Patient Transfers and Body Mechanics

Bed to Chair Transfer

Safe practice when performing transfers
Research shows that injuries to healthcare workers happen most often during patient transfers. In fact, more than one third of workplace injuries in hospitals and nursing homes occur when staff try to move patients. Most of these are injuries to the back.

The back is the main support structure for the body. It carries most of the body's weight, and it is the main pathway for the nervous system. The backbone, or spine, is a column of small bones called "vertebrae." Between each pair of vertebrae is a cushion-like pad called a "disc," which acts as a shock absorber. The vertebrae and discs are supported by ligaments and muscles.

A healthy spine has three natural curves. These natural curves form an S-shape when your back is properly aligned. You know your back is properly aligned when your ears, shoulders, and hips are in a straight line. We often refer to this as good posture.

Anything that forces the back out of its natural S-shape can strain muscles and damage discs. Back problems and pain are almost certain to follow.

Healthcare professionals often perform physically demanding tasks with patients. Following proper transfer techniques can help you to maintain a healthy back and to:

1. Work more efficiently and comfortably
2. Minimize lost time from work with costly and painful injuries
3. Increase patient satisfaction by providing good, consistent care.

Patient assessment
Before transferring a patient from a bed to a wheelchair or chair, it is important to assess the situation. How much can the patient help?

The answers to 3 questions will help you to decide how much the patient can assist and what method of transfer should be used:

1. Is the patient cooperative?
2. Can the patient support his or her own weight?
3. Is the patient too heavy to transfer alone?

<u>Is the patient cooperative</u>?
Assessing whether patients are cooperative means deciding if they have the awareness to assist you. This may include considerations such as:

- Are they sedated?
- Are they weak or dizzy?
- Are they able to follow simple directions?

If the patient is not able to understand the process or to cooperate, a lifting aid is recommended.

<u>Can the patient support his or her own weight</u>?
If the patients is able to support his/her own weight, assistance from an employee may not be

needed. The patient may be able move from the bed to a chair or wheelchair without help. You should only stand by for safety as needed.

If patients are able to partially support their own weight, assistance will be necessary. This may involve a stand and pivot technique and may include the use of a transfer belt. Sometimes, patients who cannot bear weight on their legs may have upper body strength. In such cases, transfer may be assisted with a transfer belt until the patient learns to move independently.

Remember that a manual transfer is intended to **assist**, NOT lift a patient. For patients who cannot help to support their weight, a mechanical lifting aid is recommended. However, you should not use a mechanical lifting aid, such as a hoist, unless you have been trained to do so. Improper use or malfunction of a lifting aid can cause serious injury or death.

Is the patient too heavy to transfer alone?
Avoid injury to the patient and to yourself. If the patient is heavy, two people should assist in the transfer. This does not mean a patient is overweight. Some sources suggest that a lifting hoist should be used for patients over 154 pounds.

The transfer belt
A number of aids are available to help you to transfer patients safely. One frequently-used aid is the transfer belt.

A transfer belt is placed around the patient's waist and secured snugly. The belt can be adjusted to fit different patients and usually fastens with velcro and a buckle. If the transfer belt has loops, hold these loops to support the patient more firmly during transfer; if the belt does not have loops, hold onto the belt itself. You should use a transfer belt with patients who can partially support their own weight but need assistance.

Transfer belts enable employees to grip patients more firmly and control their movement during transfer.

Studies show that using a transfer belt increases patient satisfaction. Lifting patients manually without a transfer belt may cause the patient discomfort under the arms. Patients also prefer the transfer belt because they feel more secure. The belt gives the employee the ability to better control the patient's movement during a transfer.

A transfer belt should not be used with some patients. These include:

- Pregnant patients
- Patients who have undergone recent abdominal surgery
- Patients who are experiencing pain in the abdomen
- Patients who have ostomies (such as a colostomy, ureterostomy, ilostomy)
- Patients who are unable to tolerate the pressure of the belt.

Remember that a transfer belt is to assist in the transfer of a patient. It is NOT intended to lift a patient.

