible.

Examples of suitable materials:

- Towels or cloths that are cotton and soft to touch.



*Above: soft absorbent cotton towels without embroidery can make the innermost layer.*

## Other materials/equipment required

- Thick and strong thread.
- Velcro-hook and pile. Preferably wide straps of approximately 5 cm, but multiple thinner straps can be used if necessary, if they are well stitched.
- Wide elastic with width of approximately 4 cm (for waist).
- Narrower elastic with width of approximately 1-2 cm (for leg holes).
- Sewing machine that can sew through thick fabrics. Ensure stitching is reinforced and strong, particularly where there are areas of pull, such as around the Velcro attachments.



Above: thick Velcro (at least 5cm) for fastening must be stitched strongly onto the pad. Ensure the skin is not in contact with the Velcro.

## Contenance pad pattern

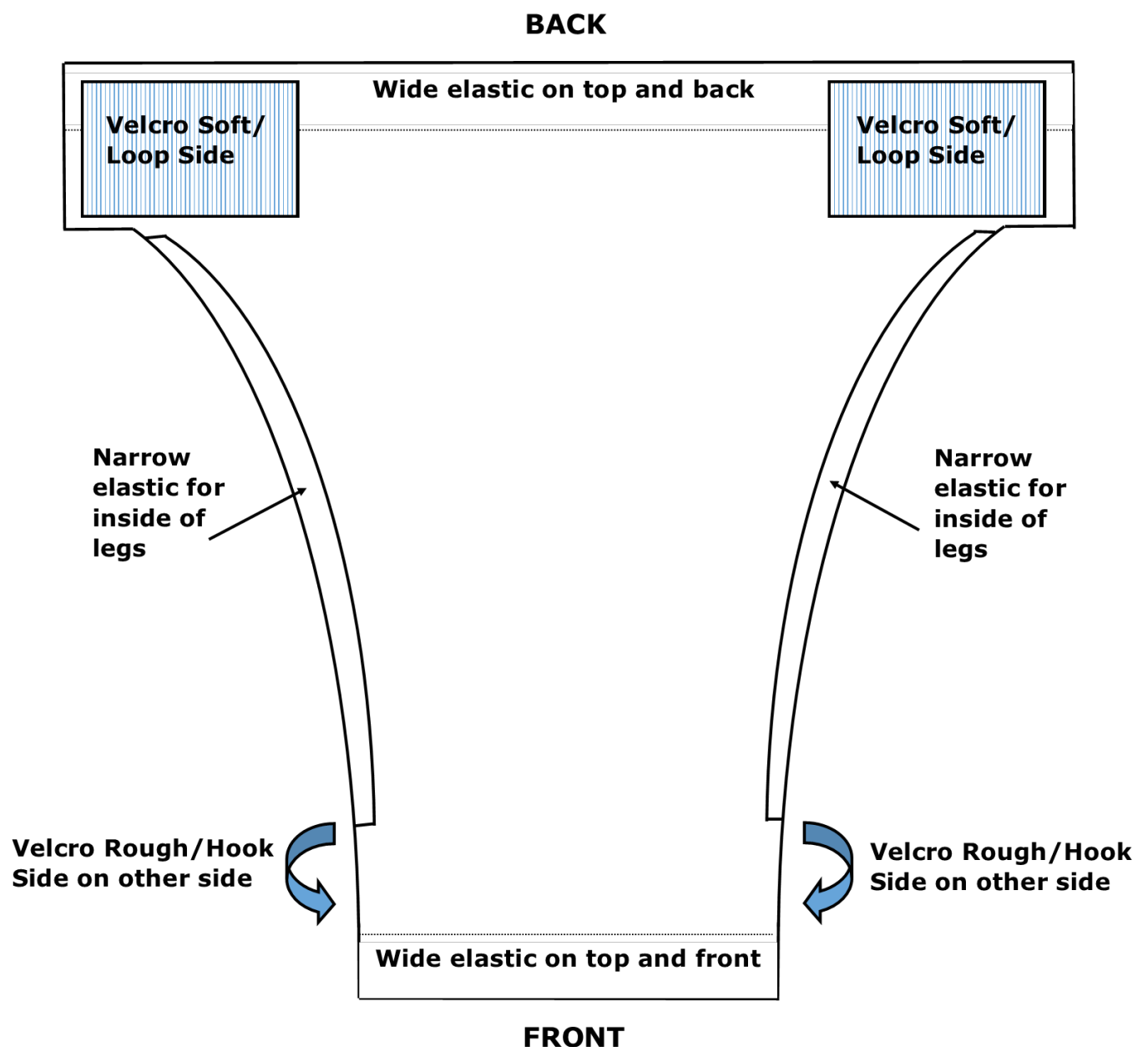
The following is an example of a pattern that can be used for making the continence pad.

