
Understanding and managing your bowel program

A guide for you after spinal cord injury

Spinal Cord Injury
Rehabilitation Program

This booklet has been written by the health care providers who provide care to people who have a spinal cord injury or illness. At the time of this printing the information was accurate to the best of our knowledge. The information may change due to the rapid changes in health care. It is not intended to replace medical/health advice from your health care providers.

© Hamilton Health Sciences, 2003.
Revised and reprinted 2005, 2008, 2011 and 2015.

Table of Contents

	Page
Bowel function after a spinal cord injury	1 - 9
Ways to manage your bowel	10 - 15
Common bowel problems.....	16 - 23
Medications for your bowel program.....	24 - 27

Bowel function after a spinal cord injury

After a spinal cord injury, signals from your bowels do not always get through to your brain as they did before to help you to control your bowel movements. Constipation, stomach bloating and/or unplanned bowel movements can happen because of a lack of regular exercise, poor eating habits and from the damage caused by your spinal cord injury. This booklet will help you learn how to regain control of your bowels.

Throughout your rehabilitation you will hear terms to describe the type of spinal cord injury you have. These terms include: reflexic and areflexic bowel. It is important for you to learn about the type of spinal cord injury you have, because there are different ways of managing your bowel depending on your type of injury. This will help maximize control of your bowel function.

Reflexic bowel

Reflexic bowel means that a bowel movement cannot be started or stopped by thinking about it. The muscle in the rectal area stays tight, and when there is a build-up of stool in the rectum, a bowel movement can happen without warning. The time it takes for food to travel from the mouth to the rectum for a bowel movement can take twice as long as normal.

The aim with this type of injury is to have a soft-formed stool and a planned bowel movement when the rectum is stimulated.

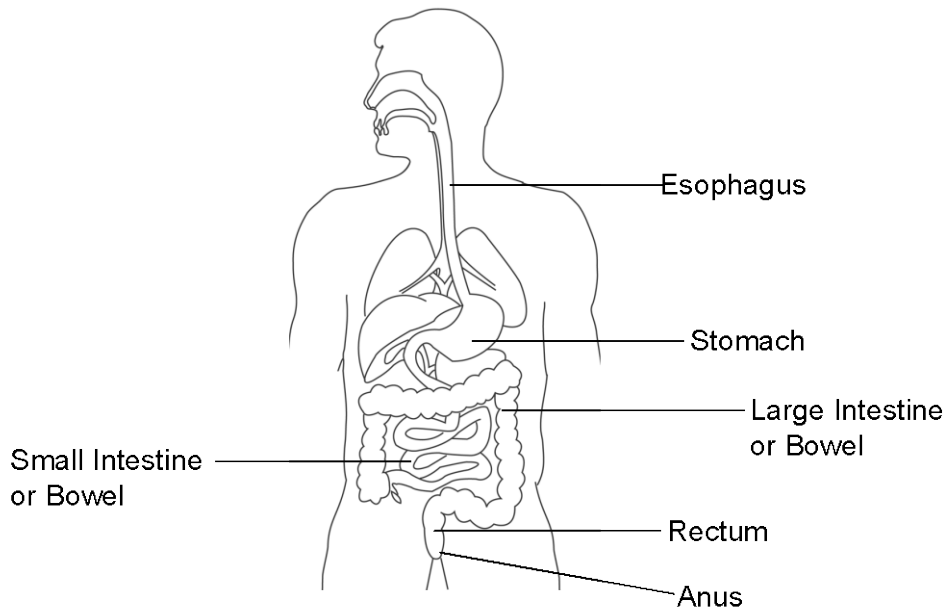
Areflexic bowel

Areflexic bowel means that the travel of stool through the bowel is greatly slowed, up to four times longer than normal. When stool reaches the rectum, it falls out because the muscle is too weak to hold the stool in.

The aim with this type of injury is to have a firm-formed stool that stays in the rectum between planned bowel movements.

How the bowel works

When you swallow food, it travels down the esophagus to your stomach. Chemicals in the stomach help to digest the food.



After leaving your stomach, food travels through the small intestine, then through the large intestine. Wave-like muscular action of the intestines helps to move the food along. Nutrients and water are absorbed by the body from the food as it passes through the bowel. Bowel is another name for intestine.

Solid waste is all that is left in the large bowel. When you feel the urge to empty your bowel, the rectum fills and you think to relax the rectum's outside muscle or sphincter. The sphincter opens and allows you to "push" the stool or bowel movement out through the anus. Normally it takes about 24 to 29 hours for food to go from your mouth to a bowel movement.

