OBJECTIVES

- To support a restraint as a last resort approach for adult patients with an acquired brain injury in Alberta Health Services (AHS) Rehabilitation settings.

- To support a safe environment of care for all when other interventions are not effective or appropriate.

- To support patients with an acquired brain injury with rehabilitation needs.

APPLICABILITY

Compliance with this document is required by all Alberta Health Services employees, members of the medical and midwifery staffs, Students, Volunteers, and other persons acting on behalf of Alberta Health Services (including contracted service providers as necessary) working with adult patients of rehabilitation and acquired brain injury AHS settings.

Note: When working with Older Adult patients, refer to the AHS Restraint as a Last Resort – Older Adult Procedure, where appropriate.

ELEMENTS

1. Assessment

   1.1 Non-emergency situations:

      a) In collaboration with the patient or alternate decision-maker, the treatment team assesses behaviour and factors contributing to the behaviour leading to consideration of restraint use (see Appendix A: Patient Assessment Check List);
b) obtain a detailed description of the behaviour, noting frequency, time of day, and trends (see Appendix C: Agitated Behaviour Mapping Tool);

c) best practice for restraint use recommends a standardized method to record behaviour to assess need for restraint;

d) identify potential contributing reasons for behaviour (e.g., pain, medication reactions, change in environment, emotional/psychological triggers, bowel/bladder issues, fluid and electrolyte imbalance, etc.) (see Appendix D: Management of Agitation following Brain Injury);

e) identify consequences/risks of the behaviour for the patient and others (e.g., potential for or actual injury);

f) explore alternative strategies to restraint use and trial options (see Appendix E: Alternative Interventions):

   (i) Identify the impact of changes in care routine (e.g., bowel and/or bladder program, pain relief, consistent caregiver, positioning changes, reality orientation to day/time/familiar objects, planned ambulation/diversion activity); and

   (ii) identify the impact of changes in environment (e.g., lighting, furniture placement, access to/ability to use call bell, room temperature, consistency of daily routine, environmental labels, environmental stimuli).

g) Obtain authorization if alternative strategies are not successful and restraint is required.

   (i) A Physician or Nurse Practitioner order shall be obtained prior to application of the restraint;

   (ii) Rationale for use should include:

       • Intended outcomes of restraint;

       • potential effects of restraint;

       • frequency of observation and documentation review;

       • frequency and conditions for use of restraint; and

       • criteria and timelines for discontinuation of restraint.

   (iii) obtain consent from the patient or alternate decision-maker.
(iv) at time of restraint application discussion should occur with nursing staff in charge of the shift to ensure initial transfer of information; and

(v) identify most appropriate, least restrictive restraint, frequency and/or length of time to be applied.

h) Review of restraint use:

(i) Non-emergency restraint use shall be reviewed by the Physician or Nurse Practitioner, at a minimum, on a weekly basis; and

(ii) treatment plans shall incorporate the plan for the reduction and eventual elimination of restraint use.

1.2 Emergency situations:

a) In an emergency situation, where no pre-existing orders are in effect, nursing staff may initiate the use of non-pharmacological restraint intervention in circumstances where nursing assessment indicates restraint is the only means of preventing serious bodily harm to the patient or others.

b) Pharmacological restraints require Physician or Nurse Practitioner order prior to administration.

c) Identify the most appropriate, least restrictive type of restraint, including frequency and/or length of time to be applied.

d) The Nurse shall inform the attending Physician or Nurse Practitioner of the need for emergency restraint and obtain an order as soon as possible for the continuation of the restraint.

(i) The patient’s alternate decision-maker (if applicable) shall be informed of the need for restraint as soon as reasonably possible.

e) The need for emergency restraint must be reviewed as appropriate based on the type of restraint and removed as soon as possible.

2. Risks and Benefits

2.1 Inform the patient and/or alternate decision-maker:

a) Decisions regarding the use and discontinuation of restraints shall be explained to and discussed with the patient and/or alternate decision-maker as soon as is reasonably practical dependent on the urgency of the situation.
b) Information discussed with the patient and/or alternate decision-maker shall include the reason for restraint, type to be used, anticipated duration, risks, and (if applicable) how the alternate decision-maker can assist the patient.

