# Soteria Strains Program Guide

Section 2 – Identifying Hazards and Assessing Risk

Section 2.3 – Patient Risk Profile
V1.0 edited July 20, 2015



A provincial strategy for healthcare workplace musculoskeletal injury prevention.

# **Table of Contents**

Se	ection 2.3 – Patient Risk Profile	2
	Introduction	2
	Completing a Patient Risk Profile	
	Appendix 2.3.1 – Sample Patient Risk Profile	
	Appendix 2.3.2 - Mobility Decision Support Tool (Adapted with permission from Interior Health (BC))	
	Appendix 2.3.3 – Patient Mobility Status Posters	
	Annendix 2 3 4 - Patient Assessment Care Planning & Algorithm - Dent of Veterans Affairs (US)	13

## Section 2.3 - Patient Risk Profile

### Introduction

A patient risk profile is used to determine the minimum amount of assistance necessary to transfer a patient safely. The profile should be integrated into all patient-related processes (e.g. care plans, admitting) in order to determine the risk associated with patient handling and mobility activities. Specific patient handling and mobility tasks are identified, and a plan is documented and implemented to ensure all lifts, transfers, and repositioning activities are performed as safely as possible.

The profile should be completed and/or updated at the following checkpoints:

- Upon admission
- Transfer from one unit to another
- When any significant change in patient's condition and/or mobility status occurs
- When results of the point-of-care mobility status check (PACE) suggests the current plan is not adequate to ensure patient and health care worker safety during patient handling and mobility activities.

The patient risk profile should be integrated into an allied health professional's regular assessment process as appropriate. This profile is typically completed by an admitting nurse or by a consulting physiotherapist or occupational therapist. Many units complete this assessment with input from a variety of health care providers/disciplines depending on the needs, staffing, and team dynamics. This latter scenario is often required in patient populations with special considerations such as bariatric patients.

When completing the patient risk profile, remember that many of the steps are integrated with daily-care activities. It is not necessary to complete the assessment in the order presented here, but it should be integrated in a logical manner into the assessor's regular assessment and care activities.

# **Completing a Patient Risk Profile**

Step/Activity	Tools
1) Review patient's chart	
2) Record or review patient's height and weight	Appendix 2.3.1 - sample patient risk profile
3) Review special considerations as required	form
4) Assess patient's ability to communicate	Appendix 2.3.2 – mobility decision support tool
5) Assess patient's cognitive status	Appendix 2.3.3 - patient mobility status
6) Assess patient's history/risk of violence	posters (under construction)
7) Assess/review falls risk	Appendix 2.3.4 - algorithms for high-risk tasks
8) Assess patient's physical abilities	
9) Identify High-risk patient-handling and mobility tasks	
10) Document and communicate the safe patient-handling and mobility plan	

The patient risk profile must be well documented and communicated using tools such as the sample patient risk profile form in Appendix 2.3.1 and the patient mobility status posters in Appendix 2.3.3.

Access to the algorithms for high-risk tasks as shown in Appendix 2.3.4 has been shown, in research, to be an effective element for safe patient handling and movement programs.

### Step 1 - Review Patient's Chart

As with all patient assessment activities, understanding the patient's current and past medical history is essential. It is expected that assessors will have experience performing chart reviews, or be trained on how to complete one, and take note of any relevant information (e.g. height, weight, weight-bearing status, history of violence, etc.) if available. Information from the chart may also help to focus the assessment.

### Step 2 - Record Patient's Height and Weight

Height and weight are important to understanding the patient's body type, especially if they are bariatric. If this information is not included in the patient's chart, it should be obtained, via actual measurement if possible, and recorded. These measurements will help to determine if the equipment being used is rated properly for the person. For example, one standard type of hospital bed is rated for 500 pounds and the mattress width is 965.2mm (38"). Even if the patient does not weigh 500 pounds, if

Soteria Strains - A provincial strategy for healthcare workplace musculoskeletal injury prevention

they are short enough, their body width may be too wide to fit appropriately on the bed or other equipment. Also, this information will be used to ensure that slings and other aids are selected / sized appropriately for the patient.