Parts of the bowel and digestive system

Esophagus	When food is swallowed, it travels down this tube to the stomach.
Stomach	An organ which helps to digest or break down the food we eat.
Bowel	Also called “intestines”, very long twisted tube with two parts: 1) small intestine, 2) large intestine. The large intestine is often called the colon or bowel.
Sphincter	Muscles which surrounds and closes the rectum at the anus.
Rectum	Lowest part of the bowel. Stores stool.
Anus	Opening at the end of the rectum where stool is pushed out.

Terms used to describe bowel function

Bloating/gas	Abdomen is distended or swollen beyond normal size.
Constipation	Hard stool causing difficult bowel movement.
Diarrhea	Bowel movement which consist of large amounts of loose, watery stool.
Elimination	Passage of stool out of the body.
Impaction	Hard stool blocking the bowel.
Peristalsis	“Wave-like” action of bowel that moves waste material through the bowel into the rectum – not under conscious control.
Stool	Waste material or bowel movement (BM).

How can I regain control of my bowels?

At first, you may feel like you will never regain control of your bowels. While you are in the rehabilitation program, you and the health care team staff will work together to find which method works best for you. This method is called your "bowel program". The goals of your bowel program will be:

A: To maintain control or continence of your bowels.

- To completely empty the bowels at regular times.
- To avoid having an unplanned bowel movement between the times chosen.

B: To avoid problems that sometimes happen with a spinal cord injury.

These problems include constipation and autonomic dysreflexia.

For more information about autonomic dysreflexia see page 20.

Successful bowel control

There are 4 keys to successful bowel control, which you can do to help your bowel empty at a predictable time. By following these keys your bowels can be controlled without the need for diapers or fear of unplanned bowel movements.

- **Diet** - Eat a well balanced diet. This includes whole grain foods, fresh fruits and vegetables. Your nurse and dietitian can help you plan your diet and review food choices with you. You will learn which foods can cause constipation and diarrhea.
- **Fluids** - Drink enough fluids to keep your stool soft. Prune juice is a natural laxative. Remember to keep fluid intake within limits outlined for your bladder.
- **Stay Active** - Lack of regular exercise can lead to constipation.
- **Consistency** - Once you have found a routine in which you are having bowel movements at a regular time, stick with it. Skipping a bowel program can cause many problems such as constipation or unplanned bowel movements.

If you are having problems with your bowel program, usually one of these 4 keys is missing. Discuss each key with your nurse to help solve the problem.

How can I tell if I have to empty my bowels?

The key to bowel control is to always follow your bowel program. By following your program you can prevent unplanned bowel movements. At first, you may not have any warning signs that your bowels are going to move. By keeping to your bowel program, you may be able to empty your bowels regularly.

After a while, you may become aware of certain warning signals that your bowels are full. Some of these are similar to signs of a full bladder.

Warning signals:

- rumbling in stomach
- feeling of fullness
- passing gas
- sweating above level of injury and 'tingling'
- having nausea at times

If you notice these signs, get to a toilet quickly. Later, try to figure out what caused the bowel movement if it happened outside your regular bowel program time.

Finding the cause of an unplanned bowel movement may need some detective work. Remember your 4 keys: review what you had eaten, what you drank, your activity level and whether or not you had followed your bowel program the days before. These steps should give you the answer to "why now?" bowel movements.

Illness and unplanned bowel movements

Having frequent unplanned bowel movements can be a sign of illness. A change in bowel movements such as:

- your stools are different: loose, bloody, very foul smelling, or a different colour
- you feel nauseated
- you are sweating more than usual
- have a fever

can be a sign of illness. If these things happen, call your doctor.

Ways to manage your bowel

Remember that the way you will gain control of your bowels, is partly decided by the type of spinal cord injury you have. You may learn to do these methods on your own. Depending on your level of function, you may need special equipment and aids, or be directing other people to perform the methods for you.

Effect of spinal cord injury on the bowel	Aim of bowel program	Methods
Reflexic	Soft-formed bowel movement at a planned time. The lower bowel is stimulated to cause a bowel movement.	<ul style="list-style-type: none"> • fibre and fluids • laxatives • anal digital stimulation • suppository • other
Areflexic	Firm-formed bowel movement at a planned time. The lower bowel does not need stimulation, as the rectal muscle is loose. Keeping the stool firm helps to control bowel movement.	<ul style="list-style-type: none"> • fibre and fluids • laxatives • manual removal of stool from rectum “hooking of stool”

Methods of managing your bowels are described here.