3. Consent

3.1 Consent shall be obtained from the patient and/or alternate decision-maker in accordance with AHS Consent to Treatment/Procedure(s) policy suite, prior to the application of restraint in non-emergent situations.

4. Types of Mechanical Restraint not to be used

4.1 Posy vests/jackets, bed linens/sheets, wheel chair trays with attached back fastening seatbelt, head straps or immobilizers shall not to be utilized as a restraint.

5. Monitoring

5.1 All mechanical restraint use shall include ongoing assessment and monitoring for the following:

a) Signs of discomfort/pressure/injury associated with the application of the restraint;

b) nutrition/hydration;

c) circulation and range of motion in the extremities;

d) hygiene and elimination;

e) agitation or other behaviour that could lead to self-harm or distress; and

f) emotional/psychological status.

5.2 Observation:

a) An observation schedule shall be maintained and documented in the patient health record to ensure appropriate patient supervision (see Appendix B: Monitoring Checks of Mechanically Restrained Patients);

b) upon application of mechanical restraint the patient shall be monitored at a minimum of every 15 minutes for the first 60 minutes;

c) mechanically restrained patients shall be directly observed a minimum of every 30 minutes for the duration of the restraint;

d) at least every two (2) hours during waking hours and at least every eight (8) hours during non-waking hours, and more often if necessary or if
recommended by the restraint’s manufacturer, staff shall ambulate the patient, provide range of motion exercises, or reposition the patient as well as release the restraint if appropriate; and

e) the level of patient observation shall be considered in the context of the type of restraint being used and the level of patient agitation.

6. Discontinuation of restraint

6.1 Ongoing comprehensive clinical and environmental assessment of the need for and use of restraint is required as part of the written treatment plan.

6.2 Treatment/care plans shall incorporate a plan for the reduction and eventual elimination of restraint use.

6.3 Factors contributing to behaviours that may lead to consideration of restraint use should be identified on an ongoing basis and actions should be taken to minimize those factors.

6.4 Readiness for discontinuation of restraint is assessed by input from the treatment team and the patient or alternative decision-maker.

7. Documentation

7.1 Documentation in the patient health record should consider the following components:

a) Clinical assessment:
   (i) Medical symptoms;
   (ii) behaviours;
   (iii) functional status; and
   (iv) alternatives considered/tried.

b) Environmental assessment:
   (i) Contributing factors.

c) Planning:
   (i) Discussion with patient or alternate decision-maker;
   (ii) rationale for use of restraint;
   (iii) least restrictive restraint selected; and
   (iv) plan for discontinuation.
d) Implementation:
   (i) Recommended timeline to notify prescriber and obtain required order;
   (ii) informed consent (non-emergent situations) and Physician or Nurse Practitioner order,
   (iii) use of Protective Services and/or number of staff involved;
   (iv) use of restraint (type, size, period of time, documentation review); and
   (v) monitoring.

e) Evaluation:
   (i) Review for discontinuation or continued use;
   (ii) effectiveness of restraint;
   (iii) patients response to restraint; and
   (iv) debriefing patient of restraint use.

7.2 Frequency of documentation:
   a) Non-emergent restraint use: documentation shall occur once per day for one (1) week after initiation and then could be reduced to one (1) per week, to be included with weekly review of restraint use.
   b) Emergent restraint use: documentation to occur once per shift until discontinuation of use.

8. Staff Education & Training

8.1 Staff shall receive information and training on the use and risks of restraint use.
   a) Prior to applying a restraint or caring for a patient with a restraint, staff are responsible to be knowledgeable regarding the following:
      (i) De-escalation techniques;
      (ii) alternatives to restraints;
      (iii) the application and discontinuation of the specific restraint being used; and
      (iv) the care needs of the patient being restrained.
b) Education and training on restraint use shall be completed in new hire orientation and annual education for all direct care staff.

c) Whenever possible information shall be made available to patients and/or family/alternate decision-maker on the following:

(i) alternatives to restraints;

(ii) the application and discontinuation of restraints; and

(iii) on how to care for patients being restrained.

