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Skin-Spinal Cord Injury Manual

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Regional Spinal Cord Injury Center of the Delaware Valley

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Spinal Cord Injury Manual

A publication of the Regional Spinal Cord Injury Center of the Delaware Valley

The Regional Spinal Cord Injury Center of the Delaware Valley provides a comprehensive program of patient care, community education, and research. It is a federally designated program of Thomas Jefferson University and its affiliated institutions of Thomas Jefferson University Hospital and Magee Rehabilitation Hospital.

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Spinal Cord Injury
Patient-Family Teaching Manual

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Regional Spinal Cord Injury Center
of the Delaware Valley

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Dedication

The Handbook Committee of the RSCICDV gratefully acknowledges the assistance and dedication of all who contributed to this manual, and all the others who worked so hard to make this Handbook a reality.

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Skin

Skin

Introduction to Skin Function

The skin is a vital part of the body with many necessary functions:

- The skin protects you from the environment. When your skin is intact, there is a barrier against bacteria and injury to the organs inside of the body. It prevents too much sunlight or harmful chemicals from entering the body.
- The skin helps you stay warm or cool. Your sweat glands produce sweat and cool you off as the sweat evaporates from the skin.
- Nerve endings in the skin send messages to the brain to give you information about pain, temperature and touch.

Changes in Skin Function After Spinal Cord Injury

After spinal cord impairment, the skin loses its ability to protect itself against harmful things. The nerves in parts of your skin, at and below the level of your spinal impairment, may not be able to send accurate information to the brain because of damage to the spinal cord. You may not be able to notice the difference between hot and cold. You may not feel a pin prick or know if someone has moved your leg. Unless you look, you cannot always tell where your legs, arms or fingers are.

A pressure ulcer is a complication that may occur as a result of your spinal cord impairment. A pressure ulcer is an area of tissue damage caused by not relieving pressure. The area is usually over a bony prominence.

In this section, you will find information on how to take care of your skin, how to prevent pressure ulcers and how to care for a pressure ulcer if one occurs.

You will learn safety measures to protect yourself from harmful things in the environment, and how to check your skin regularly for potential problems.

Anatomy of Skin

Skin is made up of two layers: the epidermis and dermis

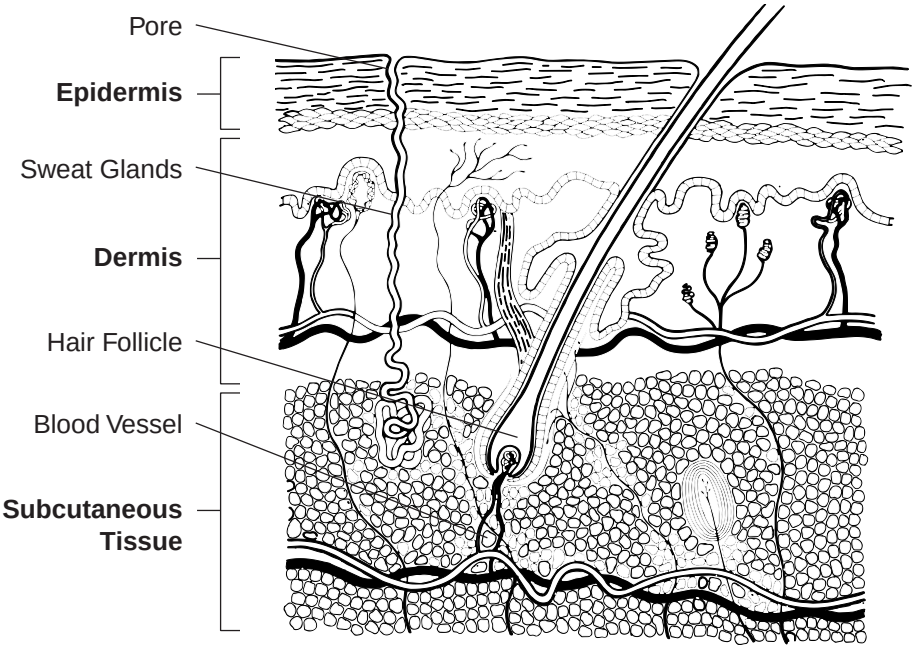
Epidermis: This is the outer, thinnest layer of the skin. It does not have blood vessels. The color of the skin comes from something called melanin, found in the innermost layer of the epidermis.

