



SAFETY DIRECTOR BULLETIN



LEAF COLLECTION OPERATIONS BEST PRACTICES

Fall leaf collection is one of the most hazardous public works operations. Crews collect leaves using three primary methods: leaf vacuum trucks, front-end loaders with scoop or clam attachments, and manual pickup of bagged leaves. Each method presents distinct hazards, and all three share the common danger of working on streets open to traffic.

Department Leaders

- Perform a job hazard assessment on all leaf collection procedures and equipment.
- Thoroughly train all new employees before allowing them to operate any piece of equipment.
- Provide refresher training at the beginning of each leaf season for experienced workers. If the season is extended, provide additional training to reinforce safety procedures at regular intervals.
- Visit job sites and talk to workers. Reinforce desirable behaviors and consistently correct unsafe actions.

Traffic Hazards – Mobile Work Zone

Leaf collection is considered a Mobile Work Zone operation per MUTCD Part 6 (11th Edition, Rev. 1, December 2025).

- Workers in the work zone must wear high-visibility safety apparel meeting ANSI/ISEA 107-2015 Performance Class 2 (daytime) or Class 3 (nighttime/low-light conditions). Retroreflective outerwear must remain compliant as temperatures change—ensure workers have compliant options for all weather layers.
- Work vehicles must display high-intensity rotating, flashing, oscillating, or strobe amber warning lights visible from front and rear. Raised truck beds, equipment, or damage may not obstruct light visibility.

Leaf Collection Best Practices

- Consider placing advance warning signs at the entrance(s) to developments with limited access points.
- For mobile operations, vehicle-mounted lights may substitute for stationary advance warning signs on low-volume residential streets. However, signs must be covered or turned from view when work is not in progress.
- On arterial and collector roads, a shadow vehicle equipped with high-intensity warning lights and an arrow board (in caution mode) shall follow the work vehicle. On higher-speed roadways, consider a rear-mounted impact attenuator.
- On residential streets, a shadow vehicle is strongly recommended wherever curves, hills, or parked vehicles limit sight distance.
- Where flaggers are used, they must be trained and use STOP/SLOW paddles as the primary signaling device (flags are for emergencies only). Flaggers must wear Class 2 or Class 3 high-visibility apparel.
- Schedule collections near schools when school is not in session or bus/pickup/drop-off traffic is minimal.
- Schedule collections on commuter routes before or after peak traffic hours.
- Be alert to sun glare hazards—brief crews on high-risk times (morning on eastbound routes, afternoon on westbound routes) and consider scheduling collection operations during low-glare periods.
- New Jersey has the most congested roads in the nation. Workers should be frequently reminded to watch for distracted, blinded, or inattentive drivers approaching from behind.

Environmental and Weather Hazards

- Fall leaf season can include warm days. Workers in full sun wearing high-visibility gear are at risk for heat illness. Provide water, rest breaks in shade, and monitor workers for symptoms. Follow your agency's heat illness prevention plan.
- Early morning operations in late fall can involve cold temperatures. Ensure workers layer appropriately—all layers must maintain ANSI/ISEA 107-2015 compliance for high-visibility requirements.

Leaf Vacuum Trucks - Intake/Hose Hazards

- Never place hands or any body part near the vacuum intake opening. Clearing clogs in the vacuum hose, impeller, or discharge system requires full lockout/tagout (LOTO) of all energy sources before any worker contacts the equipment. This is a leading cause of serious injury. Develop and post a written LOTO procedure specific to each leaf vacuum truck model. Review LOTO procedures with crews before the season begins.
- Power Take-Off (PTO) drives must be guarded during operation. Apply LOTO before any service to PTO components.
- Leaf vacuum trucks and blowers routinely generate noise levels exceeding 85 dBA. Hearing protection is required for operators and nearby workers. If workers are regularly exposed above 85 dBA (8-hour TWA), a hearing conservation program is required.
- To minimize exhaust and carbon monoxide exposure, avoid unnecessary idling, especially in low-wind conditions or near workers on foot. Do not position workers downwind of diesel exhaust for extended periods.
- Conduct a daily pre-use inspection before each shift using a manufacturer-based or agency checklist.