DEFINITIONS

Alternate Decision-Maker means a person who is authorized to make decisions with or on behalf of the patient. These may include, specific decision-maker, a minor’s legal representative, a guardian, a ‘nearest relative’ in accordance with the Mental Health Act [Alberta], an agent in accordance with a Personal Directive, or a person designated in accordance with the Human Tissue and Organ Donation Act [Alberta].

Health record means the Alberta Health Services legal record of the patient's diagnostic, treatment and care information.

Least restrictive restraint means only that degree of restraint, used for the least amount of time, which is absolutely necessary to inhibit movement in order to enable treatment or support control of the patient for safety.

Order means a direction given by a regulated health care professional to carry out specific activity(ies) as part of the diagnostic and/or therapeutic care and treatment to the benefit of a patient. An order may be written (including handwritten and or electronic), verbal, by telephone or facsimile.

Patient means an adult or child who receives or has requested health care or services from Alberta Health Services and its health services providers or individuals authorized to act on behalf of Alberta Health Services. This term is inclusive of residents, clients and outpatients.

Restraint means any measure used to limit the activity or control the behaviour of a patient or a portion of their body.

Restraint as a last resort means all possible alternative interventions considered and rejected with consideration of the patient's mental and physical condition before deciding to use a restraint.

Pharmacological restraint means the use of pharmaceutical products to control behaviours, actions, and/or restrict freedom of movement, but which are not required to treat an identified medical or psychiatric condition.
REFERENCES

- Appendix A: Patient Assessment Check List
- Appendix B: Monitoring Checks of Mechanically Restrained Patients
- Appendix C: Agitated Behaviour Mapping Tool (#19626) Sample
- Appendix D: Management of Agitation Following Brain Injury Algorithm
- Appendix E: Alternative Interventions
- Alberta Health Services Forms:
  - Agitated Behaviour Mapping Tool (#19626)
- Alberta Health Services Governance Documents:
  - Consent to Treatment/Procedure(s) policy suite (#PRR-01)
  - Restraint as a Last Resort Policy (#HCS-176)
  - Restraint as a Last Resort - Older Adult Procedure (#HCS-176-01)

VERSION HISTORY

<table>
<thead>
<tr>
<th>Date</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Click here to enter a date</td>
<td>Optional: Choose an item</td>
</tr>
</tbody>
</table>
APPENDIX A

Patient Assessment Check List

Patient Assessment/ Indication for Use (check all that apply):

<table>
<thead>
<tr>
<th>Danger to self</th>
<th>Danger to others/ aggressive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk of falls/ recent fall/ unsteady gait</td>
<td>Wandering/ flight risk</td>
</tr>
<tr>
<td>Pulling at tubes, drains, etc.</td>
<td>Other:</td>
</tr>
</tbody>
</table>

Alternative Methods Used/ Trialed (check all that apply):

<table>
<thead>
<tr>
<th>Environmental considerations</th>
<th>Physiological considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>side rails up (2-4 rails as appropriate; consider safety if patient climbs over)</td>
<td>rule out other causes of agitation/ restlessness (refer to Agitation algorithm)</td>
</tr>
<tr>
<td>room near nursing station</td>
<td>pain relief</td>
</tr>
<tr>
<td>bed in low position; mattress on floor</td>
<td>bowel/bladder program</td>
</tr>
<tr>
<td>½ door +/- Wanderguard®</td>
<td>consider medications (chemical restraints)</td>
</tr>
<tr>
<td>bed alarm/ position sensor</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical considerations</th>
<th>Psychological considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>planned ambulatory schedule</td>
<td>reality orientation (clock, calendar, etc.)</td>
</tr>
<tr>
<td>physiotherapy/ occupational therapy for gait</td>
<td>signs on doors/ environmental cues</td>
</tr>
<tr>
<td>PT/OT for maximized seating</td>
<td>reorientation/ verbal redirection</td>
</tr>
<tr>
<td>tubing disguised (abdominal binder, kling, etc.)</td>
<td>1:1 sitter/ supervision with family participation</td>
</tr>
<tr>
<td>positioning schedule: comfort/ body alignment</td>
<td>diversion activities (music, TV, video)</td>
</tr>
<tr>
<td>least restrictive devices (neuromitt, etc)</td>
<td>consistent caregivers</td>
</tr>
</tbody>
</table>