Dermis: The dermis, below the epidermis, contains nerves, blood vessels, oil, sweat glands and elastic fibers. The blood supply of the skin is in the dermis.

Accessory organs of the skin: Hair, nails and tiny glands are the accessory organs of the skin. Hair is spread over the entire body except the palms and soles. Nails are "hardened" skin cells which grow under the white crescent area at the rear of each nail.

Other glands of the skin are the sebaceous (oil) glands, sweat glands and ceruminous glands. The many sweat glands help regulate the fluid, body chemicals and temperature balance. They also help the body get rid of wastes.

Diagram of Skin



(Adapted with Permission from Cull, P: The Source Book of Medical Illustration, Park Ridge, NJ, 1989, Parthenon Publishing Group, Inc.)

Keeping Your Skin Healthy

After a spinal cord impairment, your skin requires daily care and a lot of attention. You will need to spend time daily cleaning the skin, checking the skin for problems, moving yourself so the skin will get proper blood supply and drinking and eating properly so the skin can stay healthy.

Cleanliness

- Bathe daily with mild soap and warm water. Pay particular attention to the genital area. Keep the area below the sacrum (the lower part of your back) clean and dry.

- Keep the skin free of sweat, urine and feces. This will prevent skin irritation, rashes and pressure ulcers from occurring.
- If incontinence of urine or feces occurs, wash and dry the skin immediately.
- Avoid harsh cleansing agents that dry out skin oils, especially anything with alcohol in it. Alcohol will tend to dry the skin and will break down areas, opening skin to bacteria.
- Keep bed linens wrinkle free, clean and dry.
- Creams or lotions may or may not be appropriate for your skin. Before using, check with your doctor or nurse.

Turning and Positioning in Bed

- When lying in bed, turn yourself at least every two hours, especially if not lying on a special mattress. If you are unable, have someone else help you turn side to side, on your stomach (prone), or your back (supine). You may need to turn more often if your skin cannot tolerate two hour intervals. If your skin can tolerate two hour intervals, you may be able to increase the interval between turns. You may use an alarm clock to indicate when it is time for you to turn. Establish a regular turning schedule when you need to be in bed for any great length of time.
- When positioned, make certain that your body is in proper alignment; for example, shoulders, hips and legs all in a straight line.
- Use pillows, rolled blankets or other supports for positioning.
- Avoid having bed linens placed tightly around your body. This will enable you to change your position easier.

Skin Inspection

- Check skin daily for redness, open areas, abrasions, rashes or any other breakdown. Inspect your genitals for redness as well. Use a long handled mirror to see the areas that you are unable to see. If you notice a red area, stay off it until it completely disappears.

- Lift your body rather than slide your body across the bed sheets or cushion. This will help prevent friction burns and rubbing away the protective layer of skin.
- Avoid prolonged lying in bed. Get out of bed daily.
- If wearing any type of cast or brace, check skin yourself; or if you are unable, have someone else check beneath the cast or brace for any skin breakdown a minimum of twice daily. Make sure your cast or brace fits properly (not too tight or too loose).

How to inspect skin:

- Every day you need to check your skin for any signs of redness, color change, rash or any irritation. Finding problems early can help prevent pressure ulcers from occurring.
- You should check your skin at least two times daily. Morning and bedtime are often the most convenient times. Use your skin inspection mirror to help you see all the areas. Check all areas of skin, but pay close attention to areas directly over a bony prominence, such as ankles, elbows and your tailbone.
- See the diagram called **Susceptible Areas for Pressure Ulcers**. *Susceptible areas* mean areas that are more likely to get a pressure ulcer. The pictures show which areas may give you problems and in what positions these problems usually occur.
- If you are healing a pressure ulcer or have a "problem" area, you may need to check it more than two times a day.
- What should you do if you notice a red spot, skin breakdown, rash or other problem? Refer to the section called **What to Do When You Notice a Potential Pressure Ulcer**.

Hydration (Fluid Intake)

- You must drink the daily amount of fluid that was recommended for you to maintain good skin condition.

Nutrition

- Be sure to eat a balanced diet with foods from each of the four food groups to ensure proper nutrition. A balanced diet includes meats, dairy, vegetables, grains and fruits.

