The Manufacturing Sector

EVERYONE WHO GOES TO WORK COMES HOME HEALTHY AND SAFE
SESSION OVERVIEW

- Manufacturing Workplace Injury Toll
- Best Practice Guidelines - Safe Use of Machinery
- Workplace Transport
- Noise
- Clean Air – Airborne Contaminants
- Health & Safety Reform Bill update
The sector is made up of a range of diverse industries with an estimated ¼ million workers.

Over the past 5 years there were a total of more than 126,000 claims to ACC and about 13,500 severe claims that kept workers away from work for five days or more.

Many manufacturing workers also suffer ill health and premature death from workplace exposures to noise, respiratory hazards and chemicals.

Total cost $157.9m
DEATH & INJURY IN THE MANUFACTURING SECTOR

There were 38 workplace fatalities in the manufacturing sector 2008 – 2014

Forklifts and trucks were the main types of vehicles involved in injury & death

Forklifts alone prompted 80 serious harm notifications to WorkSafe NZ and four fatalities in 2013

Falling objects killed 7 of those people
MACHINERY GUIDANCE

- Best Practice Guidelines
- Safe use of Machinery Toolkit
- Individual factsheets on specific machines
  - Metal
  - Wood
  - Food
  - Plastics
  - Printing
  - General
SAFE USE OF MACHINERY
Have you...

Checked that all machinery is adequately guarded by:

• Carrying out a risk assessment and comparing it to current standards (involving a competent person in this process where necessary).

• Providing effective guards/devices in accordance with the type of machine controls (i.e. hydraulic, pneumatic, mechanical).

• Providing a safe system of work for cleaning, clearing and maintenance activities.

ASNZ4024 (2014 Safety of Machinery)
Worksafe NZ - The Way We Work

Reactive
- Response
- Investigations
- IRH Assessment
- Duty Holder Review

Proactive
- National Focus Areas
- Local Initiatives
WHAT OUR INSPECTORS LOOK FOR...
WHAT OUR INSPECTORS LOOK FOR...

Assessing your workplace

- Good housekeeping
- Machinery - well maintained and correctly safeguarded
- Operators trained, supervised and competent
- Safe procedures
  - for cleaning, clearing and maintenance of machines,
  - any other safety issues, such as work at height and transport
- There should also be good control of health hazards
- Hazard/risk assessments, and health surveillance records
- Maintenance and test records
- Written instructions provided to employees covering:
  - training and supervision for machinery;
  - Information on health hazards and how to control the risks;
  - how to use and care for PPE such as respirators, hear protection; and
WORKSAFE ASSESSMENTS

What WorkSafe Inspectors will be assessing in your workplace.
Vehicles at work continue to be a major cause of fatal and major injuries.

Forklifts - 80 SH and 4 fatalities in 2013;
- 37% SH Manufacturing
- 24% SH Transport/Postal/Warehousing

What to do first?
To manage the risks from workplace transport effectively, you need to consider three key areas:
- Safe site
- Safe vehicle
- Safe driver
# SAFE SITE

## Key Areas

- Management of layouts and traffic flows in a workplace is critical
- All staff trained/aware of pedestrian & vehicle movements

## Things to consider

- Well marked road and pedestrian areas free from obstruction
- Separate entrances for people and plant and safe crossing points
- All staff trained and aware of people and traffic flows on site
- Have designated loading /unloading areas with temporary or permanent barriers and no go areas.
- Spotters to assist with vehicle positioning, trained
SAFE DRIVER

**Key Areas**

- Trained and competent to operate a vehicle safely
- Less experienced – need to be supervised and monitored

**Things to consider**

- Initial training and refresher courses by qualified providers
- Motion sensors and equipment monitors to log driver behaviours
- Only staff operate vehicles when authorised to do so
- Keep training records for all staff
- Be aware of issues that may impair drivers i.e. medical considerations
- Drivers are familiar with site rules and procedures.
SAFE VEHICLE

Key Areas

• Vehicles in a place of work must be safe for intended use

• Vehicle maintenance is critical

Things to consider

• Fuel source - Petrol, LPG Electric

• Visibility – running lights, mirrors, reversing alarms cameras

• Seat belts – use properly

• Pre start checks – recorded and logged with vehicle records

• Regular Maintenance – inspections and logging of checks
CASE STUDIES

Kiwi Fruit Packing House
• 3 companies fined a total of $120,000 reparation $20,000 over forklift accident

Concrete Manufacturing Company
• Concrete company fined $70,000 and reparation of $60,000 over death of a worker

Transport Company
• Fined $50,500, plus reparation of $25,000
OCCUPATIONAL HEALTH – Hazards in Manufacturing