Ensure the pattern includes enough space for sewing in elastic and hems, particularly Layer 1: Outer Layer, which will have the largest hems for elastic at the top and legs.

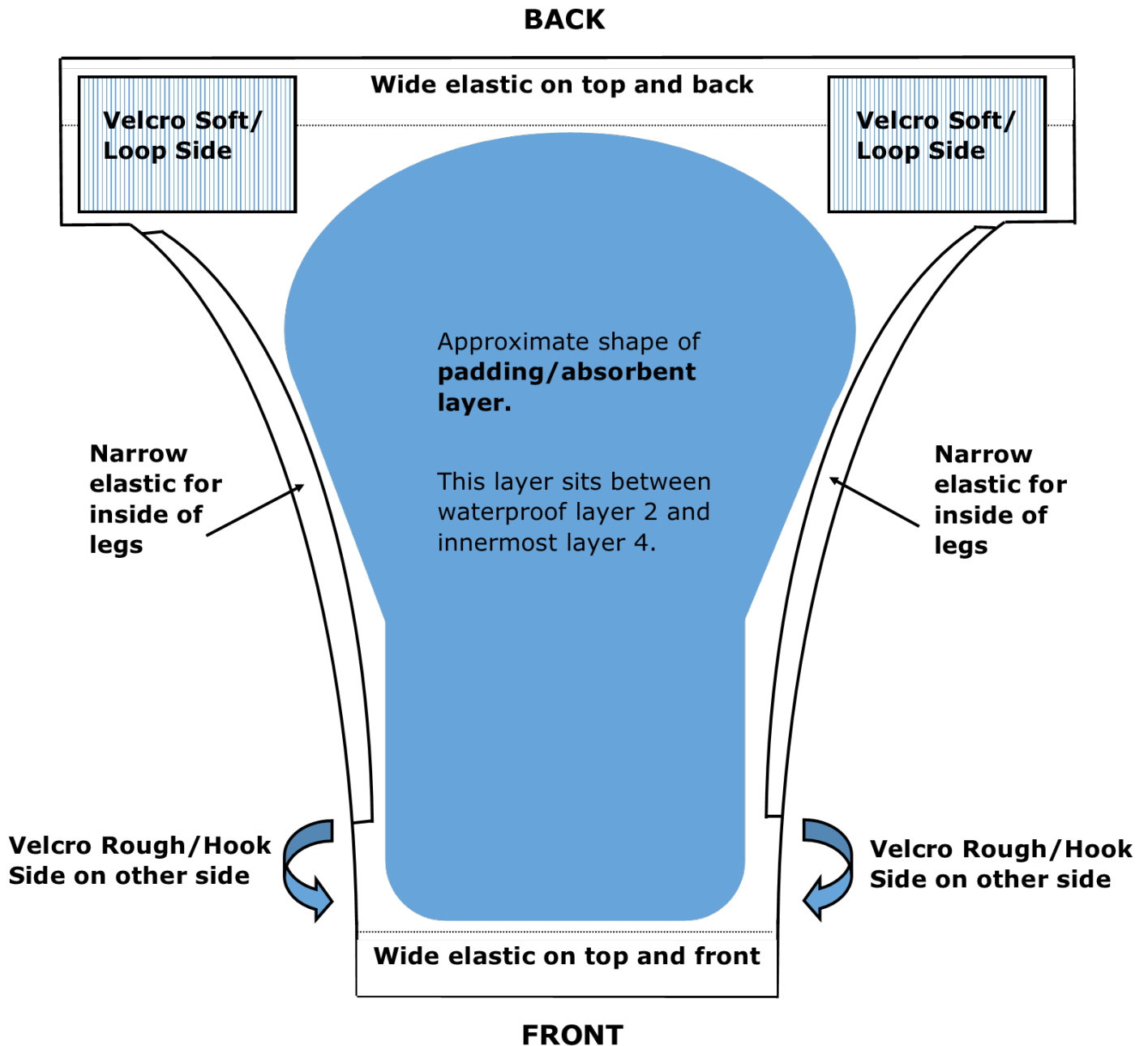
The pattern on the following page can be used as a guide for cutting:

- Layer 1: Outer Layer (with hems)
- Layer 2: Waterproof Layer, and
- Layer 4: Innermost Layer.