- A proper diet will provide the body with energy and a normal protective cushion of subcutaneous fat over bony prominences. Poor nutrition does not allow body tissue to rebuild, stay healthy or fight infection as easily as a proper diet.

Sun Exposure

- Use sunscreen if spending more than 15 minutes in the sun. Wear a wide brim hat. Avoid sun exposure between 10 a.m. and 3 p.m.

Equipment

- Be sure to inspect equipment daily. Check wheelchair, mattress, cushions and transfer boards daily for problems.

Excessive Heat / Cold

- After a spinal cord impairment, your body does not respond to extremes in heat or cold. You are more susceptible to frostbite in cold weather due to changes in circulation and lack of sensation. You are more susceptible to heat stroke or other heat related illnesses due to decreased ability to regulate temperature and changes in the ability to perspire.

Pressure Relief

After your spinal cord impairment, you will notice that a great deal of attention is paid to how often you should be turned and how you should be turned. Because the skin is more susceptible to skin breakdown after the injury, you will be turned every one to two hours, depending on what kind of bed you're in. You may even be in a bed that turns you.

When you begin to sit in a wheelchair, the staff will only let you sit for short times and will perform weight shifts at least every 30 minutes.

Why Is All This Turning and Moving Necessary?

When you stay in one position without moving, pressure can prevent blood from flowing properly to the skin and tissues, depriving the tissue of the oxygen it needs. Turning and changing positions frequently allows the circulation to "get going" again. When you do not move and change position frequently enough, the skin may breakdown because it is not getting the blood supply it needs.

Once you are involved actively in your rehabilitation program, the staff will teach you or your family to turn and change your position. This is called *pressure relief* or *weight shifting*. You need to carry out this pressure relief in bed and in your wheelchair.

Building Up Skin Tolerance for Pressure

Usually in bed, you will be turned every two hours. Depending on how your skin holds up, this time can be increased gradually.

The amount of time for staying up in the wheelchair is increased gradually from 15 minutes to all day for some people. No matter how many hours you sit in a wheelchair, you need to move yourself every 15 to 30 minutes.

Each person is different in how quickly tolerance to pressure is developed. When you are in the hospital, the staff will work with you daily to help you build this tolerance and know what limits your skin can handle.

Skin tolerance changes if you are sick, not eating well, have changes in posture or change the surface on which you sit or lay.

How Do You Know If It Is Okay To Increase Sitting Time, or Lengthen the Time You Can Stay in One Position in Bed?

Always check your skin after two hours. If there are no pressure areas (redness that does not disappear in 30 minutes), you **may** be able to increase time for sitting or increase time between turns. Tolerance decreases, though, as you age or if you get sick (UTI, etc).

If redness occurs that does not disappear in 30 minutes, return to previous "safe" intervals. You can try again at another time. Check with the rehab team or the Spinal Cord Injury Follow-Up Clinic for possible ideas that could help you to increase your skin tolerance.

Pressure Relief Methods

Turning

When in bed, you can be turned in four positions:

- Back (supine)
- Right side (right lateral)
- Front (prone)

- Left side (left lateral)

Usually when turning at night, you will spend time in each position. Try not to go back to the same position after being off it for only two hours.

Example of turning schedule:

- Position 1: right side – two hours
- Position 2: back – two hours
- Position 3: left side – two hours
- Position 4: prone (chest) – two hours

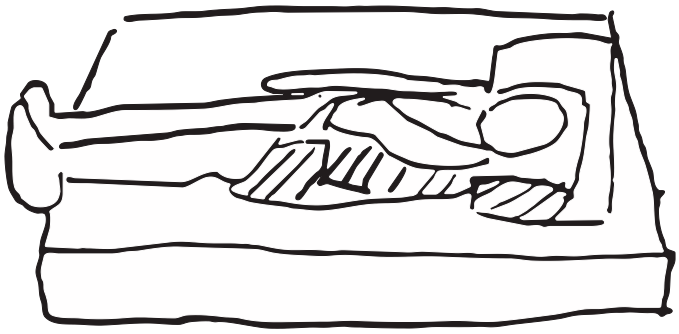
> **Note:** Stay out of any position for at least four hours before returning to that position.

