

# LIFT POSTURE ANALYSIS\_M

Trunk and Upper Extremity Posture Analysis during a firefighting lift task



## 00:01 Initiating Lift

Establishing lower body position to initiate lift.



## 00:02 Stance and hand placement

Note high knee angle and low hip angle increasing risk of injury to low back and upper extremities. Note narrow stance and hand placement (highlighted in yellow circle).



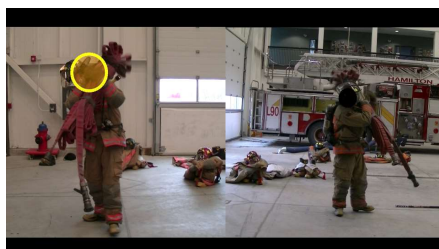
## 00:03 Trunk position during lift

Note stooped back and high knee flexion. At this point in the lift lower knee flexion angles (around 90 degrees) and neutral trunk posture would reduce risk of strain/sprain injuries to the low back and shoulders.



## 00:03 Trunk posture during mid-lift

Note stooped trunk posture as firefighter lifts HRP to shoulder. Core endurance to stabilize hip and back are necessary to reduce injury risk. Attempting to maintain a neutral trunk posture relative to lower extremities and shoulder is also important.



## 00:04 Stabilizing HRP on shoulder

Note awkward neck and head position relative to HRP pack.



## 00:04 HRP secured on shoulder

Note neck posture; lateral flexion to accommodate HRP and helmet brim.