Interior Health

IH Patient Handling Equipment Recommendations and Allocation Guidelines

Patient handling is traditionally the leading cause of injury within the healthcare environment. Interior Health continues to work to incorporate ways to reduce such incidents, meet Worksafe BC regulations, maintain patient comfort as well as patient and staff safety. By making patient handling equipment available, and integrating it into facility design, organizations will benefit the health and safety of patients and ensure safe and positive work environments for care providers (Borden, 2010). The following document provides standardized patient handling equipment specifications and the areas in which overhead lift coverage is recommended. It should be used as a guideline on all facility design projects in new construction, renovations and existing facilities and is intended to highlight patient handling equipment needs so that adequate funding is considered in each project.

1 PATIENT HANDLING EQUIPMENT RECOMMENDATIONS

1.1 Floor Based Full Body Lifts and Slings

1. One Full body floor based lift for each care unit or floor.
2. One full body floor based lift for every 8-10 non weight-bearing patients if there is no or minimal ceiling track lift coverage.
3. Consider 2 slings per lift (in areas with recommended ceiling track lift coverage). Slings should be different sizes to accommodate a wide range of patients. Slings must be deemed compatible for lift.
4. For areas that solely use floor based full body lifts (no/minimal CTL coverage) please refer to Section 1.4.3 for sling recommendations.

1.2 Sit-to-Stand (stand assist or standing) Lifts

1. One sit-to-stand lift for each care unit or floor.
2. One sit-to-stand lift for every 8-10 partially weight-bearing patients.
3. Consider 2 slings per lift. Slings should be different sizes to accommodate a wide range of patients. Slings must be deemed compatible for lift.

1.3 Devices for Lateral Transfers/Repositioning (*Listed below in order of injury risk reduction impact*)

1. Overhead lifts with positioning sling (can also be used to lift patient from floor).
2. Air-assisted lateral transfer devices. When additional components are purchased (i.e. compatible air jacks) can also be used to lift patient from floor.
3. Friction-reducing assistive devices (e.g., slider/roller boards, slider sheets).

1.4 Ceiling Track Lifts (CTL) and Slings

1. CTL specifications, see recommendations in Table 1. Ceiling Track Lift System Standards.

Table 1. Ceiling Track Lift System Recommendations			
Motor Weight Capacity (lbs)	**Weight Capacity Tested (lbs)**	**Ceiling Track Lift System**	**Recommended Coverage Percentage/ Unit or Site***
450 lbs	To accommodate 625 lb motor To accommodate 450 lb motor (use only if structural upgrade required to achieve 625 lbs)	X-Y Gantry	Minimum of 80%
800 lbs	To accommodate 800 lb motor	X-Y Gantry	Minimum of 1 system up to 20%

i. Weight capacity standard 450 lb motor to accommodate greatest range of patients - to be installed for at least 80% of each recommended unit.
ii. Minimum of one 800 lb motor, up to 20%, of each recommended unit to accommodate capacity for bariatric patients.
iii. Weight capacity tested for 625 lb motors (unless requires a structural upgrade, then tested to 450 lbs) for at least 80% of each recommended unit. Weight capacity testing for 800 lb motors for a minimum of one system, and up to 20%, of each recommended unit .** (For areas weight tested to 625 lbs or 800 lbs, the 625 lb motor is compatible).
iv. X-Y gantry (manual traverse) system.

2. The system is capable of lifting patients from the floor (e.g., when a patient falls).
3. 2 slings per patient in residential care /4 slings per patient in acute care when slings are laundered in-house; 3 slings per patient in residential care/ 6 slings per patient in acute care when slings are laundered off-site.
4. Coverage based on assessment, see recommendations below in Section 2.1 Table 2. Ceiling Track Lift Coverage Recommendations.

*Recommended percentage coverage based on Table 2: Ceiling Track Lift Coverage Recommendations.
**Should a facility not have the capacity beyond ceiling structure (i.e. door widths too narrow etc) to accommodate a bariatric patient this facility is not expected to retrofit/redesign to meet CTL guidelines.

1.4.1 Additional Considerations

1. One CTL system should cover a maximum of 2 beds.
2. ICU beds are most often identified as the highest priority area in acute care; a power gantry system is recommended in ICU in order to avoid any unwanted movement of the patient.
3. All active tub rooms to be covered and tracks extended to toilet and patient dressing table.
4. Consider a portable or built in scale in the CTL system for weighing patients, with a minimum of one scale per site in residential care. If there is only one scale the recommended location is in the tub room. (ensure scale is compatible with lift motor).
5. Coverage for Rehabilitation areas recommended and outlined in Section 2.1 Table 2. Ceiling Lift Coverage Recommendations.

6. In procedural areas where beds/stretchers are positioned in a row (side-by-side) such as Hemodialysis, or Cath Lab a straight track can be considered. In such cases 1 motor to cover 2 beds should still be followed.

2 CEILING TRACK LIFT ALLOCATION GUIDELINES

2.1 Ceiling Track Lift Coverage Recommendations

Table 2: Ceiling Track Lift Coverage Recommendations	
U	**Ceiling Track Lift Coverage Recommendations****
1. Residential Care	100%
2. Intensive / Critical Care	100%
3. Medical Imaging	Coverage for procedure rooms (e.g., X-ray, CT) with coverage based on patient dependency Coverage in patient transfer bay (MRI)
4. Emergency	Consider for 100% monitored beds, 50-75% acute beds
5. Medicine – including Acute Medical, Elder Care, Palliative	75% minimum
6. Surgical Unit	50% minimum (depending on type surgical unit)
7. Sub acute	50% minimum as per assessment
8. OR	0*** (alternatives such as lateral air transfer devices recommended)
9. PAR	100% coverage; alternatives such as lateral air transfer devices may be considered
10. Rehabilitation Unit	50% minimum: if unit is primarily neuro rehab, consider a minimum of 70% coverage. For new construction or rooms large enough for ambulation within rooms, consider 100% coverage.
11. Rehabilitation Treatment Clinic	Consider 100% coverage over treatment tables extending to parallel bars to allow 2 motors used simultaneously on one system. In such cases, ensure adequate weight capacity testing is done. Alternately consider straight track over parallel bars and X-Y gantry system over treatment tables & activity areas.
12. Morgue	Consider 100% coverage. Lift system should be able to assist with inserting/extracting trays into cooler as well as lifting/moving bodies into/within autopsy suite.
13. Nursing Training Room	1 system per training room.
14. Hemodialysis, Cath Lab – procedural areas	100% coverage. Consider straight track to accommodate beds/stretchers positioned side-by- side. 1 motor should cover 2 beds. If track extends beyond 2 beds purchase additional motors.

15. Other units	Consider coverage based on average number of patients requiring assistance for transfers or bed repositioning
Based on unit, coverage for toilet rooms considered for new construction, and in renovation projects where feasible. Criteria for consideration to include: ○ X-Y gantry system covers toilet room. Tracks other than X-Y gantry (i.e. separate tracks that connect to a X-Y system) to reach toilet room are NOT recommended ○ toilet room has pony walls to allow CTL boom to pass over (pony wall is a lower wall used to separate rooms while still maintaining privacy).	
**Based on US VHA (2003) and Collins (2006) ***Based on ORNAC (2011) & CSA (2011)	

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