

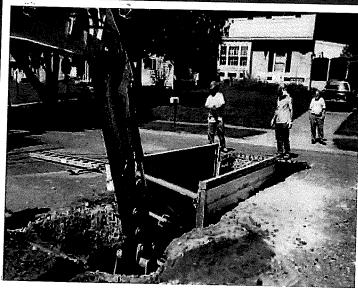
# **Top 8 Municipal Safety Needs for 2016-2018**

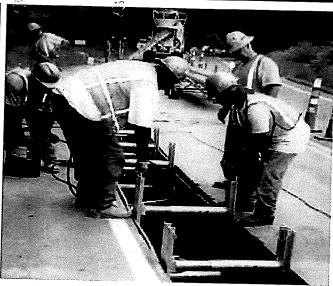
Municipalities who want to strengthen their safety programs often ask, "Where do we start?" The Department of Labor Standards encourages employers to prioritize their efforts on conditions that cause a high-pattern of injuries, and high-cost injuries. Resources are available at <a href="https://www.mass.gov/dols/wshp">www.mass.gov/dols/wshp</a>.

Topic	Examples of Applicable Activity	Reason for Concern	Resources
Activities th	at have potential for a fatal c	or significant injury	
,			
Aerial Lift	DPW Parks and Tree; electric utilities; holiday tree lighting; traffic light maintenance	Fatal accidents and serious injury in past three years when workers were ejected from bucket.	Template policy available from DLS. Provide Fall Protection. Provide training.
Crossing Guards	Police; school departments	Fatal accidents and serious injury have occurred in past three years when a Crossing Guard was struck by vehicle.	Ensure crosswalks and guards are visible; enforce traffic rules. Bulletin available from DLS.
Lockout Tagout	Facilities; HVAC; electricians; water and sewer; compactors; vehicle mechanics	Potential for fatal accident when working with energized equipment.	Template policy available from DLS.
Trench	DPW; Water and Sewer departments.	Potential for fatal accident. Private sector fatalities have occurred over past three years in Massachusetts.	Provide cave-in protection and Competent Person. Template policy and inspection worksheet are available from DLS.
Workzone Safety	Police details; DPW; water and sewer departments	Potential for fatal accident. Serious injuries have occurred in past five years when an officer was struck by a vehicle.	A flipbook with workzone diagrams available from MassDOT. Toolbox talks available at www.workzonesafety.org
Activities th	at have a high pattern of inju	ry in municipal departments	
Chainsaw; Tree Trimming	DPW parks and tree department	Frequent incidents across the state with lacerations and getting struck by tree limbs.	Provide new hire and periodic training for chainsaws and tree trimming.
Floors, Stairs and Railings	All municipal departments.	Slip and Trip injuries are a common pattern in all municipal departments.	Conduct frequent walkthroughs to control slippery or damaged floors, ice, and replace railings.
Lifting Heavy Objects	All municipal departments.	Muscle and back strain are a common pattern in all municipal departments.	Evaluate trash barrels and tasks to promote safe lifting. Conduct Lifting training.



# Safety Tips - Trench Safety





Every year, workers are killed or seriously injured conducting work in trenches, including utility repair, utility inspections, and construction. Trenches are recognized by OSHA as one of the most hazardous construction work conditions, with a fatality rate more than double that for construction work overall.

# Prevent Worker Injury When Working in Trenches

- Protect workers from soil cave-ins in all trenches 5' or deeper, and in shallower trenches where a cave-in hazard exists. Do this by supporting the walls with shoring, shielding workers with trench boxes, or sloping the walls back wide enough, in accordance with the OSHA Excavation Standard.
- Provide ladders to workers in trenches 4' or deeper.
- Underground utilities must be identified and supported. Call Dig Safe 1-888-344-7233.
- Ensure that workers wear high visibility clothing when exposed to vehicle traffic, and use appropriate work zone signage and traffic channeling set-ups.
- Spoils must be kept back a minimum of 2' from the trench edge. Keep equipment and heavy material as far back from the trench edge as possible.
- Stabilize undermined adjacent structures.
- Protect employees from water accumulation by pumping out ground or utility water, and preventing drainage or other water from entering the trench.
- Do not allow employees to work under suspended or raised loads or materials.
- Conduct pre-job planning and inspections of trench worksites.

A competent person must inspect each trench worksite, including the soil protective system, prior to the start of work, and again if there is a hazard-increasing change in conditions such as a rainstorm.

Based on findings of worksite investigations, cave-ins of the soil walls cause the most worker fatalities and injuries during work in trenches.

# **Workers in trenches face other significant hazards in addition to cave-in of the soil walls, including:**

- Falling loads, falling spoils pile
- Heavy equipment hazards
- Electrocution or explosion from underground utility
- Drowning from trench filling with groundwater
- Falling undermined sidewalk / structure
- Traffic / Roadway Work Zone Hazards
- Hazardous atmosphere
- Drowning from a compromised utility pipe



# **CHAINSAW SAFETY**

Employers must train employees who use chainsaws to operate the saw safely. Review the Owner's Manual for each model saw that is used. This bulletin reviews important safety tips.