Sit-to-stand pivot transfer

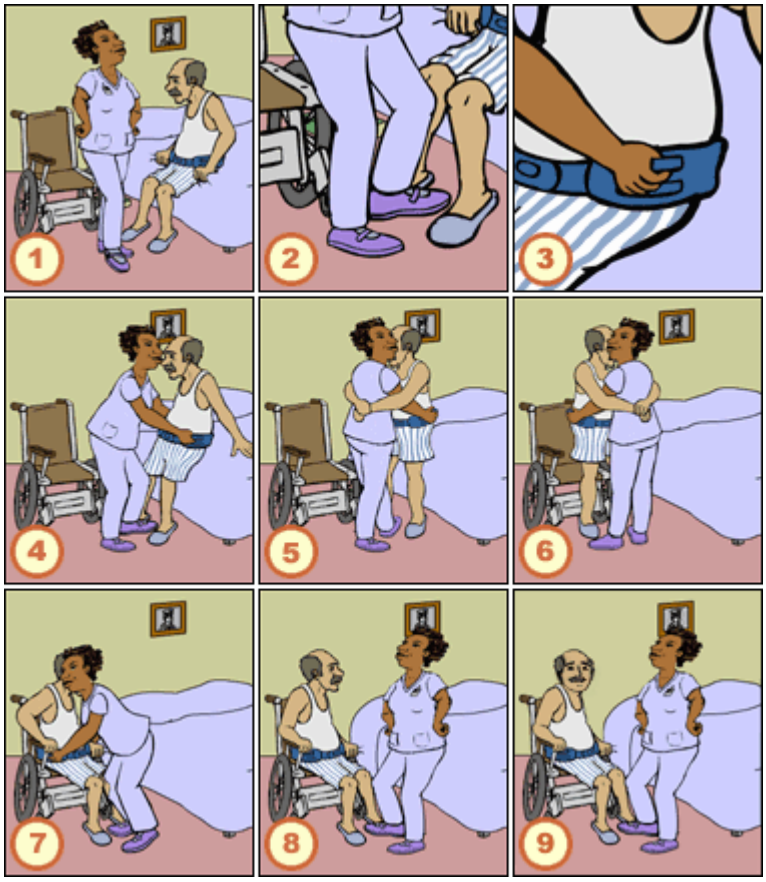
A common technique for helping a patient to move from a bed to a whelchair or chair is the "Sit to Stand Pivot Transfer."

Before transferring a patient from a bed to a chair or wheelchair:

- Explain the process to the patient
- Position the chair at the head of the bed on the patient's strong side (if applicable) and remove any obstacles
- Lock any wheels on the chair and bed
- If transferring to a wheelchair, remove the arm nearest the bed and remove the leg rests or swing them out of the way
- Adjust bed height so that the patient's hips will be slightly above the knees with the feet flat on the floor
- Make sure that the floor is dry and that both you and the patient are wearing non-slippery footwear
- Apply a transfer belt to the patient's waist.

The transfer itself is a simple process of standing the patient up, pivoting, and sitting the patient down. To perform this transfer, carry out the following steps:

1. Stand close to the patient to avoid leaning or over-reaching and place your foot that is closer to the head of the bed on the floor between the patient's legs.
2. Reach around the patient's waist and grip the transfer belt.
3. Ask the patient to push against the bed with the arms and to stand with you on the count of 3.
4. Using a rocking motion, count to 3, and then stand the patient up.
5. Holding the patient close to your body, pivot on the foot between the patient's legs until the backs of the patients' legs touch the front of the chair.
6. With your knees bent, lower the patient into the chair using the transfer belt.
7. Throughout the process, ensure that your back is properly aligned with your ears, shoulders, and hips in a vertical line.



When performing this transfer, if patients wish to hold on to you for support, ask them to hold on to your upper arms, forearms, or waist. Never allow a patient to hold on to your neck. If you are concerned that a patient may grab your neck, you may grip the transfer belt by placing your arms around the patient's arms.

If a second employee is available to help with the transfer, a similar process is used. The second employee should be behind the patient with one knee on the bed. The second employee grips the transfer belt from the back. The first employee uses a gentle rocking motion to stand the patient up. As soon as the patient clears the bed, the second employee shifts the patient to the chair.

Bed to Stretcher Transfer

Safe practice when performing lateral transfers
Healthcare is a physically demanding occupation. In fact, the nursing profession has one of the highest rates of work-related back injuries. Many of these injuries occur during patient transfers.

The most hazardous types of patient transfers are:

- Bed to chair
- Bed to stretcher
- Reposition in bed.