Our Focus

• Noise
• Airborne Contaminants

We need to do more

• Noise – management, controls etc., noise induced hearing loss
• Airborne Contaminants –
  • e.g. welding fumes, wood dust, flour dust, formaldehyde, carbon monoxide, chemical fumes, solvents, biological agents.
• Any dust from any manufacturing processes
CLEAN AIR – TREAT HEALTH LIKE SAFETY
Airborne Contaminants

We need to do more about Airborne Contaminants

2010 – 137 deaths and 850 hospitalisations in the manufacturing sector due to exposure to harmful substances*

Dust, welding fumes and asbestos were the leading causes of death and hospitalisations

Poor ventilation has been identified as major factor in exposure to harmful welding and related fumes
# CLEAN AIR – RESPIRATORY HAZARDS

<table>
<thead>
<tr>
<th>Type</th>
<th>What it is</th>
<th>Examples</th>
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<tbody>
<tr>
<td>Dust</td>
<td>Tiny bits of solid material suspended in the air.</td>
<td>Wood dust in cabinet making or a craft woodworker using rimu; flour in a bakery; mould dust from bird droppings or compost.</td>
</tr>
<tr>
<td>Mist</td>
<td>Tiny droplets of liquid suspended in the air.</td>
<td>Acid mist at an electroplating shop; water spray near an air-conditioning unit.</td>
</tr>
<tr>
<td>Fume</td>
<td>Extremely fine metallic particles originating from hot processes.</td>
<td>Metal fume in a foundry or from welding process.</td>
</tr>
<tr>
<td>Vapour</td>
<td>Gas from an evaporating liquid.</td>
<td>Paint thinners during spray-coating; solvents from recently LOSP-treated timber; fibreglassing.</td>
</tr>
<tr>
<td>Gas</td>
<td></td>
<td>Carbon monoxide from the use of petrol-powered forklift used in a confined space. Methane from anaerobic decay of organic matter.</td>
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RESPIRATORY PROTECTIVE EQUIPMENT - RPE

Key Areas

• RPE - Get the “Right” Device
• RPE – Advice for employers & employees

Things to consider

Eliminate, Isolate, Minimise

RPE – correct device, fit tested, no facial hair, make sure it is worn.

Cleaning, storage & maintenance

Training and education

Lung function testing and respiratory questionnaire

Health Monitoring
CASE STUDIES

2014 - Hefty fine and reparations order for Tanning company

- Tanning company been fined $73,000 and ordered to pay reparations totalling $90,000 over a toxic gas incident that left four of its workers unconscious.

2015 – Company directors admits to being blasé about H&S

- Company’s director admitted that maybe he had “got blasé about the health and safety” because of his experienced staff - fined $33,750 after one of his employees was overcome with fumes when working in a confined space.
• 50% production workers exposed to above 85dB(A)

• 25% workers exposed to impulse noise levels exceeding 140dB(A) during every shift

• 25% of people experienced difficulties with hearing

• Hearing protection is now worn most of the time

• Disposable ear plugs almost always fitted badly leading to exposure
## NOISE MANAGEMENT

### Key Areas

- Noise Management Plan (source, path, receiver)
- On Going Health Monitoring

### Things to consider

- Have a noise control policy to eliminate or reduce noise level to below legal maximums
- Audiometric testing for all staff regularly exposed to excessive noise
- Information and training for all staff
- Select fit for purpose hearing protection
- Replace noisy machines – “Buy Quiet”
- Management of Noise in the Workplace 2002 – Approved Code of Practice
Health and Safety Reform Bill: What you need to know

FEBRUARY 2015

New Zealand Government
KEY ELEMENTS

01 Meaning of Person Conducting a Business or Undertaking
02 Meaning of Worker and Duties
03 Primary Duty of Care
04 Upstream Activities
05 Duty to Cooperate and Consult
06 Officers and Due Diligence Duty
07 Stronger Worker Participation
08 Regulatory Toolbox

www.worksafe.govt.nz
WHAT IS A PCBU?

A “person” conducting a business or undertaking
WHO ISN’T A PCBU?

Workers

Volunteer Associations

Officers

Home Owners
THE PCBU HOLDS THE PRIMARY DUTY OF CARE...

Because those who create risk... Are responsible for managing it.

- The PCBU is required to look after the workers it employs or engages, as well as those workers influenced or directed by the PCBU

- The PCBU must also ensure others’ health and safety is not put at risk from the conduct of the business or undertaking
OFFICERS’ DUTIES

Due diligence
WORKERS ENGAGEMENT/PARTICIPATION

Engage with workers

Right fit for workplace

Reps, committees or either

Reasonable chance to participate
REGULATIONS AND GUIDANCE
VISIT WORKSAFE.GOVT.NZ