

# Forklifts and people don't mix

WorkSafe's expectations for separation of pedestrians and forklifts









#### The problem: Pedestrians and forklifts interacting



#### 80 incidents involving forklifts and pedestrians have occurred in 2010 (so far)

- > All involved serious or potentially serious injury
- > 1 fatality occurred in January
- > 48 involved pedestrians being struck by forklifts
- > 10 involved truck drivers being struck by forklifts during loading / unloading activities

#### • The consequences of these incidents include:

- > Death, serious injury, hospitalisation and long-term physical and emotional impacts
- > Loss of income, lifestyle, and morale
- > Intervention by WorkSafe leading to possible legal action
- > Impacts on workplace morale, employee relations, and bottom line

### The law: What employers and employees must do



#### The Occupational Health & Safety Act requires employers to:

- > Identify hazards
- > Control risks
  - Eliminate risks so far as reasonably practicable
  - If it's not reasonably practicable to eliminate the risk, the risk must be *reduced* so far as reasonably practicable

#### In relation to powered mobile plant, employers must:

> Reduce or eliminate the risk of powered mobile plant colliding with pedestrians or other powered mobile plant

#### Employees must:

- > Take reasonable care for their own health and safety, and the health and safety of others who may be affected by their acts or omissions
- Cooperate with their employer regarding any action taken to comply with health and safety requirements



- Ask 'are forklifts really necessary for the work to be done?'
  - > often a less hazardous alternative item of plant could be used instead of a forklift, eg. hand or powered pallet truck, electric tug, tow tractors



Powered tug



Tow tractor



Hand pallet truck



Powered pallet truck



- Develop a comprehensive Traffic Management plan for the workplace that includes:
  - > Mechanisms for consultation with employees
  - > Policies and procedures
  - > Provision of information, instruction and training for:
    - forklift operators (including Licensing, competency and truck loading / unloading operations)
    - other employees at the workplace
    - truck drivers (particularly in relation to loading / unloading)
    - visitors / contractors
  - > Supervision of operations
  - > Expectations for compliance with policies and procedures
    - Disciplinary procedures for non-compliance
  - > A process to monitor and review how well the system is operating



- Put controls in place that physically separate pedestrians from areas where forklifts operate <u>at all times</u> where practicable
  - > Separation can be achieved by:
    - Barriers
      - Permanent
        - » gates, fences, guard rails
      - Temporary
        - » plastic bollards / fencing
    - Work scheduling that prevents pedestrians being in the same area at the same time as operating forklifts
    - Exclusion zones / safety zones
    - Electronic systems to prevent pedestrian and forklift interaction
      - Proximity sensors
      - Speed limiters





- An assessment of forklift operations will be required to determine the actual separation distance and type of barriers that will be needed, including:
  - > The type of load being carried (height, width, weight)
  - > Forklift operating speeds
  - > Any physical barriers or electronic systems already in place
- It may be necessary to install signage / mirrors at key points to supplement physical separation measures
- If there is any likelihood of powered mobile plant colliding with pedestrians or other powered mobile plant, the plant must be fitted with a warning device (eg. beepers, lights)

Painted lines on the ground are <u>not</u> an effective way to separate pedestrians from operating forklifts

## Pedestrian and forklift separation: Work Safe Examples of permanent physical barriers

Permanent fences / guard rails / gates









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## Pedestrian and forklift separation: **Examples of permanent physical barriers**



Permanent fences / guard rails / gates







### Pedestrian and forklift separation: | Examples of temporary physical barriers



#### Portable extendable fencing





Mobile barriers – steel/plastic





Fold-down bollard

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### Pedestrian and forklift separation: | Examples of temporary physical barriers



T-top bollard / mesh





Retractable barrier / flashing light

Witches hats with extendable bars



Portable expanding barrier

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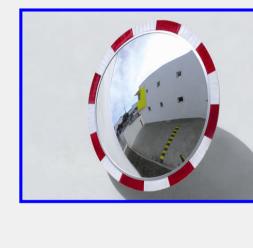
#### Pedestrian and forklift separation: Examples of supplementary controls



Mirrors







Signage and witches hats



#### Pedestrian and forklift separation: What forklift operators must do



- Hold the appropriate (and current) License to Perform High Risk Work (Forklift)
- Abide by the policies and procedures of the workplace
- Remain within designated forklift operating areas at all times
- Only operate a forklift if there are no pedestrians in the vicinity
- Maintain control over any truck loading / unloading activities
  - > reinforce workplace policies and procedures in relation to driver exclusion from areas where loading / unloading takes place
  - > ensure drivers use designated safety zones or other system established at the workplace
- Inform a supervisor or manager of breaches of workplace policies, procedures or controls by other employees or contractors / visitors (including truck drivers)

#### Pedestrian and forklift separation: What forklift operators <u>must not</u> do



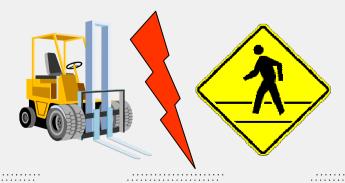
- Engage in any of the 7 'Deadly Sins' of forklift operation:
  - > Driving too fast (especially with a load, or whilst turning)
  - > Travelling with a raised load (above front wheel height)
  - > Failing to look in the direction of travel prior to moving (especially when reversing or turning)
  - > Travelling with an unsecured, unstable or unbalanced load
  - > Show evidence of collisions (either on forklift or structures, eg. walls, doors, corners, racking, bollards)
  - > Travelling with a load that obscures forward vision
  - > Turning with a raised load
- Breach any controls put in place to prevent forklifts interacting with pedestrians at the workplace
- Operate a forklift if any person is in the vicinity

### Pedestrian and forklift separation: Work Safe What pedestrians (and truck drivers) must do

- Abide by the policies and procedures of the workplace
- Observe designated pedestrian areas / exclusion zones / safety zones at all times
- Truck drivers must cooperate with any instruction provided by a forklift operator or supervisor at the workplace in relation to loading / unloading activities
  - > Abide by workplace policies and procedures in relation to exclusion from areas where loading / unloading takes place
  - > Ensure they use driver safety zones or other system established at the workplace at all times during loading / unloading
- Inform a supervisor or manager of breaches of workplace policies, procedures or controls by forklift operators, other employees, or contractors / visitors (including truck drivers)

#### Pedestrian and forklift separation: Work Safe What Managers and Supervisors must do

- Abide by and enforce workplace policies and procedures
- Supervise operations to ensure forklift operators and pedestrians (including truck drivers) observe exclusion zones / designated safety zones at all times
- Take appropriate action (in line with policies and procedures) to address any breaches of controls by forklift operators, other employees, or contractors / visitors (including truck drivers)
- Engage all employees and contractors / visitors in consultation when developing or reviewing policies and procedures that achieve physical separation of pedestrians and forklift operations



# Pedestrian and forklift separation: Summary of key principles



Work Safe

- Implement controls such as physical barriers or work scheduling that prevents any interaction between forklifts and pedestrians
- Develop a comprehensive traffic management plan in conjunction with all affected employees (and contractors / visitors)
- Train Supervisors and Managers to reinforce and monitor controls in place to manage risks from forklift operations
- Consider <u>all</u> employees when addressing forklift and pedestrian separation, such as office / administration staff, temporary / contract staff, and also visitors
- Induction, training and supervision must be carried out to ensure employees, contractors and visitors understand and adhere to workplace policies and procedures in relation to forklift / pedestrian separation
- Review the traffic management plan at regular intervals to ensure it continues to achieve the highest level of control possible