The view of the pattern below is facing the Layer 4: Innermost Layer.



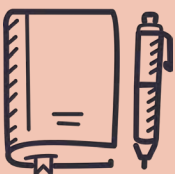
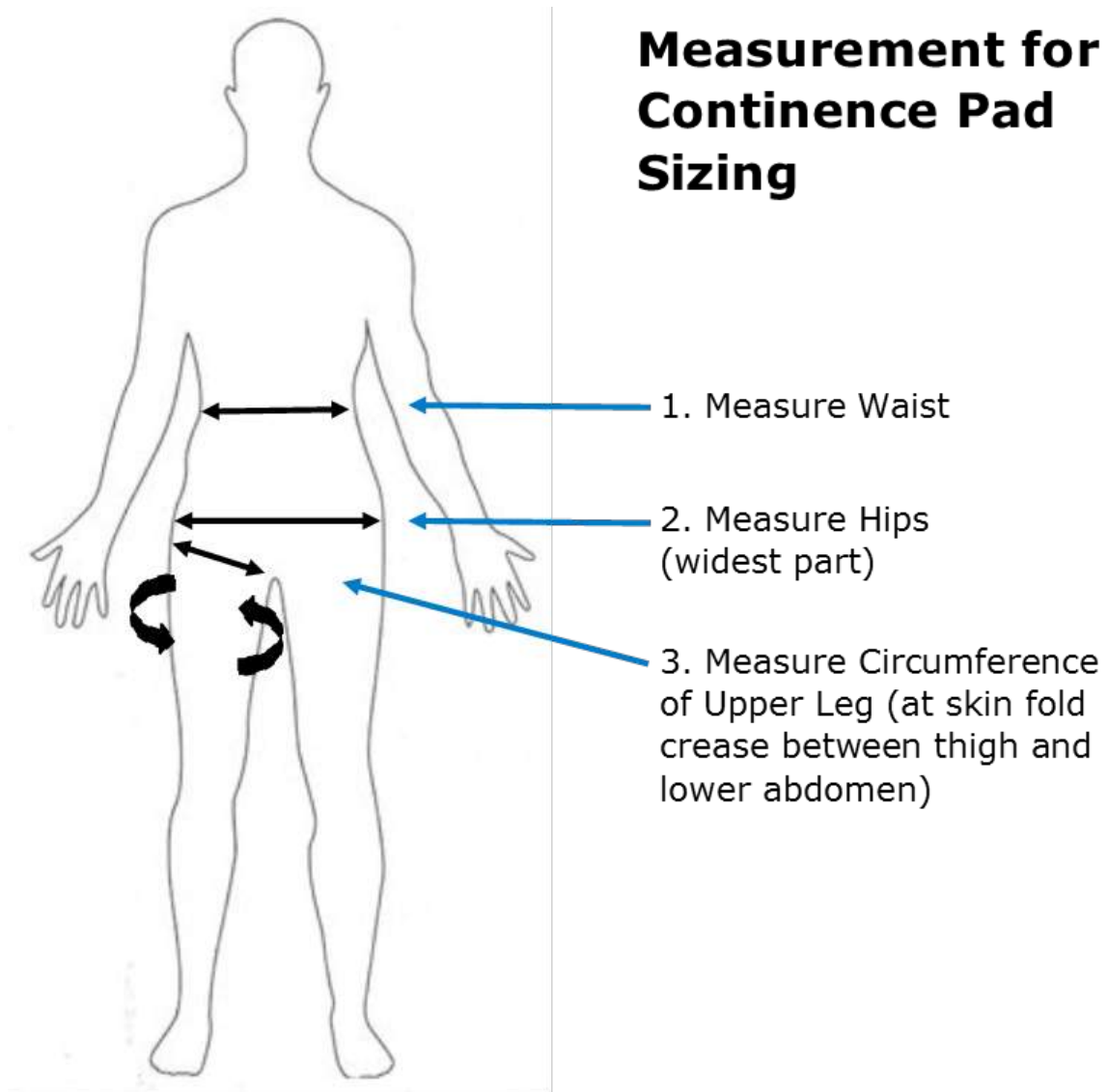
The pattern below is an example of an approximate shape of Layer 3: Padding/Absorbent Layer. This layer sits between Layer 2: Waterproof Layer and Layer 4: Innermost Layer.