Positioning in Bed

Supine

When on your back in bed, keep heels off bed either by positioning them up on pillows or by wearing pressure relieving boots.

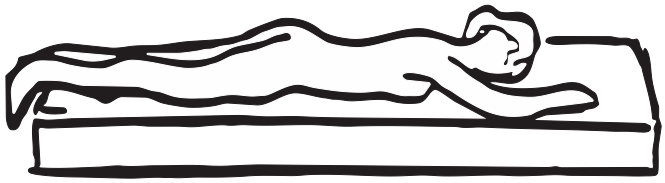
Supine



Prone

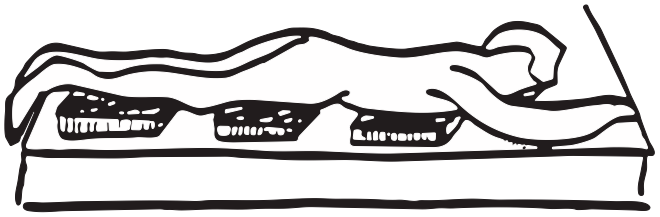
If on a water mattress, you do not need pillows for bridging. Keep your feet deep on pillows over the end of the mattress.

Prone — No Pillows



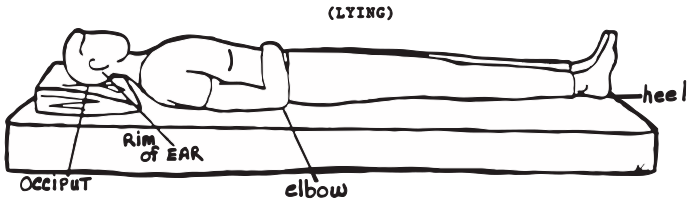
If on a regular mattress, use bridging techniques as shown with pillows. Bridging keeps knees, ribs and feet free of pressure.

Prone — With Pillows

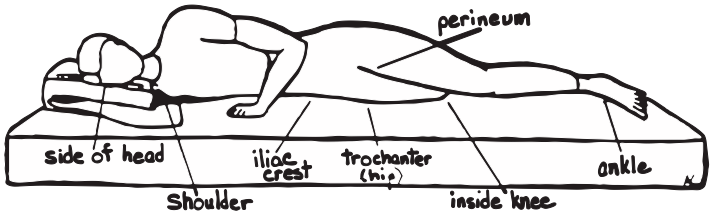


Susceptible Areas for Pressure Sores

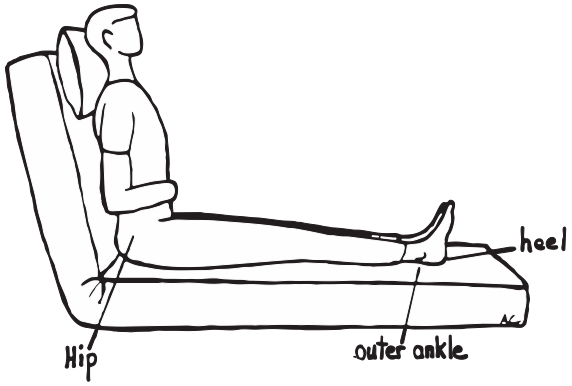
Lying on Back



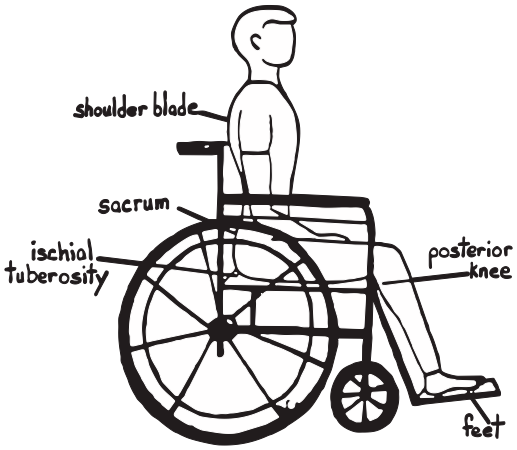
Lying on Side



Sitting Up in Bed



Sitting in Wheelchair



Pressure Ulcers — Risk Factors

A pressure ulcer is damage to skin and tissue that occurs when the tissue does not get the blood supply it needs. Pressure on any part of the body can cause the blood supply to be cut off. When this happens, a pressure ulcer can begin to form.