### Step 3- Review Special Considerations as Required

Every patient population has specific needs when it comes to safe handling and mobility. The patient risk profile described here should allow the health care worker to plan for such needs in most situations. There are some patient populations, however, that may need special considerations. These groups may present a specific set of challenges that require enhancements to the standard program approach. These include patients with:

- Bariatric needs
- Orthopedic challenges
- Cognitive impairments
- Labour and delivery issues

For patients with bariatric, orthopedic, and cognitive impairment, labour and delivery, and amputations, refer to suggested additional considerations in "Program Guide Section 4 – Special Considerations."

### Step 4 - Assess Patient's Ability to Communicate

A patient's ability to communicate includes understanding and following directions as well as articulating their intentions and needs. Communication may occur through verbal and non-verbal channels and, in some cases, may be facilitated with written communications. A patient's ability to communicate can be assessed during normal interactions with the patient and may be confirmed or queried during the physical assessment. Injury risk increases during patient handling and mobility if the patient:

- Does not understand speech
- Does not speak/understand the primary language of the provider (language barrier)
- Cannot follow simple commands
- Does not understand non-verbal communication
- Communicates with sign language or communication devices
- Has a hearing deficit and is not using a hearing device
- Has a speech problem
- Has a low level of consciousness

The ability to communicate should be determined prior to assessing cognition.

### **Step 5 - Assess Patient's Cognitive Status**

Changes to cognitive status may be normal for a patient based on their condition (e.g., early- to latestage dementia patients) or their medications (e.g., drowsiness from drugs for pain medications). It is important to be aware of the patient's cognitive status and anticipate changes/cycles. As with communication, a patient's cognitive status may be indirectly assessed during regular interactions with the patient and may be confirmed or queried during the physical assessment. A helpful, simple and quick tool is assessing the patient's orientation to person, place, and time (Do you know your name? Do you know where you are? Do you know what time/date it is?). Some professionals use a fourth orientation, situation (Can you describe what just happened or is happening?). Incorrect responses to these questions do not necessarily mean there is a cognitive deficit, but they may trigger further assessment.

Some patient populations require special attention to cognitive status such as patients with brain injury, dementia, and psychiatric co-morbidities. Please refer to "Section 4 – Special Considerations" for more information on assessing these patients.

### Step 6 - Assess Patient's History/Risk of Violence

Patients may become agitated and/or violent for a variety of reasons. Potential for violence during patient handling and mobility activities increases injury risk for both the patient and the health care worker. It is important for health care workers to be aware of and communicate/document a patient's violent behavior and potential triggers. Historical information may be obtained from review of the patient's chart.

Certain clinical, psychological, and historical variables increase a patient's potential for violence. They are:

A history of repetitive violence	Agitation	Anger
Disorganized behavior	Poor compliance during an assessment	Detailed or planned threat of violence
An available means for inflicting injury such as a weapon	Presence of a neurological illness with psychosis	Antisocial personality disorder
Alcohol or illicit drug use	History of childhood physical sexual abuse	Command auditory hallucinations
Paranoid delusions	Suspicion	Poor impulse control
Poor adherence or non-adherence to treatment	Poor insight	Low IQ score <sup>2</sup>
Physically or verbally threatens the caregiver or others	Yells, shouts, or screams	Physical outbursts against the caregiver
Verbal outbursts against the caregiver	Physically attack others(e.g., kicking, punching, hitting)	Verbally attacks others (e.g., shouts, insults)
Causes injury to themselves	Causes injury to others or the caregiver	

While there is no specific combination or number of risk factors that can predict violence, their presence alerts health care workers that the patient poses a risk of violence. Health care workers who are aware of these risk factors have the opportunity to develop strategies to minimize the potential for aggression.

### **Note: Workplace Violence**

The Nova Scotia Violence in the Workplace Regulations requires that workplace violence must be recognized as an occupational health and safety hazard. All healthcare organizations in NS are legally obligated to assess workplace violence risks and then implement appropriate preventive and protective measures. It is recognized that aggressive behaviors and related management strategies occur across a continuum and that prevention/early-intervention strategies can reduce the likelihood that such behaviors will escalate. The Soteria Strains Patient Handling and Mobility Program is designed to integrate and align with a preventive approach.

For further information on the prevention and management of workplace violence, refer to the organization's policy and procedures on that topic.