Complete Education (initial):

Informed patient/ alternate decision maker about concern for patient safety
Discussed alternative strategies that may be utilized to minimize safety risks
Discussed risks of restraint use and non-use
- Risks include bone/muscle mass loss, skin breakdown, immobilization including urinary incontinence, urinary tract infections, pneumonia, cardiovascular stress and psychological effects including increased agitation, anxiety, delirium and depression (Evans & Cotter, 2008)
Informed patient and alternate decision maker that staff are open to any feedback or suggestions regarding restraint use

Patient and/ alternative decision maker acknowledged understanding of restraint use, OR:
Patient and/ alternative decision maker has REFUSED use of restraints. Note: if patient is an extreme danger to self or others, decision to use restraints in an emergency situation may be made.

Comments:___________________________________________________________________________________
_____________________________________________________________________________________________
______________________________________________________

Patient ☐ or other/ name and relationship: ____________________________
Nurse’s Signature: ________________________ Date: ________________________

THIS IS NOT A CONSENT FORM.
THIS IS REQUIRED DOCUMENTATION OF EDUCATION REGARDING THE USE OF RESTRAINTS.
## APPENDIX B

### Monitoring Checks of Mechanically Restrained Patients

<table>
<thead>
<tr>
<th>Allowable Maximum Time Between Monitoring Checks of Restrained Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Regardless of patient / restraint risk, upon application of restraint patient will be monitored at a minimum of every 15 minutes for the first 60 minutes</td>
</tr>
<tr>
<td>• At least every two hours during waking hours, and more often if necessary, staff will ambulate the patient, provide range of motion exercises, or reposition the patient as well as release the restraint if appropriate.</td>
</tr>
</tbody>
</table>

### Restraint Risk

<table>
<thead>
<tr>
<th>Restraint Risk</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Any restraint that crosses the patient's waist.</td>
</tr>
<tr>
<td></td>
<td>A roll Posey.</td>
</tr>
<tr>
<td></td>
<td>A roll bed restraint (i.e., Segufix)</td>
</tr>
<tr>
<td></td>
<td>A table top or chair tray that the patient cannot independently remove.</td>
</tr>
<tr>
<td></td>
<td>Any commode restraint</td>
</tr>
<tr>
<td>Low</td>
<td>Any restraint that is routed across the patient's hips including under or rear fastening seat belts.</td>
</tr>
</tbody>
</table>

### Patient Risk

<table>
<thead>
<tr>
<th>Patient Risk</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Patient indicates (verbally or through body language) that he/she is frustrated with or displeased with the use of a restraint.</td>
</tr>
<tr>
<td></td>
<td>Patient demonstrates impaired judgment and impulsivity regarding his/her own physical abilities, especially when related to independent mobilization.</td>
</tr>
<tr>
<td></td>
<td>Recent admission.</td>
</tr>
<tr>
<td>Low</td>
<td>Patient indicates no frustration, displeasure or resistance to the use of a restraint.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant to 15 min</td>
<td>30 min</td>
<td>30 min</td>
</tr>
</tbody>
</table>

© Alberta Health Services (AHS)
Agitated Behaviour Mapping Tool

Instructions: Complete the Agitated Behaviour Scale (ABS) hourly for an 8h shift.
- If total shift score is greater than 21, initiate ABS q8h.
- When total shift score is less than 21 for 3 times (24 hours), discontinue ABS.
- Use a check mark to indicate an hour of sleep to track sleep cycle.