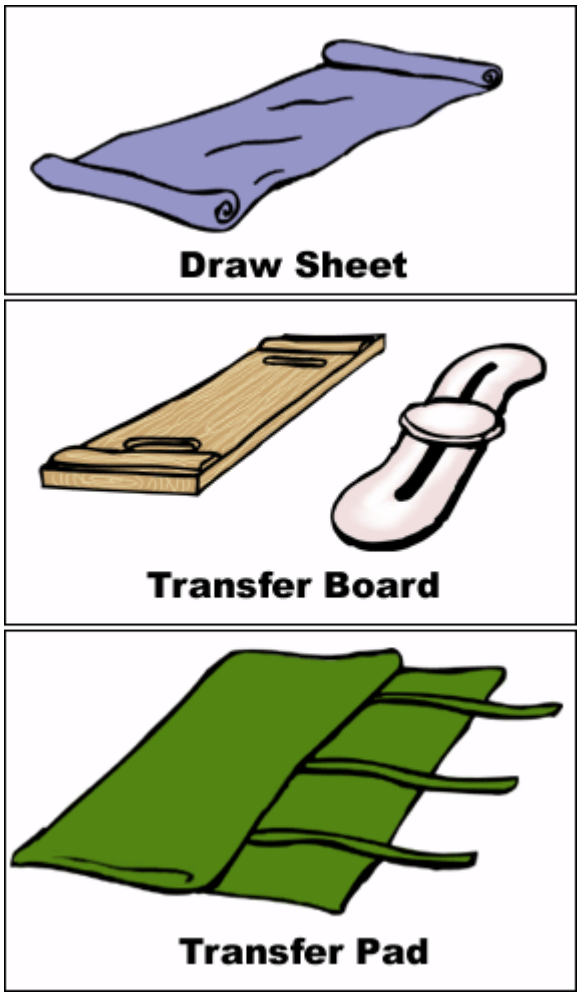
It is important to follow proper transfer techniques to reduce the chance of injury. In addition, whenever you move a patient or lift, push, or pull an object, it is important to use good body mechanics. Even a light load can cause lower back strain if poor body mechanics are used.

Using good body mechanics includes keeping your back in proper alignment. To maintain the back's natural S-shape, keep the ears, shoulders, and hips in a straight line. When bending forward, this straight line is maintained by bending at the **hips**, not the waist.

In addition to back injuries, there are other risks to both patients and employees from improper transfer techniques. These risks might include falls, dislocation, and shoulder strain to name a few.

Types of lateral sliding aids
A lateral transfer is the movement of a patient, who is in a lying down position, from one flat surface to another. One example of a lateral transfer is a transfer from bed to stretcher.

There are many types of aids available to make the process of a manual lateral transfer easier. A sliding aid should always be used when performing a lateral transfer. Lateral sliding aids include draw sheets, transfer pads, and transfer boards.



Types of lateral sliding aids

Draw sheets
A draw sheet or any short sheet can be used as a sliding aid. There are also specially designed roller sheets. These are made of special fabrics that have low-friction inner surfaces. The layers of fabric roll or slide over one another during the patient transfer.

Transfer pads
Various types of pads are also available. These may be quilted pads with pull straps and a roller sheet underneath. The pads may also come with slats that can be used to bridge small gaps between surfaces.

Transfer boards
Transfer boards are also used. These may use various low-friction or roller technologies so that the patient can be pulled across easily.

Performing a lateral transfer
Before transferring a patient from a bed to a stretcher, it is important to assess the situation. How much can the patient help?

If a patient is able to move from the bed to stretcher without help, you should only stand by for safety as needed.

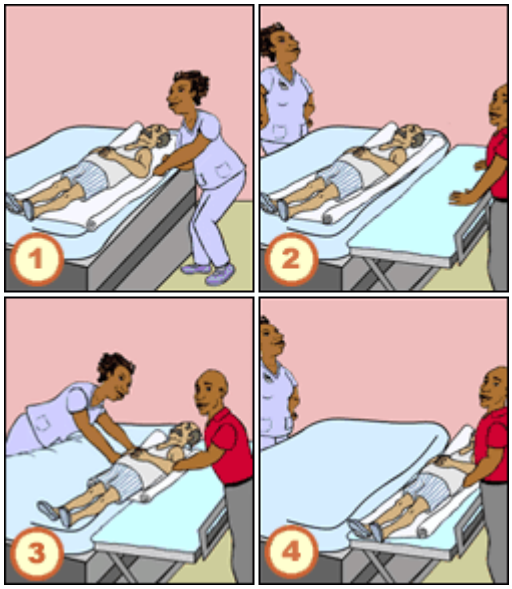
If a patient can assist only partially or not at all, a lateral transfer will need to be done. Two employees should always participate in a lateral transfer and a lateral sliding aid should be used. If the patient is very heavy, three employees should assist or a mechanical transfer device should be used. You should not use any mechnical devices, however, if you have not been trained to use them.