Take note that the Padding/Absorbent Layer extends to the top of the pad at the back and front. This layer is also wide across the back and narrows between the legs. This is important for the pad to have full absorption and to prevent chance of leakage.

## Sizing:

- This pattern has not been sized and will need to be adjusted to fit the person.
  - It is critical to get the size right, so it is recommended that a sizing process is undertaken prior to constructing multiple pads and that users are measured for and trial sizes to find the best fit.
- Aim to develop a consistent sizing pattern that can be used to match the population so that sizing can be more easily prescribed. This process may take some time to develop.



Remember that pads which are too large will not be effective in holding in the urine and faecal waste. Pads which are too small may cause injury from pressure sores or reducing circulation. The size must fit right at both the hips/waist and at the leg holes.



## How the pads are fastened

### 1. Open the pad and lay it flat under the person's buttocks.

If possible, ask the person to bend their knees and raise their buttocks towards the ceiling to assist. Supporting a person's feet or knees may help the person with this movement.



### 2. Pull the front part of the pad through the legs to cover the genitals at the front.





### **3. Fasten one side of the Velcro over the top of the leg.**



### **4. Securely fasten the other side of the Velcro over the top of the other leg.**

Ensure that the pad fits well. A loose pad will slip off and may leak. A tight pad may affect blood circulation or cause a pressure sore.



## Stitching

Ensure stitching is strong. To be reused, the pad must be strongly stitched so that it does not fall apart after multiple wears and washing.

### *Stitching between the padding/absorbent layer and innermost layers of the pad*

- A diamond pattern or some other form of stitching can be used to keep the padding/absorbent layer and innermost layer of the pad together. This is then stitched to the other two layers.



Above: a diamond pattern sewn on to the innermost layer and the padding layer.

### *Elastic stitching*

- The stitching of the thinner elastic on the inside of the legs does not extend the full side of the material. There is no elastic on the front and rear tabs where the velcro is attached.
- The stitching of the thicker elastic is gathered at the front and back at waist level of the pad.

### *Velcro stitching*

- The soft loop side of the Velcro sits at the top of the pad when laid flat. The harder hook side of the Velcro sits on the outer layer of the fabric.
- It is critical that the Velcro is strongly stitched. There will be repeating pulling on the Velcro when the pads are taken on and off. If it is not stitched strongly, it will quickly fall off. Consider cross stitching over the Velcro straps or other methods that will increase strength of adhesion.
- The Velcro straps could be wider than those pictured here to enable more adjustment in size.

# Toileting Routines



**Challenge:** A person can control release of urine or faeces sometimes, but not all the time.



**Strategy:** Create a regular routine for toileting.



## Description of challenge

- If a person can sit on an over-toilet frame, fold-down over-toilet bench or indoor toilet commode chair with bucket, then scheduling regular times for toileting can aid in managing incontinence.
- This strategy can sometimes help people to train their bladders and bowels to release urine and faeces at predictable times throughout the day.
  - This can be particularly helpful for children, who may be able to develop better control of their bowels and bladders as they are growing.
- It is important to remember that regular times won't prevent uncontrolled release of urine and faeces, but it may contribute to being able to predict times when it may or may not happen to assist with planning activities.

## Key considerations

- Refer to the strategies in 'Learning From Experience: Guidelines for locally sourced and cost-effective strategies to modify existing household toilets and water access: Over Toilet Frames' for constructing indoor toilet commode chairs and buckets as well as modifications to the toilet to enable access.
- Choose times of the day that are consistent and fit within the household's routine.
- Most households will likely be able to identify key times of the day when the person may be more likely to empty their bowels and bladder.
  - For some people, this may be early in the morning.
  - For some people, this may be during a bath. It may be good to plan a schedule that involves sitting on the toilet or commode seat, followed by a bath to help prevent releases during or immediately after bathing.
  - For some people, scheduling toilet time after eating can also be effective.
- Not all people will be able to use regular toilet times. Some people will not be able to do this immediately, but may develop the ability to do this after some time.
  - It is important to remain calm and supportive. Becoming agitated or angry at the person may prevent the person's body from relaxing enough to release the bowel movement or urine.

## List of materials and equipment

- Over-Toilet Frame, Folding Over-Toilet Bench, Commode Chair with Bucket and/or other relevant access modifications described in 'Learning From Experience: Guidelines for locally sourced and cost-effective strategies to modify existing household toilets and water access.'