How Do Pressure Ulcers Happen?

Many people think that the skin surface is where a pressure ulcer starts because they see a hole in the skin. Just the opposite is true. Pressure usually comes from the blood vessels being squeezed between the skin surface and bone. The muscles suffer damage first and then up through the skin surface. Because what you see at the skin surface is the smallest part of the ulcer, you may be fooled into thinking that you only have a little problem. Every pressure ulcer seen on the skin should be regarded seriously because of the probable damage below the skin surface.

Pressure can be applied to the body in several ways:

- **Direct:** Caused by direct, unrelieved pressure to the bony prominences. For example, sitting without moving.
- **Shearing:** When tissue layers are pulled one layer over another. For example, sliding during a transfer instead of lifting your body or sliding down in the bed when the head is up.
- **Friction:** Caused by tissue layers being rubbed back and forth over another. For example, spasticity.
- **Penetrating:** Caused by an object puncturing the skin. For example, falling onto a nail or tack.

Risk Factors for Developing Pressure Ulcers

There are many risks for developing pressure ulcers.

Some include:

- illness
- dehydration
- low activity level
- tight clothing (jeans)
- extreme heat or cold
- bowel or bladder incontinence
- age
- spasticity

- skin rash
- broken equipment
- thin body build/obesity
- other medical problems
- past history of skin breakdown

What Will a Pressure Ulcer Look Like?

At first, you notice:

- A reddened area (or bluish-tinge in dark skin) on the skin surface. It may feel hard and warm to the touch.

As the ulcer continues to develop:

- The area may turn light red and cool to the touch.
- The top layer of skin may become hard and blacken.
- When you touch the ulcer, it may feel "mushy" underneath the skin surface and you may notice drainage seeping from the wound's edges.
- The top layer of skin caves in and a large hole may be seen underneath.
- You may also notice a foul odor from the drainage, have a fever, have increased spasticity or experience autonomic dysreflexia.

What To Do When You Notice a Potential Pressure Ulcer

As soon as you notice a reddened area, stay off the area until it returns to normal skin color.

Until you see your doctor or nurse, keep off the area and keep it clean and dry. You may clean it with mild soap and water and cover with clean gauze dressings.

If the reddened area does not improve after staying off the area for one hour, consult your doctor, nurse or the Spinal Cord Injury Follow-Up Clinic.

It is best to have all ulcers, no matter how small, checked early.

Pressure Ulcer Staging System

The pressure ulcer staging system is used to classify how much tissue is damaged. There are four stages. Stage I is the least amount of tissue damage, and Stage IV is the greatest amount of tissue damage.

Pressure Ulcer Staging System

Stage I

Non-blanchable redness (affected area that remains red after being touched by your fingertip) of intact skin.

Stage I Pressure Sore

Stage II

Partial skin thickness loss involving the epidermis, dermis or both.

Stage II Pressure Sore

Stage III

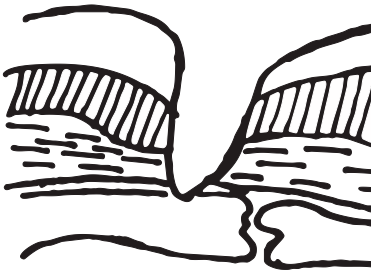
Full skin thickness loss involving damage to, or death of, subcutaneous tissue (layers just beneath the skin) that may extend down to, but not through, the underlying fascia (deepest layer of skin that covers muscle groups).

Stage III Pressure Sore

Stage IV

Full skin thickness loss with extensive destruction: tissue damage to muscle, bone, or supporting structures (tendons, joint capsule).