Complete each of the following items. Do not leave blanks. Score each item using the following:
- 1 = Absent (behaviour not present)
- 2 = Present to a Slight Degree (behaviour does not interfere/disrupt)
- 3 = Present to a Moderate Degree (behaviour interferes/disrupts but can be redirected)
- 4 = Present to an Extreme Degree (behaviour interferes/disrupts and cannot be redirected)

<table>
<thead>
<tr>
<th>Day Shift (07-1500h)</th>
<th>Evening Shift (15-2300h)</th>
<th>Night Shift (23-0700h)</th>
<th>Date/Day - Weekday</th>
<th>Time (h:mm)</th>
<th>Highest Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Short attention span, easy distractibility, inability to concentrate.
- Impulsive, impatient, low tolerance for pain or frustration.
- Uncooperative, resistant to care, demanding.
- Rocking, rubbing, moaning or other self-stimulating behaviour.
- Pulling at tubes, restraints, etc.
- Wandering from treatment areas.
- Restlessness, pacing, excessive movement.
- Repetitive behaviours, motor and/or verbal.
- Violent and/or threatening violence toward people or property.
- Explosive and/or unpredictable behaviour.
- Self-abusiveness, physical and/or verbal.
- Rapid, loud or excessive talking.
- Sudden changes of mood.
- Easily initiated or excessive crying and/or laughter.

**SLEEPING (use check mark)**

Total Score for Shift
- 21 or less NORMAL
- 22 to 28 MILD
- 29 to 35 MODERATE
- 36 or more SEVERE

10/25/2018 07:00 PM
Management of Agitation Following Brain Injury

Agitation present?

Alcohol withdrawal a possibility? YES

Monitor and treat for alcohol withdrawal (i.e. Clinical Institute Withdrawal Assessment (CIWA) or similar)

Agitation still a problem? YES

Rule out clinical and environmental contributors to agitation (see over)

Use non-pharmacological interventions for sleep; Consider sleep sedation

Agitation interfering with medical care or creating harm or danger to self or others? YES

Sleeping at night? NO

NO

PAIN controlled adequately? NO

Give analgesic regular dose usually better than as needed

YES

YES

Consider mechanical restraints. Consider mechanical restraints; ensure appropriate pharmacological intervention is used concurrently to minimize further agitation and/or injury.

Consider pharmacological intervention. Start low and go slow. Taper to effect. Use scheduled medications proactively and PRNs when needed.

Note: When medication has been effective in moderating severe behaviour, staff are often reluctant to reduce or withdraw the medication for fear of a return to dangerous or disruptive levels of responding. The patient may be kept on the drug well beyond the time needed. Most medications have the potential to affect the level of alertness, cognition and initiation of a patient, which may have deleterious effects on rehab. Individuals with a brain injury are typically more sensitive to medications and their side effects (depression, mania, insomnia, paranoia)
Patient appears agitated?

Complete Agitated Behaviour Scale (ABS) to assess, quantify and describe symptom pattern. If score greater than 21 initiate ABS every hour for an 8 hour shift. Follow daily trends and implement appropriate interventions. Once the total shift score is less than 21 for 3 times (24 hour period), the ABS can be discontinued.

Rule out CLINICAL contributors to agitation
- Pain/Discomfort
- Electrolyte/Acid Base Disorder
- Endocrine
- Nutritional

Rule out ENVIRONMENTAL contributors to agitation
- Sleep Hygiene
- Infection
- Toxicity
- Organ Failure
- Change in routine
- Changed room/roomate
- Noise
- Boredom/lack of meaningful activities
- Lighting levels
- Too much stimuli

When considering mechanical restraints:

Physical restraints are not considered effective for fall prevention
- Always choose the least restrictive device
- Notify and involve the attending physician/nurse practitioner in decision to initiate protocol; refer to details in AHS Restraint Policy.
- Family members/agents should be involved in decision-making regarding restraint use whenever possible. These individuals are to be provided with explanations about the benefits and possible hazards of restraint use. This should be documented.
- Monitor closely for proper placement and more frequently if restless; monitor color, sensation, movement (CSM) and skin integrity at regular intervals; offer toileting, restraint free periods and fluids while awake.