Hard hat/helmet

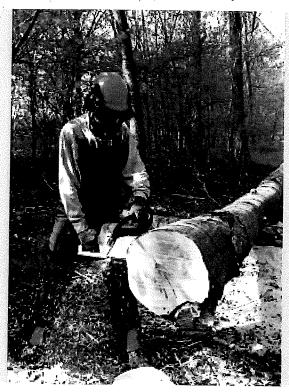
Faceshield or screen with safety glasses

Ear muffs or ear plugs

Heavy-duty, non-slip gloves

Chainsaw protective chaps

Work Boots (steel toe for arborists and logger)



Stand to the side of the cut. Avoid cutting above shoulder height.

Allow the weight of the saw to do the work. Do not put pressure on the saw.

Two hands on saw at all times.

Release the throttle and use chain brake, or shut saw off completely before carrying the saw to a new location.

Keep foot area clear of trip obstacles.

# Worker training:

- Review each specific Owner's Manual and Manufacturer's Safety Manual for each model chainsaw you use.
- Demonstrate the kick back zone.
- Demonstrate stance to reduce injury from kickback and reaction forces.
- Demonstrate chain brake, clutch, and throttle.
- Tree cutting workers need to understand techniques to control fall zones and prevent tree limbs under tension from springing back towards workers.

# Inspect chainsaw before use:

- Chain is sharp and tension adjusted so it is secure on the chain bar.
- Chain brake, clutch, and throttle operate as designed by manufacturer.
- Lubrication reservoir is full.
- Select rear-handled chainsaws for almost all tasks. Avoid top-handle chainsaw unless essential for task and used by a trained arborist in tree-climbing applications.

### Prevent kickback:

- Plan for the reactive forces of the saw.
- No chainsaw is designed for one-handed use. Always keep two hands on the saw when chain is running. Never operate with one hand.
- Never use the upper tip of the chain to start a cut.
- Sharp chains prevent kickback. Keep spare chains or be prepared to sharpen the chain in the field.

Sample safety programs for municipal and state agencies are available at www.mass.gov/dols/wshp.

# **CUT-OFF SAW TOOLBOX TALK**

Employees who use cut-off saws must be trained to operate the saw safely. Review the Owner's Manual for each model saw that is used. This Toolbox Safety Talk can help review important safety tips.

## **Work Practices**

Review the Owner's Manual for each model cut-off saw you use.

## Inspect each saw before use:

- Blade not cracked, chipped, or warped.
- Use the correct blade for material and conditions being cut.
- Match saw RPM with blade RPM.
- Machine guards (belt and blade guards) are secure and adjusted.
- Verify throttle and stop switch are working.
- Fuel added when saw is cold.

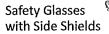
### **Prevent Kick-back:**

- Always keep two hands on the saw. Never operate with one hand.
- Never cut above shoulder height.
- Do not bend over the blade when cutting.
- Support the material being cut to prevent pinching or binding of the wheel.
- Do not grind or bevel on the side of the wheel.
- Release pressure on the cut-off saw as you reach the end of the cut.
- Review owner's manual to understand directional forces on the wheel.
- Position your body to keep clear of the wheel and reactive forces.

## Work Safely:

- Start saw when resting on ground. Do not "drop start" cut-off saws.
- Wet cut when feasible to reduce dust and reduce energy of reactive forces on the wheel.
- During transport, do not roll the blade wheel on the ground.
- This can damage the wheel and cause shattering during use.







Work Gloves



Hearing Protection – ear plugs or ear muffs



Boots



Tight fitting respirator with P100 filters when cutting concrete, brick, asbestos cement pipe. Use wet methods to reduce silica or asbestos dust.



Optional: 95 mask when cutting metal.





# **Prevent Aerial Lift Accidents**

Municipal employees are subject to accidents and injuries while working in bucket trucks and aerial lifts to hang flags and decorations, trim trees, or make repairs to buildings or streetlights.

Some of the high hazards of working in bucket trucks or on any elevated work platform include electrocution, tip overs, and struck by passing traffic.

Remind all employees who will be working on an elevated work platform of some key safety points:

- Wear a harness and lifeline properly.
- Make sure the equipment is on stable ground. Avoid slopes, sandy or wet areas, and uneven surfaces.
- Never stand on the sides of the bucket or use a ladder in the bucket to extend reach.
- Do not put yourself or your equipment within 10 feet of power lines.
- Set up a safe work zone to prevent traffic from hitting the bucket truck.
- Use advance warning signs, cones, or barricades to protect your workers.

If the bucket truck is not regularly used, make sure you inspect it and test it. Look for leaks and check the hydraulics. Make sure that all the outriggers fully deploy, beacons, and lights function properly, and there are no missing parts. Above all, make sure the operator is well trained in the safe use of the equipment.

These workers are wearing a harness and lifeline to ensure they are not thrown out of the bucket if the bucket, boom, or truck is hit by a passing vehicle.