### Step 7 – Assess/Review Fall Prevention Risk

Many facilities conduct comprehensive fall prevention assessments at key checkpoints:

- Upon admission
- Transfer from one unit to another
- When any significant change in patient's condition and/or mobility status occurs

The information from the fall prevention assessment should be incorporated into the patient risk profile and considered when developing the safe patient handling and mobility plan. It is recommended that the fall prevention assessment be integrated into the patient risk profile assessment process.

### Step 8 – Assess Patient's Physical Abilities

To ensure appropriate equipment is used when handling and mobilizing patients, the physical abilities of the patient should be assessed. This progressive assessment provides critical information to ensure both patient and health care worker safety. The physical assessment is conducted by having the patient complete a variety of measures in varying positions progressing from:

- supine to
- sitting to
- standing to
- ambulation

The assessment moves progressively toward higher-risk activities so that it can be discontinued at any stage where the patient is not likely to be safe at the next level or is unable to meet the test requirements in a given position. Test measures should be observed by the assessing health care worker (do not rely on subjective patient reports) and are described in Appendix 2.3.2 - Mobility Decision Support Tool<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Adapted with permission from Interior Health (BC)

## Step 9 - Identify High-Risk Patient Handling and Mobility Tasks

High-risk tasks should be identified and documented. These are tasks that the patient cannot do independently or with only minimal assistance (less than 35 lbs. of their weight taken by the health care worker). See "Appendix 2.3.1 – Sample Patient-Risk Profile" for a sample-form that can be used to document high-risk tasks. As a patient's status changes the list of high-risk should be kept up to date.

## Step 10 - Document and Communicate Safe Patient Handling and Mobility Plan

Once high-risk tasks are identified, the appropriate controls should be selected. This will most often be equipment selection. To aid in decision-making, algorithms are provided in Appendix 2.3.3. Note there are different algorithms for orthopedic and bariatric patients.

Controls selected should be documented, communicated, and updated as needed. For quick reference, a poster such as the samples in Appendix 2.3.3 – patient mobility status posters (appendix is currently under construction) may be placed above the patient's bed. This should be dated and signed by the assessing health professional.



Soteria Strains Program Guide Section 2.3 Patient Risk Profile Page 8 of 24

Appendix 2.3.1 – Sample Patient Risk Profile							
[Organization]		Patient Addressograph					
<b>Detailed Patient Risk Pro</b>	ofile	Tation Addressograph					
TO BE COMPLETED (che	eck one that applies):						
On admis							
☐ On transfe	er ge in condition						
_ ,							
REVIEWED PREVIOUS CHART  Yes Note relevant Information:							
Height:	Weight:	BMI:					
SPECIAL CONSIDERATI	ONS:						
☐ Bariatric ☐	Orthopedic Cognitive Impairm	ent					
Other							
ABILITY TO COMMUNIC	ATE:	Speaks:					
Understands /	Follow Directions	☐ English					
☐ Articulates Inte	entions / Needs	French					
☐ Unable to Com	nmunicate	Other					
Communication	Channels:						
☐ Verbal	☐ Non – Verbal	☐ Written					
COGNITIVE ABILITY:							
□ Normal	Result of Medication	☐ Dementia					
☐ Brain Injury	☐ Psychological Comorbities	Other					
		_					
History of Violence:	Yes No						
If yes, Potential Triggers							
-							

Soteria Strains Program Guide Section 2.3 Patient Risk Profile Page 9 of 24

Falls Prevention Assessment:	ıt:			

# **Physical Abilities Assessment:**

		Reason for Assessment				
		1 – upon admission, 2 – transfer from unit, 3 – significant change in patients condition / Mobility status occurs				
Patient is able to	Yes/No	□ 1□ 2□ 3	□ 1□ 2□ 3	□ 1□ 2□ 3		
		D: yy/mm/dd	D: <u>v/mm/dd</u>	D: yy/m/dd		
		T: <u>0-2400hrs</u>	T: 0-2400hrs	T: 0-2400kms		
SUPINE POSITION:						
Boost up in bed no assist						
Roll in Bed						
TRANSITIONAL POSITION:						
Lie To Sit						
SITTING:						
Static – can sit edge of bed						
Correct position no/minimal assist						
Lean side to side, forward to back to neutral						
SIT TO STAND:						
Lean forward, lift buttocks off surface						
stand up						

Soteria Strains Program Guide Section 2.3 Patient Risk Profile Page 10 of 24

STANDING:							
Stand still unassisted							
Step from side to side							
March on spot							
High Risk Task			Algori	thm	Equipment/As device		# Health care workers
Sling choice:	Sli	ing Size:					
Sling Type: Seated Ambulation		nputation) Support		standing	Sup	ine	

(Units may consider including the high risk tasks identified during unit assessments as a check list with associated equipment solutions).