Suppository Insertion	You may need to use this to stimulate emptying of the bowel.
Supplies <ul style="list-style-type: none"><input type="checkbox"/> Protective sheets (if in bed)<input type="checkbox"/> Lubricant<input type="checkbox"/> Toilet paper<input type="checkbox"/> Gloves<input type="checkbox"/> Suppository	Steps: <ol style="list-style-type: none">1. Place protective sheet under bottom and lie on the left side if in bed.2. Put on glove and lubricate index finger.3. Insert suppository gently into rectum and position against wall of rectum. Suppository will not work unless it is against rectal tissue.4. Transfer to toilet.5. Bear down, massage abdomen right to left and apply gentle pressure to push out stool.6. You may need to use anal stimulation about 10 to 15 minutes after inserting the suppository to empty your bowels.7. Discard soiled glove.8. Wash bottom and wash hands.

The different types of suppositories and laxatives are described in the medication book for the Spinal Cord Injury Program.

Anal Digital Stimulation	Gentle stimulation of the anus relaxes the rectal muscle to cause the sphincter to open. This allows stool to pass out of the bowel. Sitting in an upright position on a toilet or commode lets gravity help with elimination.
Supplies <ul style="list-style-type: none"><input type="checkbox"/> Protective sheets (if in bed)<input type="checkbox"/> Lubricant<input type="checkbox"/> Toilet paper<input type="checkbox"/> Gloves	Steps: <ol style="list-style-type: none">1. Put on a glove and lubricate index finger. A dry glove can injure rectal tissue.2. Lie on left side or sit on toilet or commode chair.3. Insert gloved, lubricated finger gently into rectum only one inch. Do not insert deeper, this can injure the bowel lining.4. Gently rotate finger for not longer than 30 seconds to 2 minutes at a time. Make sure finger stays in contact with the rectal wall to help relax the rectal muscle.5. Remove finger as you feel stool come down. Bear down and/or apply pressure to abdomen and gently massage abdomen right to left with arms to push out stool.6. Discard soiled glove.7. Wash bottom and wash hands.

- Stop anal stimulation if bleeding. All rectal bleeding should be checked by a doctor or nurse.

Digital Removal of Stool, “Hooking of Stool”	Removing stool from the rectum with the finger. Sitting in an upright position on a toilet or commode works best for having a bowel movement.
Supplies <ul style="list-style-type: none"><input type="checkbox"/> Lubricant<input type="checkbox"/> Toilet paper<input type="checkbox"/> Gloves	Steps: <ol style="list-style-type: none">1. Sit on toilet or commode.2. Put on glove and lubricate index finger.3. Insert gloved, lubricated finger gently into rectum about 1 inch. Do not insert deeper, this can injure the rectum.4. Hook the stool with finger and remove.5. Bear down, suck in your stomach and gently massage abdomen from right to left. This helps to advance stool.6. Repeat as needed until all the stool is removed.7. Discard soiled glove.8. Wipe bottom and wash hands.

- Stop digital removal of stool if you notice bleeding. All rectal bleeding should be checked by a doctor or nurse.

If you follow the four keys to successful bowel control, you will likely avoid constipation and the use of enemas and disimpaction. An enema is a liquid inserted into the bowel through the rectum using low pressure. Disimpaction means removing stool from the rectum by hand.

Both of these procedures, using an enema and disimpaction, can lower bowel muscle tone. Enemas and disimpaction should only be used if absolutely necessary. If you find that you are using enemas and/or disimpaction more than very occasionally, you should contact your nurse or doctor for help with your bowel program.

If an enema is used, use a small commercial solution commonly sold in drug stores. Too much solution or frequent enemas can ruin bowel muscle tone. Also, too much pressure within the bowel, from hard stool and large amounts of enema solution, can cause serious problems.

Using an Enema	You might need an enema to soften hard stool and empty bowel if you are constipated.
Supplies <ul style="list-style-type: none"><input type="checkbox"/> Enema<input type="checkbox"/> Protective sheets<input type="checkbox"/> Toilet paper<input type="checkbox"/> Gloves	Steps: <ol style="list-style-type: none">1. Lie on left side. Place protective sheets under bottom.2. Put on gloves.3. Gently insert lubricated tip of enema into rectum.4. Squeeze plastic bottle to instill enema.5. Leave solution in 15 to 20 minutes.6. If possible, transfer to toilet to empty bowels.7. Discard gloves.8. Wash bottom and wash hands.