# Toilet Training



**Challenge:** A person does not use the toilet because they learn differently to others.



**Strategy:** Toilet training for people who learn differently.

## Description of challenge

- Some people learn differently to others. This includes learning to control urination and defecation and use a toilet.
  - Be supportive and gentle and prevent situations where the person feels forced or fearful of using the toilet.
  - The person must feel safe and secure in the toilet space before they will be able to learn successfully. Never get angry, shout or shame the person about toileting – this will not help.
- People may sometimes learn differently because they have conditions such as autism, intellectual disabilities or communication disabilities.
- A person can be helped to learn how to use the toilet at any age, but this strategy is particularly helpful for children and young people.

## Key considerations

- Some people need different ways to learn before they can understand how manage toileting.
  - Consider alternative ways that the person can learn and know what is expected when using the toilet.
  - It can be helpful to demonstrate each stage of the task of going to the toilet using pictures, a doll, songs, storytelling, and sometimes (if appropriate and safe for the person) a demonstration. An example of each stage of the task could be:
    1. Move to the toilet.
    2. Go inside toilet and close door.
    3. Pull down pants/clothes.
    4. Squat (or sit).
    5. Wee and/or poo.
    6. Wash in between legs.
    7. Stand up.
    8. Pull up pants/clothes.
    9. Flush/pour water down toilet.
    10. Leave toilet.
    11. Wash hands.
  - Helping the person learn the sequence of the steps of the task may help the person to know what is expected of them.
- Keep the learning process fun and relaxed. Toilet training which involves shouting, anger, frustration, shame or fear often has the consequence of making the person stay away from the toilet.

- Celebrate small achievements to provide motivation, such as celebration of success when reaching single steps rather than being able to go to the toilet entirely independently.
  - For example, use praise to acknowledge when a person is able to move towards the toilet when they are about to urinate or defecate to indicate that they need to go. They have achieved the first step. A next step could be to enter into the toilet when urinating or defecating (but may still not use the hole). Acknowledge the person's success with praise when they achieve this. The next step could be to pull down pants and squat inside the toilet. Acknowledge the person's success with praise when they achieve this. And so forth.
  - A person may not be able to put all the steps of toileting together immediately in the same way that other people do. This may take time. Be patient and recognise small steps towards the end goal.
- Establish a regular toilet routine and select toilet times during the day that are consistent and fit within the household's routine. This may include toilet visits immediately after all meals, mid-morning, mid-afternoon, as soon as waking and immediately before bed.



Above: make toilet training relaxed and fun. Images from Werner, D. (2018). *Disabled Village Children: A guide for community health workers, rehabilitation workers and families*. Berkeley, USA: Hesperian Health Guides

## List of materials and equipment

- Items that the child or young person can use for toileting such as Over-Toilet Frame, Folding Over-Toilet Bench, Commode Chair with Bucket and/or other relevant access modifications.
- Props, such as a doll or a book of pictures, are helpful but not essential.



## Conclusion: How to apply these strategies through an individualised approach

### **Working together with individuals and households to remove or reduce WASH barriers at home**

Essential to the process of removing or reducing WASH barriers in domestic dwellings is listening to and engaging with people with disabilities, as well as their family and household members. Both the person and their environment (social, economic and physical) must be considered when addressing barriers to WASH access. As people, families, households and homes are unique and diverse, there is never a one-size-fits-all solution. Strategies work differently for different people and within different places. Take time to consider the context within the household, prior to making suggestions or implementing strategies.

It is equally important to follow up after any strategies have been implemented, to check if the strategy works for the person and the household. It is not unusual for strategies to work differently than planned, and alternatives may need to be investigated. Keep undertaking problem-solving with the person, their family and household members to find what works best, particularly to address any unintended outcomes or problems as they arise. This may require ongoing engagement rather than a single visit or series of visits, and should be planned for in determining a timeframe and budget for activities seeking to address household level WASH barriers.

It is also strongly advised to consult with other government and community services in the area, as a part of the iterative process of problem-solving. These services may be keen to collaborate around addressing WASH barriers, and they may have existing strategies and skills that can be drawn upon.