## **Appendix 2.3.2 - Mobility Decision Support Tool (**Adapted with permission from Interior Health (BC))

This tool is intended to guide decisions on transfers and ambulation related to daily activities of providing care. It is not intended to restrict activities for rehabilitation therapy purposes, or to override clinical judgment and resident-specific needs, as determined by the care team.

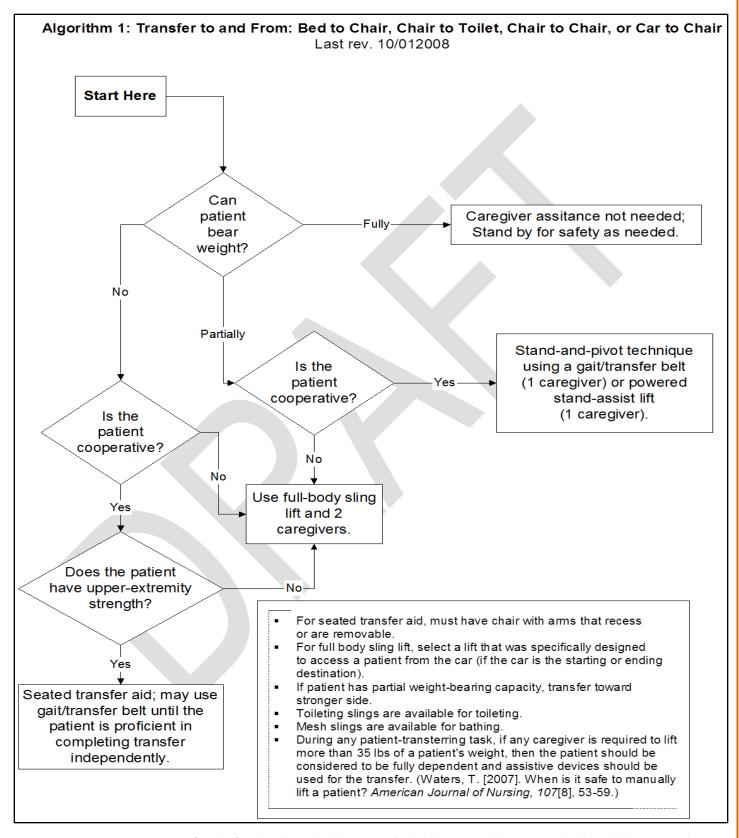
Screen the resident for safe mobilization: observe Communicate and document the outcome abilities to confirm and proceed as indicated. Do not proceed, or 1. Is cooperative and able to follow directions and/or Transfer-use full mechanical lift No physical cueing Reposition-use full mechanical lift (or assistive Yes devices if resident has some abilities) Transfer-use full mechanical lift 2. Can boost up in bed with no/minimal physical Reposition-use full mechanical lift (or assistive assistance No devices if resident has some abilities) Can roll onto at least one side and maintain side lying Yes 3. Can move from lying to sitting on the edge of the Transfer-use full mechanical lift No bed with no/minimal physical assistance Yes 4. Can maintain or correct his/her position in sitting No Transfer-use full mechanical lift with no/minimal physical assistance Yes 5. With feet on floor, can lean forward and lift buttocks Transfer-use full mechanical lift No off surface and sit back down Yes 6. Can lean forward, lift buttocks off surface and stand Transfer-use full mechanical lift No Yes Do not manually transfer or walk 7. Can step from one foot to another to side or forward Use Sit Stand Lift (resident must be able to actively No with no/minimal assist (may use walking aide) participate, keep elbows at side and lean back to keep sling in position) Yes 8. Once standing, can actively walk on the spot with Do not walk no/minimal assist or with walking aide Use stand and step transfer Can walk independently or with supervision (may use walking aide) Soteria Strains - A provincial strategy for healthcare workplace musculoskeletal injury prevention