There should be timely and routine evaluation to consider appropriateness of a trial to decrease the use of restraints.
- If patient remains agitated, consider family or constant care attendant to sit with the patient

Consideration for appropriate pharmacological restraint should be made concurrently to minimise further agitation or injury
## APPENDIX E

**Alternative Interventions**

### Preventing Removal of Tubes:
- Assess medical necessity of lines/tubes and advocate for removal (in conjunction with patient/family wishes).
- Provide education regarding treatment benefits and restraint risks—may need to repeat many times.

### Interventions:
- Cover and disguise tubes with sleeves, kling, pants etc.
- Convert IVs to saline locks if possible
- Use elbow splints (to keep arms straight)
- Try toileting schedule
- Provide simple explanations and guided exploration of the tubes
- Try neuro mitts (not secured)

### Alternatives for Wandering/Agitation:
- Assess patterns of behaviours, the precipitating factors, timing, duration, frequency, etc.
- Assess physical needs (pain, hunger, thirst, fatigue, etc.) as well as emotional, social and exercise needs.

### Interventions:
- Meet physical, exercise, emotional and social needs in a safe environment
- Respond to the patient's feelings (i.e., “you must be lonely”, instead of “you can’t go home”)
- Post photos, signs, name or familiar objects on door
- Post picture or toilet on washroom door
- Provide familiar objects at bedside (i.e., bedspread)
- Adjust level of stimulation to patient needs
- Place patient’s chair at nursing station
- Distract patient with activity
- Arrange family/volunteer visits at peak times
- Redirect in a positive manner (i.e. “come with me”, instead of “don’t go out/there”)

### Alternatives for Positioning:
- Assess nature of problem (e.g., sliding/leaning/falling forward/knees swept to one side); as well as length of time before positioning problems occur. Consider fatigue, pain, time of day or other precipitating factors.

### Interventions:
- Check with OT and PT regarding the best chair or mobility aid available
- Position hips, knees, and ankles as close to 90 degrees as possible (keep in mind concurrent injuries that may prevent this); neutral positioning
- Ensure buttocks and thighs are fully supported on the seat and weight is not on one small area alone
- Ensure feet are flat on the footrests or floor to prevent sliding, shifting or leaning
- Consider tilt position for rest periods
- Monitor skin integrity
- Link with PT and OT for options re: bed positioning, pillows, wedges etc.

### Fall Prevention Alternatives:
- Assess for risk factors of falls (e.g., altered mental status, impaired mobility/balance/gait, weakness, medications, sensory imbalance, bowel or bladder urgency)

### Interventions:
- Individualize care based on patient risk factors
- Monitor mental status
- Refer to OT and PT for gait aids/positioning
- Toileting schedule
- Consider most appropriate side rails (one, two, partial; bed against wall)
- Put mattress on floor or use mat beside bed
- Bed exit alarm
- Room close to nursing station
- Consider observer/family supervision
- Patient/alternate decision maker/family education re: falls risk management
### Alternatives for Aggression
- Assess often for early signs of escalating behaviour (i.e. verbal abuse, conflict with others, pacing, agitation, anger, distress)
- Assess underlying causes (i.e. physical illness, pain, medications, fear, control issues, needs being ignored, information needs, etc.)

### Interventions
- Review medications
- Least restraint if other methods ineffective
- Modify routine as needed
- Don’t take it personally; don’t argue with the patient; don’t threaten
- Provide opportunity for patient to work out feelings in a non-threatening manner
- Offer choices to help patient regain control
- Consider quiet time in a room; 1:1 talk with staff, reduce stimuli, play soft music; try distractions such as a game or activity; offer food/beverage/meds as appropriate and remain with patient until they settle
- Kindly but firmly explain expected behaviour and identify your intent to help and explain your actions
- Reduce environmental stimuli, close the door; you may need to walk away