

Northwestern | OFFICE OF  
RISK MANAGEMENT

# Material Handling Equipment Program

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## I. Program Goals and Objectives

This program establishes procedures for the safe operation of powered material handling equipment such as forklifts, motorized pallet jacks, tractors, and other similar equipment.

## II. Scope and Application

This program applies to the operation of all material handling equipment owned or leased by Northwestern, and operated by staff, faculty, students, and contractors.

## III. Responsibilities

### A. Supervisors

- i. Ensure employees who are required to operate material handling equipment have received the required training and certification.
- ii. Maintain documentation and records required in Section VII.
- iii. Remove equipment from service when the operator, or other qualified persons, identify any condition that makes the unit unsafe to operate during inspection, maintenance, or operation of the equipment.
- iv. Ensure all equipment operators are properly inspecting and safely operating the unit.
- v. Contact Risk Management to evaluate any safety concerns.

### B. Operators

- i. Attend and pass all training and evaluation prior to operating any material handling equipment.
- ii. Complete a pre-use inspection checklist prior to operation (checklists can be found on the Risk Management [website](#)).
- vi. Report all maintenance issues to your manager or supervisor.
- vii. Ensure all safety and manufacturer guidelines and instructions are followed.

### C. Risk Management

- i. Review and revise this program to reflect changes in regulatory requirements as necessary.
- ii. Provide consultation and guidance when necessary.

## IV. Material Handling Equipment Procedures

### A. Pre-Use Inspection

- i. Complete the pre-use inspection checklist prior to operating any material handling equipment.
- ii. Any safety defects or impairments (such as hydraulic fluid leaks; defective brakes, steering, lights, or horn; and/or missing fire extinguisher, lights, or back-up alarm), must be reported to supervision for immediate repair, locked, tagged, and taken out of service.

- iii. Pre-use inspection checklists can be found on the Risk Management [website](#).

#### **B. Operating Guidelines**

- i. Operate material handling equipment in accordance with the manufacturer's operating instructions and safety guidelines.
- ii. Only trained personnel are authorized to operate material handling equipment.
- iii. If installed, seatbelts must be worn at all times during operation.
- iv. Stunt driving and horseplay are prohibited.
- v. Operators will yield the right of way to pedestrians and emergency vehicles.
- vi. All features that were received on material handling equipment from the dealer or manufacturer must be in the intended working condition, and not disabled, tampered, or removed from the equipment.
- vii. Equipment beyond the vision of more than 25 feet from the operator is unattended, and should have the keys removed and be in the proper parked position.

### V. Maintenance and Charging Batteries

#### **A. Maintenance**

- i. Only authorized personnel can make repairs.
- ii. Protective measures, including personal protective equipment (PPE), will be taken in an effort to prevent hazardous chemical exposure.
- iii. Before initiating repairs to the electrical system, disconnect the battery.
- iv. Repairs to material handling equipment must be conducted within a designated area for equipment or vehicle maintenance.

#### **B. Charging Batteries (powered industrial trucks)**

- i. Battery charging installations must be located in areas designated for that purpose.
- ii. Precautions must be taken to prevent open flames, sparks, or electric arcs in battery charging areas.
- iii. Employees charging and changing batteries shall be authorized to do the work, trained in the proper handling, and wear protective clothing, including face shields, long sleeves, rubber boots, aprons, and gloves.

#### **C. Replacing a Propane Cylinder (powered industrial trucks):**

- i. Park the vehicle in a designated area and turn off engine.
- ii. Close the cylinder valve and remove the coupling from the cylinder.
- iii. Remove the empty cylinder from the cradle holding device and store in a designated area.
- iv. Select a full cylinder and inspect the fuel lines, couplings, washers, and o-rings for damage, and aging. Verify the cylinder valve is closed prior connecting.
- v. Carefully install the filled cylinder in the cradle on the truck so the cylinder locator pin enters the locating hole in the cylinder collar.
- vi. Reconnect the fuel line to the cylinder valve and open valve slowly.

## VI. Training

### A. Training

- i. Each employee operating material handling equipment must receive training and instruction specific to the equipment used, and training must be completed prior to the use of any material handling equipment.
- ii. Training can be conducted by either a competent trainer in the department, an equipment manufacturer, Risk Management, or a vendor who specializes in training, and will conduct:
  - a. Classroom instruction
  - b. Hands-on demonstration
  - c. Operator performance evaluation
- iii. Training must cover the following:
  - a. The purpose and use of equipment manuals.
  - b. The Northwestern Material Handling Equipment Program.
  - c. Pre-use inspection checklist.
  - d. The purpose of placards and decals.
  - e. Worksite inspections.
  - f. Factors affecting stability.
  - g. Hands-on operation of the equipment.
- iv. If you are interested in becoming a trainer within your department, contact Risk Management for approval.

### B. Re-Evaluation

Documented re-evaluation of an operator will be completed at least once every three years, or when:

- i. The operator is observed using equipment in an unsafe manner.
- ii. The operator is involved in an accident or near-miss incident.
- iii. A condition in the workplace changes that could affect the safe operation.

## VII. Recordkeeping

- i. Supervisors will maintain records of:
  - a. Employee's training documentation (e.g. sign-in sheet, performance evaluation checklist, operator quiz, etc.).
  - b. Completed pre-use inspection checklists for all equipment subject to this program.
  - c. All material handling equipment maintenance, inspection, and repair documents.
- ii. These records must be available for a review for 3 years

## VIII. Regulatory Authority and Related Information

29 Code of Federal Regulations (CFR) Part 1910.178, Powered Industrial Trucks

29 Code of Federal Regulations (CFR) Part 1926.602, Material Handling Equipment

American National Standards Institute B56.1-1969, Powered Industrial Trucks

OSHA Compliance Directive CPL 2-1.28A, Compliance Assistance for the Powered Industrial Truck Operator Training Standards

## IX. Contact

For questions, contact Gwen Butler, Director, Environmental Health and Safety, at 847-491-4936 or [gwen.butler@northwestern.edu](mailto:gwen.butler@northwestern.edu).