Appendix 2.3.3 - Patient Mobility Status Posters

# 

Soteria Strains - A provincial strategy for healthcare workplace musculoskeletal injury prevention

# Appendix 2.3.4 – Patient Assessment, Care Planning & Algorithm – Dept of Veterans Affairs (US)



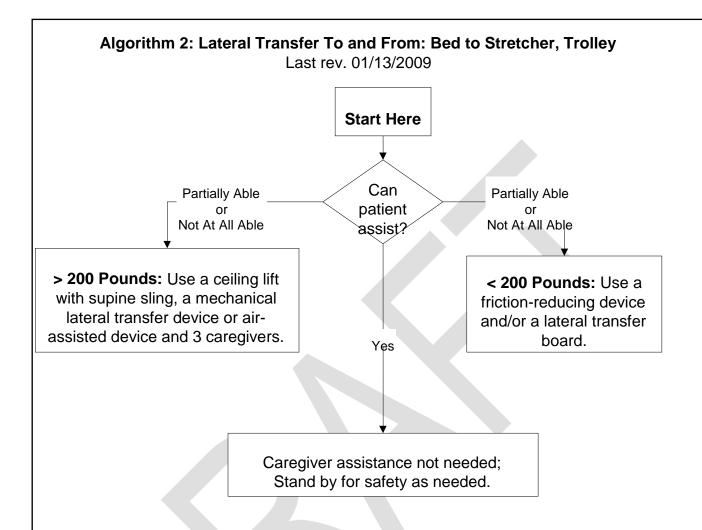
# Algorithm # 1: Transfer to and from: Bed to Chair, Chair to Toilet, Chair to Chair, or Car to Chair

The algorithm starts with a decision as to whether the patient can bear weight fully, partially, or not at all. If they can bear weight fully, caregiver assistance is not needed, but they should stand by for safety.

If they can bear weight partially, the next decision point is whether or not they are cooperative. If they are cooperative then the stand and pivot technique should be used with a gait/transfer belt or a powered stand assist lift (1 caregiver needed). If they are not cooperative, a fully body sling lift and 2 caregivers should be used.

If they cannot bear weight, the next decision point is whether or not they are cooperative. If they are not, a fully body sling lift and 2-3 caregivers should be used. If they are cooperative, the next decision point is whether or not they have upper extremity strength. If they do not, again a fully body sling lift and 2-3 caregivers should be used. If they do have upper body strength then a seated transfer aid should be used. A gait/transfer belt can also be used until the patient is proficient in completing the transfer independently.

- For seated transfer aid, must have a chair with arms that recess or are removable.
- For full body sling lift, select and lift that was specifically designed to access a patient from the car (if the car is the starting or ending destination).
- If the patient has partial weight bearing capacity, transfer toward the stronger side.
- Toileting slings are available for toileting.
- Mesh slings are available for bathing.
- During any patient transferring task, if any caregiver is required to lift more than 35 pounds
  of a patient's weight, then the patient should be considered to be fully dependent and
  assistive devices should be used for the transfer.



- Destination surface should be 1/2" lower for all lateral patient moves.
- For patients with Stage III or IV pressure ulcers, care must be taken to avoid shearing force.
- During any patient transferring task, if any caregiver is required to lift more than 35 lbs of a patient's weight, then then patient should be considered to be fully dependent and assistive devices should be used for the transfer. (Waters, T. [2007]. When is it safe to manually lift a patient? American Journal of Nursing, 107[8], 53-59.)