Stage IV Pressure Sore



Treatment of Pressure Ulcers

Treatment	Stage
Remove all pressure from the area.	1-2-3-4
Keep area clean and dry. If closed, clean with soap and water. If open, clean with normal saline solution.	1-2-3-4
Ulcers should be checked at least two times a day.	1-2-3-4
Ulcers should be covered after cleaning.	2-3-4
If not open, a protective dressing may be used.	1
Dead (necrotic) tissue needs to be removed. Debriding can be done in several ways. • Cutting out dead tissue by a doctor or nurse. • Using medication called *enzyme debriders* to help soften the dead tissue so that it can be removed.	3-4
Large ulcers that drain a lot may be dressed at least three times a day.	3-4
Sometimes when an ulcer is very large and deep, you may need to stay off the area for a long time — even many months. Your doctor, nurses and rehabilitation team may suggest surgery to help the ulcer close more quickly and allow you to get back to your previous activity level.	3-4

You may hear about many things you can put on your ulcer to help it heal. The best treatment is to keep off the area so that it can get the most circulation possible. There is no magic potion or special cream that makes a pressure ulcer heal.

The choice of treatments such as dressings, packing and medication, will depend on many factors such as location, size, depth, drainage and presence of infection.

The medications that are used on pressure ulcers help to keep them clean and help to prevent infection. If you have questions about a treatment that you've heard works, ask your doctor or nurse before trying it yourself.

In order to help heal an ulcer, you may need to have a consult with a dietician. The dietitian will help you pick out foods that will help heal your pressure ulcer. (See the Nutrition Section.)

The best treatment for pressure ulcers is prevention. Even the smallest ulcer can take days or weeks to heal.

Pressure Ulcers – Susceptible Sites

Susceptible Site	Factors Contributing to Pressure Development	Interventions to Relieve and Avoid Pressure
Occiput (Back of Head)	Direct pressure caused by: • Lying on your back without pressure relief. • Sitting in high back wheelchair. • Improperly fitting braces.	Relieved by: • Proper turning schedule and positioning. • Remove the headrest or place a pillow with a cutout behind your head. • Have orthotist check brace.
Rim of Ear	Direct pressure caused by: • Lying on your side without relief of pressure	Relieved by: • Proper turning schedule and positioning.
Scapula (Shoulder Blade)	Direct pressure caused by: • Lying on your back without relief of pressure. • Lying semi-reclined without shifting weight in wheelchair. • Improperly fitting body jackets, halos or SOMI braces. Shearing caused by: • Sliding down in bed while the head of the bed is raised. • Sliding down in the wheelchair.	Relieved by: • Frequent turning and position changes or use of a special mattress. • Frequent position changes. • Proper fitting of braces and frequent skin checks. Prevented by: • Proper bed positioning. Position hips at the break of the bed. Avoid raising head of the bed more than 30 degrees. • Position hips so buttocks are at the back of the wheelchair.
Rib Cage	Direct pressure caused by: • Lying on your side without pressure relief • Improperly fitting body jackets, halos, SOMI braces and wheelchair supports.	Relieved by: • Frequent turning and positioning or special mattress. • Proper fitting braces and supports and frequent skin checks.

Susceptible Site	Factors Contributing to Pressure Development	Interventions to Relieve and Avoid Pressure
Elbows	Direct pressure caused by: • Leaning on your elbows to prop yourself up in wheelchair, bed or on a prone cart. • Injury to elbows when changing position.	Relieved by: • Elbow protectors and other supports such as pillows and wedges. • Prevent injury to elbows.
Ischial Tuberosity (Buttock Bones You Sit On)	Direct pressure caused by: • Sitting too long without shifting weight. • Foot pedals of wheelchair set too high. • Hammock or slinging effect of wheelchair seat. Shearing caused by: • Sliding your buttocks over a transfer board during a transfer. Other factors: • Previous skin breakdown.	Relieved by: • Weight shifts every 15 to 30 minutes in your wheelchair. When riding in a car, remember to shift your weight. • Be sure that your feet are flat in the center of the foot plate of the wheelchair and not touching pins or heel loops. • Increase depth of wheelchair cushion. • Use seat board under cushion to correct hammock or slinging effect of wheelchair. Prevented by: • Lifting your buttocks over a transfer board — don't slide! Don't turn on affected side of ischium. Lift when turning and transferring. Other tips: • In a bathtub, use a soft rubber mat. • Take your medications for spasticity. • Use the proper wheelchair cushion for you.