For further information, read the Aerial Lift Safety Bulletin on the DLS website: www.mass.gov/dols/wshp

# **Ladder Safety**

# **How to Choose A Ladder**

It is important to choose the right ladder for the job. Some key points to consider when selecting a ladder include:

- Will it be used indoors or outdoors?
- Will it be used near or around a source of electricity?
- How much weight will be on the ladder including tools and materials?
- What obstacles might be in the way?
- · What height(s) will you need to access?

# Safe Climbing Habits

- · Maintain three points of contact with the ladder when climbing up or down
- Check the ladder before you use it for any defects or missing parts
- Wear closed toe shoes with nonskid soles
- Face the ladder when climbing up or down
- · Carry tools in a tool belt

# Dos and Don'ts

Misuse or abuse of a ladder can result in falls, serious injury, or even death. For your safety,

- Stand on the top step of a stepladder or the top rung of an extension ladder
- · Lean or overreach to the sides of the ladder
- Place a ladder on an uneven surface or on top of another ladder
- Move the ladder while someone is standing on it
- Use a stepladder in a closed position

- Use a ladder that is rated for the weight of the user, materials, and tools
- Make sure the ladder will not come within 10 feet of energized power lines
- Make sure the ladder extends three feet above the point of support
- Secure the ladder and observe the 4:1 lean ratio
- · Allow only one person at a time on a ladder

# **Ladder Safety Checklist**

Ladders are frequently used by many employees. Before you use a ladder, you can promote safety by checking whether the ladder is in good condition:

- The anti-slip safety feet are intact
- The ladder has not been painted to hide defects
- The weight capacity rating is listed on the ladder
- The siderails or steps are not warped, cracked, splintered, or bent
- Rungs, steps, and feet are free of slippery material (oil, grease, paint, mud)
- The spreader or locking device fully engages to secure the stepladder in open position





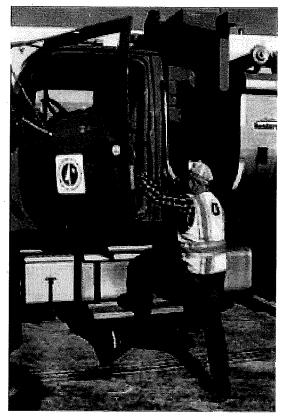
# Preventing SLIP and FALL Injuries from Heavy Equipment TOOLBOX TALK

# The Problem:

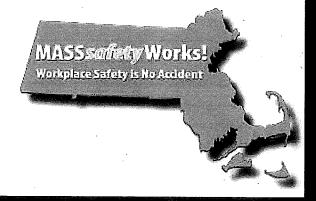
Each week, public sector workers are injured while getting into or getting out of heavy equipment vehicles. These tips are provided to help reduce work-related injuries and medical costs.

# **What You Can Do:**

- Maintain three points-of-contact while ascending and descending. Keep two hands, and at least one foot, in contact with the vehicle ladder and steps at all times.
- Always face the ladder.
- · Repair broken steps and handrails.
- Remove snow, ice, and mud from steps and handrails.
- Target your foot landing to avoid pot holes and "ankle breaker" stones.
- · Do not jump out of vehicles.
- Wear sturdy construction boots with a deep tread.
- Always use your seat belt when equipment is in operation.
- Keep doors closed when equipment is in operation – operators have fallen out of vehicles when leaning out of the door to get a better view of the ground.



Maintain three points-of-contact when getting into and getting out of vehicles.







# **Massachusetts Workplace Safety and Health Protection** for Public Employees

Massachusetts General Law Chapter 149, §§ 6 and 6-1/2 provide job safety and health protection for state, municipal and county workers through the promotion of safe and healthful work conditions. In addition, 454 CMR 25 directly extends OSHA regulations to executive branch state agencies.

**Employers:** 

Employers are required to provide procedures, equipment and training

to prevent work-related injuries and illnesses.

**Employees:** 

Employees are required to comply with the policies and procedures

established in their workplace to reduce work-related injuries

and illnesses.

Inspection:

The Department of Labor Standards ("DLS") may conduct an on-site inspection to evaluate workplace conditions and make recommendations for the prevention of work-related injuries and illnesses. See "Inspection

Summary" at www.mass.gov/dols/wshp.

**Enforcement:** 

DLS may issue a Written Warning which contains an Order to Correct when an inspection reveals a condition which could cause a work-related injury or illness. DLS may issue a Civil Citation with Civil Penalty in circumstances when the employer repeatedly allows an unsafe condition to occur, the condition has already caused a serious work-related injury, or if the

employer has ignored a previous Written Warning.

Voluntary Assistance: Public sector workplaces may request technical assistance by contacting DLS at 508-616-0461 or safepublicworkplace@state.ma.us. There are no

written warnings or penalties issued for voluntary assistance.

**Complaints:** 

Public employees or their representatives may file a complaint about safety and health conditions at their workplace by contacting DLS at

508-616-0461 or safepublicworkplace@state.ma.us.

Safety and Health Sample safety programs and technical bulletins are available at

Management: www.mass.gov/dols/wshp.

www.mass.gov/dols/wshp

508-616-0461