Disimpaction	To remove hard stool from bowel by hand.
Supplies <ul style="list-style-type: none"><input type="checkbox"/> Protective sheets (if in bed)<input type="checkbox"/> Lubricant<input type="checkbox"/> Toilet paper<input type="checkbox"/> Gloves<input type="checkbox"/> Suppository	Steps: <ol style="list-style-type: none">1. Lie on left side with protective sheets under bottom.2. Put on glove and lubricate index finger.3. Insert finger gently into rectum.4. Remove hard stool gently and place on protective sheets.5. Discard any solid stool into toilet.6. Discard all soiled paper.7. Discard gloves.8. Wash bottom.9. Wash hands.

- Stop disimpaction if you notice bleeding. All rectal bleeding should be checked by a doctor or nurse.

Common bowel problems

Incontinence, or an unplanned bowel movement

Description	Bowel movements at unplanned times.
Possible Causes	<p>Not following planned bowel program.</p> <p>Not emptying your bowel enough during bowel program.</p> <p>Change in diet.</p> <p>Change in bowel medication.</p> <p>Possible illness, such as flu, anxiety, or stress.</p> <p>Drinking alcohol such as beer increases bowel activity.</p>
Treatment	<p>Stick to your bowel program.</p> <p>If you want to make changes to your bowel program, make only one change at a time and only one change every week or two.</p> <p>If you feel unwell, or have, nausea, chills, excessive sweating, unrelieved stress, and/or a fever see your doctor.</p>

Constipation

Description	<p>Hard stools causing difficult bowel movement.</p> <p>No bowel movement for 3 to 4 days.</p> <p>Feeling bloated, fullness in abdomen and discomfort not caused by bladder distention.</p> <p>Passing more gas than usual.</p> <p>Feeling nauseated, decreased appetite.</p> <p>If left untreated, may lead to more serious problem of impaction.</p> <p>Constipation may be a trigger for autonomic dysreflexia.</p>
Possible Causes	<p>Not enough fluids.</p> <p>Not taking prescribed stool softeners.</p> <p>Change in diet - not eating enough fibre, eating too many constipating foods such as rice, bananas, chips, cheeses or fast food.</p> <p>Skipping bowel programs.</p> <p>Not enough exercise.</p> <p>Some medications, such as morphine, codeine in pain pills such as Tylenol #2 & #3, Ditropan can cause constipation.</p>

Treatment	Daily bowel programs until empty. Increase fluid intake (within bladder limits). Enough fibre in diet. Regular exercise. Drink prune juice 8 hours before the desired time of bowel movement. Try different suppositories. Only if all other methods fail, consider using a disposable enema.
------------------	---

Impaction

Description	<p>Hard stool blocking the bowel.</p> <p>Signs may be the same same as with constipation.</p> <p>Oozing of loose watery stool - liquid stool is passing around hard stool in bowel. This can be mistaken for diarrhea, but only small amount of liquid stool is passed.</p> <ul style="list-style-type: none">• Impacted stool blocking the bowel may trigger autonomic dysreflexia. Watch for symptoms and treat right away.
Possible Causes	<p>Same as constipation – see page 17.</p>
Treatment	<p>Remove stool by hand. See disimpaction page 15.</p> <p>1 or 2 disposable enemas may be needed.</p> <p>Change program to prevent this happening again, such as increase fluids, fibre in diet, stool softeners, frequency of bowel program.</p> <p>Contact your family doctor if you have not had a bowel movement for 3 days or more.</p>

Autonomic Dysreflexia

<p>Description</p>	<p>Pounding headache. Sweating above level of injury. Goosebumps. Red blotching of skin on face and neck. Nasal stuffiness. Blurred vision. Feeling anxious. Slow pulse.</p>
<p>Possible Causes</p>	<p>Constipation. Impaction. Too vigorous anal stimulation, disimpaction and enemas. There may be other reasons for symptoms of Autonomic Dysreflexia. Please refer to the section in your bladder booklet for more information.</p>
<p>Treatment</p>	<ol style="list-style-type: none"> 1. Elevate head to sitting position. 2. Use Xylocaine gel 2% to prevent over-stimulation of the rectum while gently removing hard stools. 3. If symptoms do not decrease within minutes, obtain medical help. 4. If you have a pattern of experiencing autonomic dysreflexia with your bowel program, then put Xylocaine gel 2% into rectum 5 to 10 minutes before starting anal stimulation to prevent problems.