Susceptible Site	Factors Contributing to Pressure Development	Interventions to Relieve and Avoid Pressure
Sacrum (Lower Back)	Direct pressure caused by: • Lying flat on your back for long periods of time without turning or changing position. • Sitting slumped in your wheelchair. • Sitting in a semi-reclined position in your wheelchair. • Sitting in a semi-reclined position in bed. Shearing caused by: • Sliding down in bed while the head of the bed is up. • Sliding forward in a wheelchair. • Improper turning method. • Improperly fitting casts and body jacket.	Relieved by: • Following a turning schedule. • If the seat of your wheelchair hammocks or slings, replace it with a new seat or use a seatboard under your cushion. • Properly positioned in wheelchair. • Properly positioned in bed. Prevented by: • Proper bed positioning. Position hips at the break of the bed. • Prevent forward sliding. Use seat belts and lap boards. • Be sure wheelchair seat is proper height. • Positioning devices may be necessary to improve sitting posture in your wheelchair. • Use correct turning techniques: Don't slide or pull body across sheets. Roll and lift hips, ankles and shoulders across bed. • Be sure cast or jacket fits properly. • Check your skin beneath cast and jacket two times a day.

Susceptible Site	Factors Contributing to Pressure Development	Interventions to Relieve and Avoid Pressure
Knees	Direct pressure caused by: • Lying prone (on chest) without relieving pressure. • Lying on your side without relieving pressure. • Sitting in wheelchair with pressure on the back of the knees. Shearing caused by: • Spasms of your legs drawing your knees together while sitting. • Spasms of your legs drawing your knees across your sheets.	Relieved by: • Use pillow to bridge bony areas. • Use pillow or some support between knees when lying on your side. • Use a regular turning schedule. • Work with your therapist to correct sitting posture. Prevented by: • Using support between your knees when sitting in your wheelchair. • Medications for spasticity.
Ankles	Direct pressure caused by: • Lying on your side without relief of pressure. • Sitting in your wheelchair with feet poorly positioned on foot plates. • Injury to ankles when transferring. • Improperly applied cradle boots, splints or supports. • Poorly fitting shoes. Shearing caused by: • Spasms that draw ankles together and across one another.	Relieved by: • Use foot and ankle protectors to completely support feet and ankles off mattress. • Be sure that your feet are flat in the center of the foot plate of the wheelchair and not touching pins or heel loops. • Monitor your transfers. • Periodically remove boots, splints and supports to check your skin. • Be sure your shoes fit properly. If your feet usually swell, wear shoes one size larger. • Elevate your feet periodically. Prevented by: • Use of ankle-foot protectors. • Medication for spasticity.

Susceptible Site	Factors Contributing to Pressure Development	Interventions to Relieve and Avoid Pressure
Heels	Direct pressure caused by: • Lying on your back without relief. • Improper positioning in wheelchair so that feet are poorly positioned on foot plates. • Improperly fitting shoes. Shearing caused by: • Spasms pulling heels against footrest of the wheelchair. • Spasms pulling heels against bed sheets.	Relieved by: • Pressure relieving boots when in bed. • Frequent turning and positioning changes, including prone (on chest) positioning. • Be sure feet are flat in the center of foot plate of wheelchair and not touching pins or heel loops. • Be sure shoes fit properly. Prevented by: • Using toe straps on footplates. • Medications for spasticity.
Toes	Direct pressure caused by: • Tight fitting shoes, stockings, splints or cradle boots. • Bumping your feet against a hard surface. • Improper prone positioning. • Ingrown, infected toenails. • Improper position of legs when seated in wheelchair. Shearing caused by: • Spasms drawing your foot (toes) across sheets.	Relieved by: • Properly fitting shoes, stockings, splints and cradle boots. • Avoid bumping your feet. Wear shoes when in wheelchair for position. • Proper positioning in bed. Elevate your toes from mattress when prone (on chest). • proper positioning in wheelchair. • Call your podiatrist (foot doctor). Prevented by: • Medications for spasticity.

Trochanter (Side of Hip)

Direct pressure caused by:

- Lying on your side too long without turning.
- Sitting improperly in a wheelchair.
- Heterotopic bone (See Complications in Mobility Chapter).

Shearing caused by:

- Spasms in your legs drawing your hips across bed sheets.

Relieved by:

- If one hip is not tolerating lying on your side, alternate turning from opposite side to back or prone (on your chest) position.
- Be sure hips do not touch either armrests or wheels when sitting in your wheelchair.
- Range of motion.