Front-End Loader with Scoop or Clam Attachment – Critical Crush Zones

- Between the truck/container and the loader during dumping operations.
- Under the raised scoop or clam. Eye contact alone is not sufficient—use established hand signals for definitive communication between workers on foot and the operator.

Operator Responsibilities

- Check behind, to the sides, and in front of the loader before EVERY move, for both people and vehicles.
- Backup alarm must be functional. Do not operate a loader with a non-functional backup alarm.
- Seat belt must be worn when the loader is equipped with rollover protective structure (ROPS).
- Only trained and authorized operators may operate the loader (29 CFR 1910.178 / 1926.602).
- Inspect attachment security (pins, hydraulic connections), hydraulic lines for leaks, lights, backup alarm, brakes, and tires before each shift.
- The operator must be alert that the loader boom and clam/scoop do not contact overhead utility lines. Identify overhead hazards before beginning operations. Maintain required minimum approach distances.
- Slow-moving vehicle (SMV) emblem may need to be displayed when traveling on public roads. Observe posted travel speed limits and agency rules for loader road travel.

Rakers' Responsibilities

- Remain in close coordination with loader operator. Stay visible in rear-view and side mirrors. Use hand signals.
- Do not walk under a raised scoop or clam-shell attachment.

Bagged Leaf Pickup

Bagged leaf pickup places workers directly in the roadway for extended periods, a very high-risk activity.

- Apply all Mobile Work Zone requirements above. Consider assigning one crew member as a dedicated traffic watch during high-risk times and locations, such as when the sun is low, at dusk or dawn, and on high-traffic roads. High-visibility Class 2 or 3 apparel is required for all workers.
- Establish and communicate a maximum bag weight limit to residents (recommend 30–40 lbs). A single worker must not lift overweight bags. Require team lifts for bags that exceed the weight limit or are awkward to handle.
- Use tailgate lifts or mechanical assists where available to reduce lifting from ground level.
- Rotate workers between lifting bags and driving to limit cumulative musculoskeletal exposure.
- Remind workers to use proper body mechanics: lock the lower back in its natural curve when lifting, keep loads close to the body, and avoid twisting while carrying.
- Require puncture-resistant gloves. Bags may contain hidden hazards including glass, sharp debris, animal waste, or needles/syringes. Safety-toe footwear should be required. Eye protection, possibly with UV shading, should be encouraged.
- Wet leaves on pavement create significant slip hazards. Workers should step carefully around leaf piles and wet pavement. Report and avoid areas with standing water under leaf accumulations.
- Decomposing leaves contain mold spores. Workers with respiratory conditions should be identified and may require respiratory protection. Consider N95 respirators for workers with high exposure.

Dump Site Safety

Dump sites present unique hazards: no designated traffic patterns, multiple vehicles, and workers on foot.

- High-visibility apparel is required at all times at the dump site.
- Establish and follow a designated traffic pattern at the dump site. Post the pattern where drivers can see it.
- A designated spotter is required when backing at the dump site.
- Never walk under a raised dump body. Dump bodies must be properly blocked before any worker goes underneath.
- Be alert to overhead power lines at dump sites.

Training and Seasonal Preparation

- Conduct a pre-season tailgate talk specific to leaf collection before operations begin each fall. Cover all three collection methods.
- Require documented operator training and authorization for all front-end loader and leaf vacuum truck operators before the season.
- Review and practice LOTO procedures for each piece of equipment.
- Review hand signals between loader operators and ground workers.
- Conduct a pre-use inspection walkthrough with the crew using the actual equipment.
- Provide stretch-and-flex guidance at the start of each shift.
- Review the Job Hazard Assessment. A template is available on [MSI Forms & Documents](#).