Forklifts are excellent labor saving devices. They save time and reduce the likelihood of injury associated with manual material handling activities. However, forklifts can become very dangerous if operated by a reckless or untrained operator. All operators should receive safety training prior to being allowed to operate a forklift.

**BASIC FORKLIFT SAFETY PRACTICES**

1. Make sure that you complete and document your pre-operation inspection each day.
2. Use the seat belt. It will keep you secured in the seat in the unexpected event of an tip over.
3. A parked forklift should have the forks flat on the floor with the controls set to neutral and with the parking brake set.
4. A forklift is considered to be "unattended" if the operator is more than 25 feet away or if the forklift is out of the direct vision of the operator. Unattended forklifts should be parked with the power turned off and keys removed.
5. When operating the forklift on inclines, the load should always be on the uphill side of the incline. Drive forward going up the incline. Drive backward going down the incline.
6. When traveling without a load on the forks, keep the forks approximately four to six inches off the floor.
7. Never allow anyone to walk underneath a raised load.
8. If carrying a tall load that blocks your forward vision, drive in reverse and turn your head so you can see where you are going.
9. Never drive a forklift up to the back of a person who is unaware that the forklift is behind them.
The Numbers:

1 out of 6 industrial workplace fatalities are forklift related

5000 lbs The capacity of Colby’s lift at any mast height

100 forklift fatalities per year

DIFFERENCES BETWEEN A FORKLIFT AND CAR

- **Weight**: Forklifts generally weigh about twice their capacity. Colby’s lift weighs 10,000 pounds. The average car weighs 4,000 pounds.
- **Steering**: Most forklifts are rear wheel steering. This allows you to turn tighter, however, there is the possibility of striking objects with the rear of the lift.
- **Visibility**: Forklifts have poor visibility and are designed to move material not strictly for driving.
- **Center of Gravity**: A loaded forklift has a much higher center of gravity than a car.

STABILITY TRIANGLE

The center of gravity of the forklift-load combination can move outside the stability triangle if:

- the load is picked up on the tip of the forks,
- the load is tilted forward,
- the load is tilted too far back when raised
- the load is wide, or
- forklift movement causes the center of gravity to shift

Forklift + load center of gravity
Unstable
Stable
Unloaded Forklift’s center of gravity
Questions/Discussion:
1. Where should you position the load on the forks before picking it up? Why?
2. Where is the center of gravity on an unloaded lift? Loaded lift?
3. Where should the load be when traveling on an incline (is it different if going up or down)?
4. Why is wearing your seatbelt at all times so important?

Printed Name

Signature

Questions, concerns or comments contact the EHS Director at extension 5504.
Making the Case for Rigorous Forklift Safety

Machinery Fatalities in the U.S.

In the U.S., 1 of 6 of all workplace deaths are forklift related.

110,000 major forklift accidents every year costing businesses $135,000,000 and costing workers more than 100 lives.

Over 11% of all forklifts will be involved in some type of accident during their useful life.
Fatal Forklift Accidents by Type, Industry, and Age

- **Type**:
  - Crushed by vehicle tipping over: 42%
  - Crushed between vehicle and a surface: 25%
  - Crushed between two vehicles: 11%
  - Struck or run over by a forklift: 10%
  - Struck by falling material: 8%
  - Fall from platform on the forks: 4%

- **Industry**:
  - Manufacturing: 45%
  - Retail Trade: 40%
  - Transportation: 35%
  - Whole sale trades: 30%
  - Construction: 25%
  - Mining: 20%

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**Preventing Forklift Accidents**

To keep a forklift from tipping over:
- Ensure the load is balanced
- Use extra caution when making sharp turns
- Take extra care when working on ramps, an uneven or sloping surface
- Drive with the load in its lowest position