# Steps for working with individuals and families to facilitate WASH access

An example of steps for working in households using an individualised approach includes:

## 1. Conduct first visit: Introduction and consent.

- a. Meet with the person with a disability and their household to introduce yourself.
- b. Learn about the person and their household.
- c. If appropriate, ask if they are interested in working with you to facilitate WASH access at their home. If so, make a second appointment.
- d. Before leaving ask if it is possible to quickly see the toilet and water point so you can plan for your next visit. Ask if the person using the toilet and/or waterpoint. Why/why not? (Note: be respectful that some people may decline and this may be related to feeling embarrassed or wanting to clean the area before showing it to you).

## 2. Plan for your second visit using what you have learnt about the person, their household and the physical environment of their home.

- a. Review and mark relevant sections of this learning guide and Learning From Experience: Guidelines for locally sourced and cost-effective strategies to modify existing household toilets and water access
- b. Prepare to bring a camera/phone camera, measuring tape and paper and pencil.
- c. Consider whether there are health or disability services who provide support to the person. Ask the person if they would like you to collaborate with these services or invite them to the next visit.
- d. Consider whether you will require technical/building expertise on your next visit if you expect that there may be a need for construction (it is likely that it may be more appropriate on another visit, particularly at households where there are sensitive issues).
- e. Book an appointment time with household.

## 3. Conduct second visit: Barrier identification and problem-solving to remove or reduce barriers.

- a. Ask the person to show you what they do at each stage of using the toilet, bathing and accessing water. If possible, it is important for them to show you rather than simply talking about it. This will help you understand potential barriers better.
  - o If the person moves independently, ask if the person has fallen over before and, if so, ask to be shown where this occurred. Areas where the person has fallen are often where there are barriers.
- b. Use strategies and examples from this document to generate discussion and demonstrate some of the ideas that may assist. Focus first on the most important barriers that the person encounters and the strategies that may be easiest to implement.
- c. Provide education about strategies and ask how the person and household members feel about this. Have they tried this before? Why did it work or not work? Can they think of a way that this strategy could work better for them? Do they have ideas about a different strategy? Be flexible and encourage the person and members of their household to engage in the problem-solving process.
- d. With the technical/builder expertise, take measurements and photographs and make drawings of the building and any modifications to be made. You may not have time to do this in one visit and may require third or fourth visits.

**4. Conduct further visits as necessary to implement strategies to remove or reduce barriers.** Remember to prioritise and address the most significant barriers first. You may not have the resources or time to address all the barriers immediately.

**5. Conduct monitoring visit after implementation of strategies.**

- a. Ask the person and household members if the strategy is working. If it is not working, ask why. Request if the person can demonstrate the strategy to help identify where the problem is occurring.
- b. Problem-solve with the person and household to see if the strategy can be adjusted or if a new strategy may be necessary.
- c. Repeat the process of barrier identification and problem-solving.
- d. Make any changes that are required. Engage technical expertise as necessary.
- e. Return to the household for another monitoring visit and repeat process as required.



# Annex One: How this learning resource was developed

As part of the RIWASH 3 project being implemented in Jaffna District, World Vision together with CBM Australia engaged with Engineers without Borders Australia, Agile Development Group and Northern Province Consortium of the Organizations for the Differently Abled (NPCODA) to identify strategies to improve WASH access at household level for people with disabilities. Together the organisations trialled, documented and compiled strategies for addressing household-level barriers to WASH access, between January-April 2018 in Jaffna District.

## Field visits

The trials took place in 17 households of people with disabilities and their families from Jaffna District, including four people with high support needs and/or incontinence. During home visits, the team and participants explored barriers to accessing water, hygiene and sanitation and came up with cost-effective strategies to remove or reduce these barriers.

## Human centred design workshop

Fourteen people with disabilities attended a two-day Human Centred Design Workshop facilitated by Engineers Without Borders and Agile Development Group to develop cost-effective and locally sourced solutions to current access barriers to the existing water points and toilets of participants. On the second day, Government Technical Officers and World Vision Lanka attended to provide technical input around the viability and technical design of some of the ideas generated at the workshop.

## Consultation with government staff, DPOs and social service workers

Meetings were held on the first and last day of the trip to learn from the experience from government and community stakeholders and ensure that activities aligned with local priorities.

## Engagement of local business/skills

The project drew on the services of a local carpenter, welder, mason and plumber to construct the designs recommended throughout the visit. The labour costs of the tradespeople were covered by the project, as well as the material costs such as concrete, galvanised steel, piping and timber. Through DeafLink a local DPO, five local tailors were engaged for sewing and product design services, including production of incontinence products. The DeafLink tailors had an essential role in advising on locally available materials and developing product designs.

