



Fall Protection

**Benefits and Impact of a
Standardized Height Requirement**

March 09



WHY

- Initiative to drive to common safety expectations for clients, owners and contractors across the Chemical Valley
- Asbestos
- Fall Protection
 - Uncovered some safety issues not previously addressed



WHAT

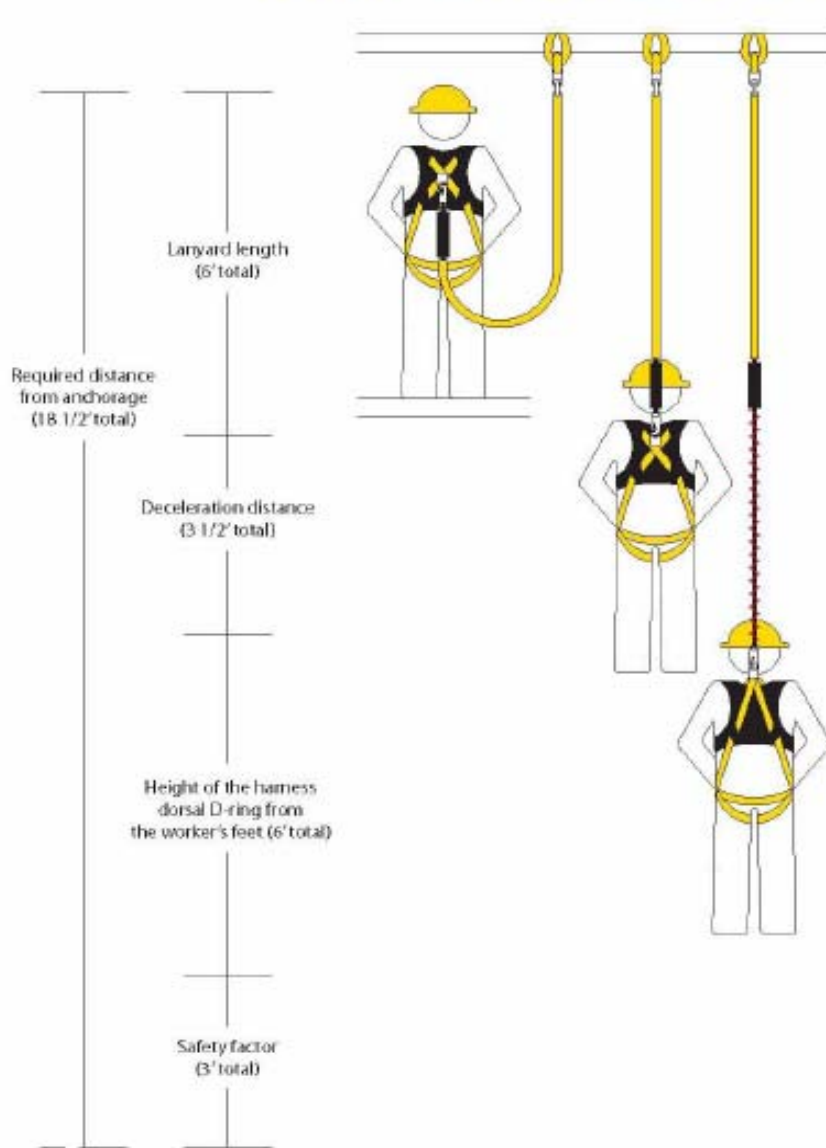
- Standardize requirements for fall protection from Ontario Legislated 3.0m / 10 ft to 1.8 m / 6 ft.
- Recognized as industry best practice
 - At least 3 major Valley companies already there (Shell, IOL, Air Products)
- Many provinces and many US states already there



Safety Concerns with Fall Protection use

- Presently required at 3.0m / 10 ft
- Most have shock absorbing 6 foot lanyard – 6 inch drop initiates absorber
- Require 18.5 feet distance from tie point to first point of contact to ensure no bottoming out.
- Anchor points for tie off need to be better understood

FALL DISTANCE CALCULATION



ANCHORAGE CONNECTOR

Anchor: The point of attachment for lanyards and lifelines, also called a tie off point. Must be capable of handling a 5,000 lb load in the direction a fall would occur. (Roof Truss, I-Beam)

Anchorage connector: Used to join the anchor point to the connecting device. (Beamer, Cross Arm Strap)

BODY WEAR

Full body harness distributes the weight of impact across the body in a fall. It keeps the user upright if hanging from the dorsal D-ring. Completes the connection of Anchor to connector to harness.

CONNECTING DEVICE

Connects the harness to the anchor or anchorage connector.

DECELERATION DEVICE

Device that slows and reduces energy in a fall. It lowers forces the body receives upon impact. (Shock Absorbing Lanyard, Rope Grab, Retractable Lifeline)



Recommendations

- Move to a 1.8 m / 6 ft requirement for mandatory fall protection
 - When working from 6-18' above grade
- Move to self retractable lanyard with shock absorber
 - Double lanyard system – 100% tie off
 - Right tool for the job
- Provide refresher training for all fall protection users
- Standardize these requirements across the valley



Benefits

- Safer - raising the bar and doing it right
- Limited to a 5 – 10 inch fall
 - Reduced fall vs. having a rescue
- Reduced “swing”
- No “bottoming out”
- Can use lower anchor points, more tie off options



Benefits - cont

- Self rescue much easier
- Much easier planning considerations for a "Rescue Plan", that is required when working at heights
- One piece of equipment for all applications (6 or 10 ' tie off) (not previously addressed)
- User will always have the right (safer) piece of equipment on – longer term a cheaper alternative
- Eliminates confusion with transient workforce



IMPACT - Costs

- Replacement strategy
 - Wholesale replacement or planned replacement
 - TBD – site / company specific
 - Learning curve – standardizing will make this easier