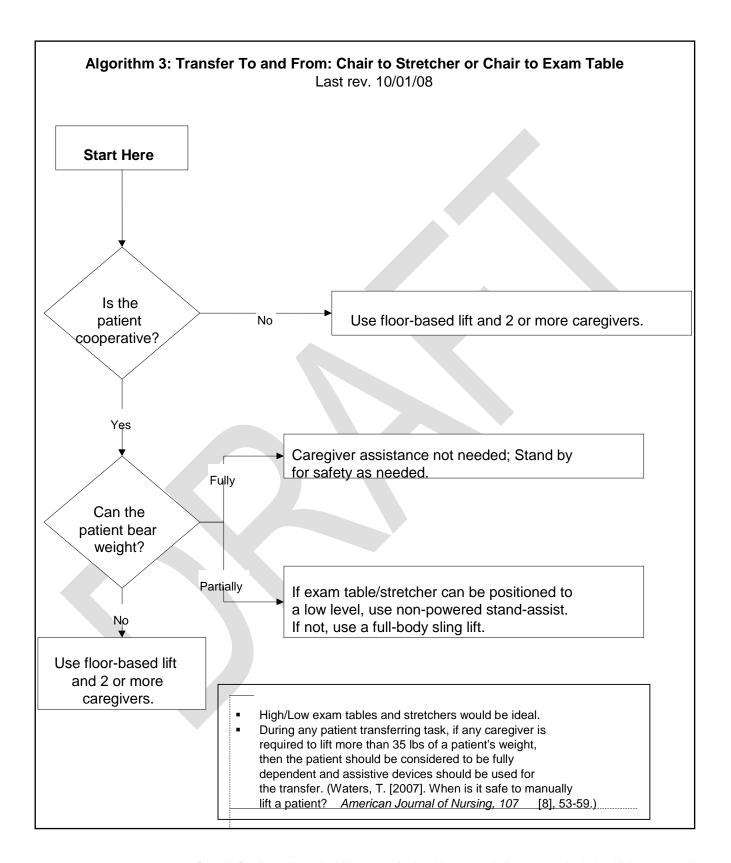
# Algorithm #2: Lateral Transfer to and from: Bed to Stretcher, Trolley

The first decision point in this algorithm is whether or not the patient can assist. If they are partially able or not at all able and less than 200 pounds, use a friction reducing device. If they are partially able or not at all able and greater than 200 pounds, use a friction reducing device and 3 caregivers.

If the patient can assist, caregiver assistance is not needed, but they should stand by for safety.

- Surfaces should be even for all lateral patient moves.
- For patients with Stage 3 or 4 pressure ulcers, care must be taken to avoid shearing force.
- During any patient transferring task, if any caregiver is required to lift more than 35 pounds
  of a patient's weight, then the patient should be considered to be fully dependent and
  assistive devices should be used for the transfer.





# Algorithm #3: Transfer to and from: Chair to Stretcher or Chair to Exam Table

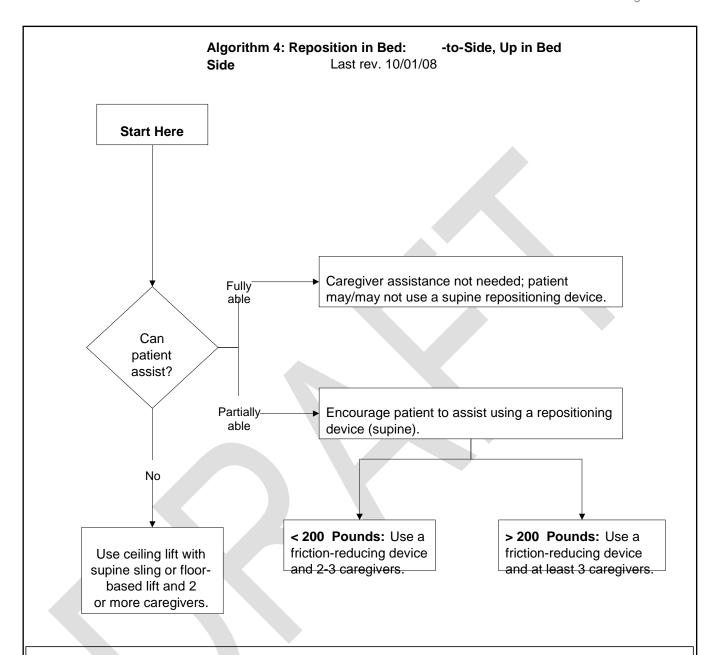
The first decision point in this algorithm is whether or not the patient is cooperative. If they are not, use a full body sling lift and two or more caregivers.

If they are cooperative, the next decision is whether or not they can bear weight. If they can fully bear weight, caregiver assistance is not needed, stand by for safety. If they can partially bear weight and the exam table or stretcher can be positioned to a low level, use a non-powered stand assist. If they can partially bear weight and the exam table or stretcher cannot be repositioned, use a fully body sling lift.