Diarrhea or loose stools

Description	Bowel movements which consist of large amounts of loose, watery stool.
Possible Causes	<p>Illness such as flu, anxiety, stress.</p> <p>Change in diet, too much greasy, spicy food or wine.</p> <p>Too many stool softeners or laxatives.</p> <p>Possible impaction - see page 19.</p> <p>Medications such as antibiotics.</p>
Treatment	<p>Decrease stool softeners and laxative until stool is formed again.</p> <p>For areflexic bowel, increase in bulk forming foods (fibre) in diet.</p> <p>See your doctor if any other signs of illness such as fever, chills, nausea or if diarrhea lasts longer than 24 hours.</p> <p>See your doctor if loose stools continue.</p>

Program taking too long

Description	<p>Bowel movement does not occur after 30 minutes.</p> <p>Bowel program takes longer than one hour from stimulation of the lower bowel to the end of the bowel movement.</p>
Possible Causes	<p>Not enough stimulation of the bowel.</p> <p>Constipation.</p> <p>Poor positioning for bowel movement; upright on a toilet or commode is best.</p>
Treatment	<p>Do more anal stimulation. Maximum number of times is 4 to 5.</p> <p>Start using a suppository or use a second suppository to push the last one up higher.</p> <p>If suppository not part of usual routine, try using one.</p> <p>If a suppository is part of usual routine, try a different one.</p> <p>Increase fluid intake and fibre in diet, within limits of bladder restrictions.</p> <p>Do bowel program after a meal or after drinking a hot liquid. Hot liquid increases bowel activity after a meal.</p> <p>Review medications with your doctor.</p>

Hemorrhoids

Description	Swelling of tissue with blood vessels inside that sticks out (or protrudes) into the anal canal. This may cause bright red blood on stools.
Possible Causes	Frequent straining to pass hard stools. Constipation. Spending too much time on the toilet or commode. Too much anal stimulation.
Treatment	Do not use anal stimulation, or use carefully with lots of lubrication. If mild hemorrhoids, use and over-the-counter treatment such as Preparation H. Use stool softeners and laxatives as well as suppository. See your doctor for treatment. After hemorrhoids have healed (2 to 4 weeks), return to previous program and prevent constipation and diarrhea.

- If blood in stool is dark in colour, or if blood is mixed in stool it could be blood from higher in the bowel or stomach. Tell your doctor. You could have an which can be treated by diet and medication.
- Always have hemorrhoids diagnosed by a doctor to confirm that there is nothing more serious happening.

Medications and your bowel program

For more information about medications please see the booklet on **Medications - A guide for you after spinal cord injury**.

Suppositories

Description	To stimulate the rectum if you have a reflexic bowel.
Name	Dulcolax or Suppository Magic Bullet - which is a special type of Dulcolax suppository that is more quickly absorbed Senekot Glycerine Micro-lax enema
Use	Strong suppositories such as Dulcolax and Senekot which stimulate nerves are usually needed at first. Glycerine irritates rectal tissue and lubricates stool to cause bowel movement. Some patients can eventually stop using suppositories. Anal stimulation may be all that is needed.

Stool softeners

Description	To soften stool. Avoid constipation and impaction.
Name	Colace Fibre supplement Ducosate Sodium Ducosate Calcium
Use	Drink plenty of fluids to help stool softener work within range of fluid restriction. If stool is too soft, unplanned bowel movements can happen: <ol style="list-style-type: none">1. Reduce dosage or stop taking stool softener for a while.2. Start again, perhaps at lower dose, when stool is firmer.

Peristaltic stimulators - laxatives

Description	To stimulate the normal wave-like muscle action of the bowel which moves the stool through the bowel. You may use a laxative if you have a reflexic or areflexic bowel.
Name	Senokot Lactulose Magnolax Mineral oil Milk of Magnesia
Use	If you are having frequent unplanned bowel movements you may wish to slowly decrease laxatives.

Bulk formers

Description	To increase amount of bulk in stool.
Name	Metamucil Fibyrax Fibre supplement
Use	Drink plenty of liquids when taking Metamucil and Fibyrax, but stay within fluid restriction. These medications may not be needed if a high fibre diet is followed.

Anesthetic ointment

Description	To prevent autonomic dysreflexia symptoms from occurring during bowel programs (especially if moving hard stool).
Name	Xylocaine gel 2%. A doctor's prescription is needed.
Use	Insert small amount into rectum with gloved finger 5 to 10 minutes before doing bowel program. If you have a reflexic bowel, and have a pattern of developing autonomic dysflexia with your bowel program, you may add this to your routine for prevention of this problem.

Summary

At first, a bowel program may seem like a lot of work. Gaining control of your bowels may seem impossible. With patience, persistence and help from your health care team, you will learn the skills to regain control of this part of your life. Often people get discouraged when they have unplanned bowel movements or problems. Regaining control of your bowels may take some trial and error, and some time. Your health care team recognizes that the ability to control your bowels is an important part of your independence, and is available to help you reach this goal.