One common method of lateral transfer involves the use of a draw sheet or short sheet. Before transferring a patient from a bed to a stretcher using a draw sheet:

- Explain the process to the patient
- Position the stretcher alongside the bed
- Adjust the height of the bed and stretcher so that they are level
- Lock wheels on both the bed and stretcher
- If there is not already a draw sheet in place, position the draw sheet or short sheet beneath the patient in the same manner that you would do so when changing an occupied bed.

To transfer a patient using a draw sheet or other short sheet:

1. Roll up the sides of the sheet next to the sides of the patient
2. One employee stand at one side of the patient
3. Another employee stand at the other side of the stretcher
4. Each employee hold the rolled up sheet close to the patient's body
5. Use the sheet to move the patient onto the stretcher
6. Both healthcare workers should maintain correct alignment of the back throughout the process.



Other sliding aids can also be used to transfer a patient from a bed to stretcher. Whatever type of aid is used, always remember to:

- Follow any procedures established by your facility
- Become familiar with the type of sliding aids available
- Make sure there is enough space to perform the transfer
- Remove any obstacles
- Keep your center of gravity as near the patient as possible
- Eliminate reaching and twisting
- Raise the bed to a comfortable height whenever possible
- Apply brakes on both bed and stretcher
- Clean the sliding aid between uses to prevent infection.

Ambulating with the Patient

Safe practice when ambulating with the patient|
Your back is very important. It provides balance and support to your whole body. Suffering a back injury can have a serious impact on the way you live and on the things you can do.

When ambulating with a patient, you walk beside the patient and provide assistance. If you are ambulating with a patient, performing a transfer, or doing any other job that requires lifting, follow these guidelines to help maintain a healthy back:

- Maintain the back's natural curves by keeping the ears, shoulders, and hips aligned.
- Lift and lower with your legs, not your back.
- Keep the weight close to your body.
- Bend at the hips, not the waist.
- Avoid twisting or turning the upper body when carrying or lifting.
- Explain what you are doing to patients and other employees who are participating.
- Make sure that both you and the patient are wearing non-slip footwear.
- Be sure the floor is dry and obstacles are removed.
- Get assistance whenever possible.

Other factors that can help to maintain a healthy back include:

- Eating a proper diet
- Exercising regularly
- Reducing stress
- Removing hazards.

Preparing to ambulate safely
Every time you prepare to move a patient, you should assess the situation. You need to know how much the patient can help and what other assistance you might need.

For example, a patient who has suffered a stroke may be much stronger on one side than the other. In this case, it will be important to support the patient's weak side by walking on that side of the patient.

If the patient is unstable, dizzy, or confused, you may need additional assistance. This may include the help of another employee or the use of a transfer belt.

It is also important to prepare the area before ambulating with the patient. Make sure that the room is not cluttered and remove any obstacles. A cluttered room increases the chances of trips or falls.

You should also be aware that a small room, such as a bathroom, may restrict your movements. Think about how you will deal with such spaces before you get there.

Walking with the patient
When ambulating, or walking, with a patient, you may sometimes wish to use a transfer belt. A transfer belt, or gait belt, is fitted snugly around the patient's waist. The belt is simple to apply and provides a secure grip to assist the employee in transferring or walking with a patient. Some belts have loops that can be used like handles to give a better grip.

One employee may ambulate safely with patients who need some help walking, but are reasonably stable. If one side is weaker than the other, support the patient's weak side by walking on that side. Support the patient by:

- Using one hand to support the patient's elbow
- Placing an arm around the patient's shoulder
- Gripping a transfer belt around the patient's waist.

Two employees should participate if patients are unstable or confused. To ambulate a patient safely with 2 employees:

1. Ask the patient to sit on the side of the bed
2. Apply the transfer belt
3. Stand the patient up (as if starting a sit-to-stand pivot transfer)
4. Two employees stand on either side of the patient
5. Place your arm round the patient's back and hold the transfer belt on the far side of the patient
6. Walk with the patient.

If patients are not used to getting up, allow them to sit on the side of the bed for a few minutes before standing. This can help to prevent dizziness.

If the patient begins to fall, DO NOT try to stop the fall. Instead, ease the patient down gently. Provide support, bending your knees not using your back, and guide the patient to the floor. Do not try to get the patient up off the floor by yourself.

A transfer belt is not intended to lift a patient. You are also not in a position to maintain good body mechanics and support the patient's entire weight. Trying to hold the patient up could cause serious injury to both the caregiver and the patient.

End of Patient Transfers and Body Mechanics Lesson