If the patient is cooperative but cannot bear weight, use a fully body sling lift and two or more caregivers.

- High/Lowe exam tables and stretchers would be ideal.
- During any patient transferring task, if any caregiver is required to lift more than 35 pounds
  of a patient's weight, then the patient should be considered to be fully dependent and
  assistive devices should be used for the transfer.





- This is not a one person task: DO NOT PULL FROM HEAD OF BED.
- When pulling a patient up in bed, the bed should be flat or in a Trendelenburg position (when tolerated) to aid in gravity with the side rail down.
- For patients with Stage III or IV pressure ulcers, care should be taken to avoid shearing force.
- The height of the bed should be appropriate for staff safety (at the elbows).
- If the patient can assist when repositioning "up in bed," ask the patient to flex the knees and push on the count of three.
- During any patient handling task, if the caregiver is required to lift more than 35 lbs of a patient's weight, then the patient should be considered to be fully dependent and assistive devices should be used. (Waters, T. [2007]. When is it safe to manually lift a patient@merican Journal of Nursing, 103, 53-59.)

## Algorithm #4: Reposition in Bed: Side-to-Side, Up in Bed

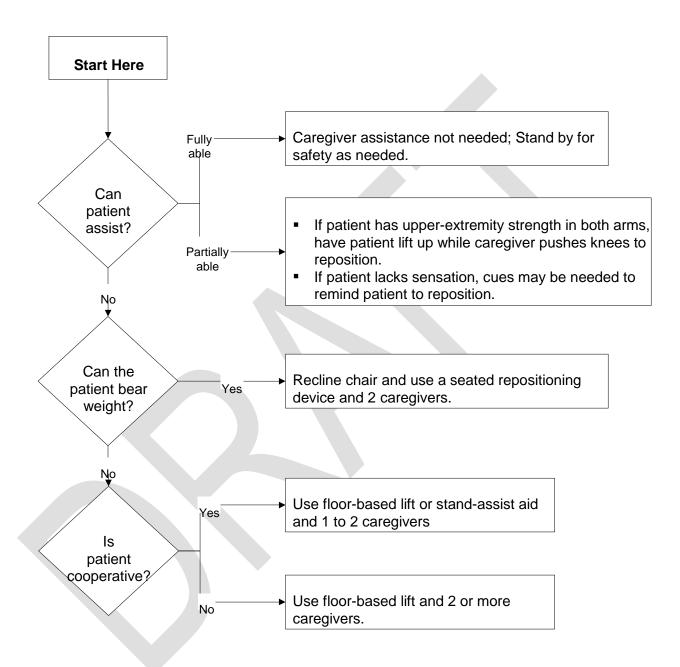
The first decision point is whether or not the patient can assist. If they are fully able, caregiver assistance is not needed, the patient may or may not use a positioning aid. If they are only partially able, encourage the patient to assist using a positing aid or cues. If the patient is less than 200 pounds use a friction reducing device and 2 to 3 caregivers. If they are over 200 pounds use a friction reducing device and at least 3 caregivers.

If the patient is not able to assist use a fully body sling lift and 2 or more caregivers.

- This is not a one person task; do not pull from the head of the bed.
- When pulling a patient up in bed, the bed should be flat or in a Tredelenburg position (when tolerated) to aid in gravity, with the side rail down.
- For patients with Stage 3 or 4 pressure ulcers, care should be taken to avoid shearing force.
- The height of the bed should be appropriate for staff safety (at the elbows).
- If the patient can assist when repositioning up in bed, ask the patient to flex the knees and
  push on the count of three.
- During any patient handling task, if any caregiver is required to lift more than 35 pounds of a
  patient's weight, then the patient should be considered to be fully dependent and assistive
  devices should be used.



# Algorithm 5: Reposition in Chair: Wheelchair and Dependency Chair Last rev. 10/01/08



- Take full advantage of chair functions, e.g., chair that reclines, or use arm rest of chair to facilitate repositioning.
- Make sure the chair wheels are locked.
- During any patient transferring task, if any caregiver is required to lift more than 35 lbs of a patient's weight, then
  the patient should be considered to be fully dependent and assistive devices should be used. (Waters, T. [2007].
  When is it safe to manually lift a patient? American Journal of Nursing, 107[8], 53-59.)