Prevented by:

- Using pillows to support your body when lying on your side.
- Medication for spasticity.

Dressings / Skin Products

There are hundreds of pressure ulcer dressings and products on the market today. Choosing a wound care product that is right for you may take time. It will be a decision between you and your doctor or nurse.

There is no one product that is right for every pressure ulcer. As your ulcer starts to heal, product changes may be made.

There are many factors that need to be considered when choosing a dressing. Some include:

- the size of the pressure ulcer
- the location of the pressure ulcer
- the amount of drainage from the pressure ulcer
- the cost of the dressing or product
- the assistance required to use the product or dressing

Some products were made to protect skin from damage or pressure ulcers. The products are called barrier or protective dressings / creams.

Some dressings were made to collect drainage. The products are called absorbent dressings or packing. Each dressing has different amounts of drainage that it can absorb. Choosing one of these will depend on how much drainage is coming from the ulcer.

There are skin care products made to help get rid of *necrotic*, *fibrotic*, or *dead* tissue. They can be ointment in tubes or dressings. Choosing an ointment or dressing will depend on the amount of dead tissue.

Some dressings were made to stay on for several days. They usually create a seal of protection for the ulcer. There are many types of these dressings.

If wounds have a lot of dead tissue in the woundbed, debridement (removal of dead tissue) may need to be done surgically. For any wound, you should contact your doctor to discuss how to care for it. You may need to come in to have the wound examined.

Glossary

Circulation	Blood flow.
Débridement	Method to remove dead skin.
Eschar	“Scab”or dead tissue.
Incontinence	Uncontrollable bowel or bladder function. Also referred to as an “accident.”
Ischial Tuberosity	“Butt bone”; the 2 bones you sit on.
Laceration	Cuts.
Maceration	Irritation.
Non-blanchable	No blood flow.
Perineal area	Genital area.
Perspiration	Sweat.
Prominence	Stands out.
Prone	Lying on stomach.
Regulate	Control.
Sacral	Area just above tailbone.
Sensation	Feeling.
Supine	Lying on back.
Susceptible	Prone, more likely to occur.

References

1. Agency for Health Care Policy and Research. *Treatment of pressure ulcers*. Rockville, MD: U.S. Department of Health and Human Services, 1994.
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3. Edwards PA. (Ed.) *The specialty practice of rehabilitation nursing: A core curriculum*. Skokie, IL: ARN, 2000.
4. Fine CK. (Ed.) *Topics in spinal cord injury rehabilitation (Skin Care)* 2(1). Gaithersburg, MD: Aspen Publishers, 1996.

Comments and Feedback

The staff of the center has recently spent a lot of time and effort in revising this manual. However, we realize that those who are actively reading and using the manual can improve it. As a part of our program of continuous quality improvement, we ask you to help guide our efforts to improve the manual.

In the next section of the chapter are two forms. The first form is an overview by chapter that seeks to identify those areas of the manual that could benefit the most from additional work. We also seek to identify any major areas of concern that have not been addressed.

The second section is a more focused questionnaire that has as its goal the specific items that should be targeted. For example, should an item be added to the glossary or the definition changed. Should a drug be added to the discussion of bowel programs?

The more specific the comments are the more likely that we will be able to make the improvements that form the basis of your idea. By communicating with the Regional Spinal Cord Injury Center of the Delaware Valley, however, users grant us permissionto use any information, suggestions, ideas, drawings or concents communicated for any purpose we choose, commercial, public or otherwise, without compensation or acknowledgement whatsoever.

Thank you for taking the time to assist us in improving this manual.

Sincerely,

SCI Manual Committee

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Feedback Form

Rate each chapter by placing an "X" on the scale underneath the term that best captures your opinion. Using the next page, provide specific comments regarding your ratings. Feel free to make copies of the next page.

	No Opinion	Fair	Satisfactory	Good	Excellent
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Travel and Transportation					
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Master Glossary					

Suggestions and Comments

Chapter: _____

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Any terms that need to be added to the glossary? How would you define the terms?

Any section or paragraph that was not clear?

Any drawing or sketch that would help to illustrate the material being covered?

Any additional topic that should be covered?

Any questions you have that you feel should have been answered by the manual?

What is the question?

What is the suggested answer?

Any references that should be added? Any other resources that should be mentioned?

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