



KENTUCKY
AGC Self Insurers' Fund

Safety Practices for Heavy Equipment Use

Working with heavy equipment in highway construction and crushed stone operations involves significant risk, but these hazards can be managed effectively with consistent safety practices. Whether operating excavators, loaders, dozers, haul trucks, or other machinery, every team member—operators, laborers, and supervisors alike—plays a critical role in maintaining a safe job site. This guide outlines key precautions that help prevent injuries, reduce downtime, and ensure compliance with regulatory standards. Following these best practices not only protects workers, but also promotes a culture of accountability and professionalism across all operations.

1. Pre-Operation Inspection

- Conduct a full walk-around inspection of equipment before each shift.
- Check tires/tracks, fluids, lights, alarms, fire extinguishers, and safety guards.
- Use equipment-specific checklists and report defects immediately.

2. Personal Protective Equipment (PPE)

- Mandatory: Hard hats, high-visibility vests, safety boots, gloves, and eye protection.
- Additional: Hearing protection and respiratory protection as required.

3. Operator Certification & Awareness

- Only trained, authorized personnel may operate heavy equipment.
- Operators must understand blind spots and swing radii.
- Keep windows clean and use seat belts at all times.

4. Worksite Communication & Signaling

- Establish clear communication protocols using hand signals or two-way radios.
- Use spotters when visibility is restricted or during complex maneuvers.
- Never assume an operator sees you—maintain eye contact or stay clear.

5. Safe Operation Practices

- Keep all body parts inside operator compartments.
- Use proper lockout/tagout procedures during maintenance.
- Do not exceed load capacities or use equipment outside its intended purpose.
- Follow all posted signage, speed limits, and traffic control measures.

6. Ground Personnel Safety

- Stay out of swing zones and under suspended loads.
- Avoid walking or working between equipment and fixed objects.
- Wear high-visibility clothing and remain alert at all times.

7. Environmental Considerations

- Maintain stable, level surfaces for equipment operation.
- Control dust and manage water runoff per site requirements.
- Use lighting for early morning or night operations.

8. Emergency Preparedness

- Know the location of first-aid kits and emergency exits.
- Report all incidents and near-misses immediately.
- Conduct regular emergency response drills.

Safety is Everyone's Responsibility. Stay Alert. Stay Alive.