### Algorithm #5: Reposition in Chair: Wheelchair and Dependency Chair

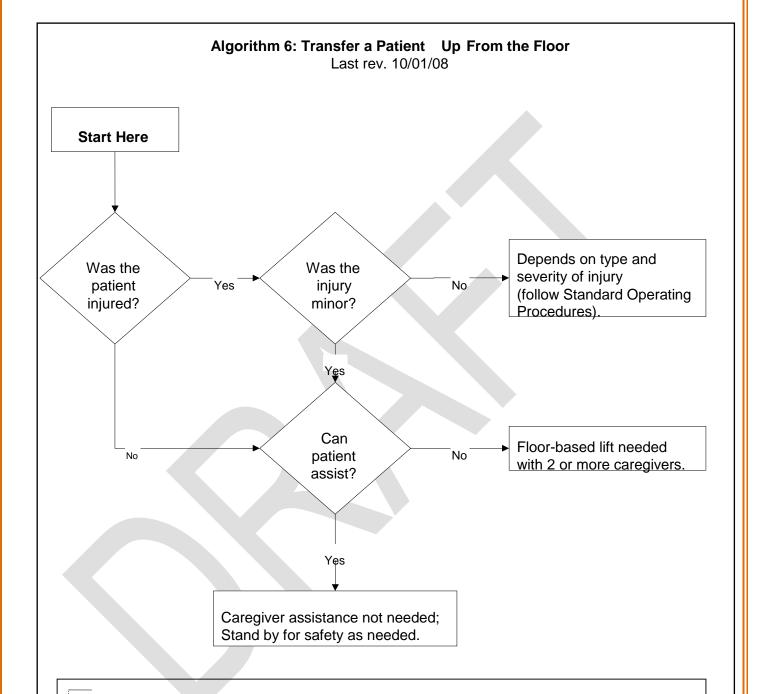
The first decision point in this algorithm is whether or not the patient can assist. If they are fully able to assist, caregiver assistance is not needed, stand by for safety. If they are only partially able and have upper extremity strength in both arms, have the patient lift up while the caregiver pushes the knees to reposition. If they are only partially able but lack sensation, cues may be needed to remind the patient to reposition.

If the patient cannot assist the next decision point is whether or not they can bear weight. If they can, recline the chair and use a friction reducing device and 2 caregivers.

If the patient cannot assist and cannot bear weight, but they are cooperative, use a fully body sling lift or non-powered stand assist aid and 1 to 2 caregivers. If they are not cooperative, use a fully body sling lift and 2 or more caregivers.

- Take full advantage of chair functions, e.g. chair that reclines, or use arm rest or chair to facilitate repositioning.
- · Make sure the chair wheels are locked.
- During any patient handling task, if any caregiver is required to lift more than 35 pounds of a
  patient's weight, then the patient should be considered to be fully dependent and assistive
  devices should be used.





- Use floor-based lift that goes all the way down to the floor (most of the newer models are capable of this).
- During any patient transferring task, if any caregiver is required to lift more than 35 lbs of a patient's weight then the patient should be considered to be fully dependent and assistive devices should be used. (Waters, T. [2007]. When is it safe to manually lift a patient?
   American Journal of Nursing, 107[8], 53-59.)

# Algorithm 6: Transfer a Patient Up from the Floor

The first decision point in this algorithm is whether or not the patient was injured. If they were, and the injury is minor, decide whether or not they can assist. If they can, caregiver is not needed, stand by for safety. If they cannot assist use a fully body sling lift with 2 or more caregivers. If they injury is not minor, and depending on the type and severity of the injury, you should follow Standard Operating Procedures.

If the patient was not injured, decide if they can assist. If they can, caregiver assistance is not needed, stand by for safety. If they cannot assist, use a full body sling lift and 2 or more caregivers.

- Use a fully body sling lift that goes all the way down to the floor (most of the newer models
  are capable of this).
- During any patient handling task, if any caregiver is required to lift more than 35 pounds of a
  patient's weight, then the patient should be considered to be fully dependent and assistive
  devices should be used.

