



INCIDENT REPORTING SYSTEM

Results of first 12 month study 2007-2008.

In early 2007 the Members of the Federation endorsed a proposal to introduce a reporting system for its members so that members could better understand the nature of unsafe incidents occurring within the piling and foundation sector of the industry.

This system was intended to encourage participation by all members and be detailed enough to provide meaningful information.

The system adopted followed very closely the similar system used successfully by the European Federation of Foundation Contractors (EFFC) since 1995. Their system is in operation in 13 countries and they have a database of over 3,500 incidents!

The essence of the system is to use a simplified “tick a box” type format with minimal additional writing required. ALL incidents are reported whether they result in time lost or no time lost to personnel or involve damage to equipment only. This gives a much broader coverage than the statutory requirements. The system was introduced as from July 2007 and we now have the results of the first 12 months of the study.

We are indebted to 8 companies who provided information for the study over the 12 month period.

AFS (Aust) Pty Ltd

Piled Foundations Pty Ltd

Frankipile Australia Pty Ltd

Piling Contractors Pty Ltd (incl Gateway Alliance)

Geotech Pty Ltd

Vibro-pile Australasia Pty Ltd

Keller Ground Engineering Pty Ltd Wagstaff Piling Pty Ltd.

A total of 186 reports were received in this period from all states of Australia. This is a relatively low database for comparison purposes with the European information but it provides us with a positive start which can only be improved upon in the future.

It is estimated that the 8 companies listed would have undertaken well in excess of 50% of the specialised foundation work covered by our membership in Australia so it is a good sample from which to report preliminary observations.

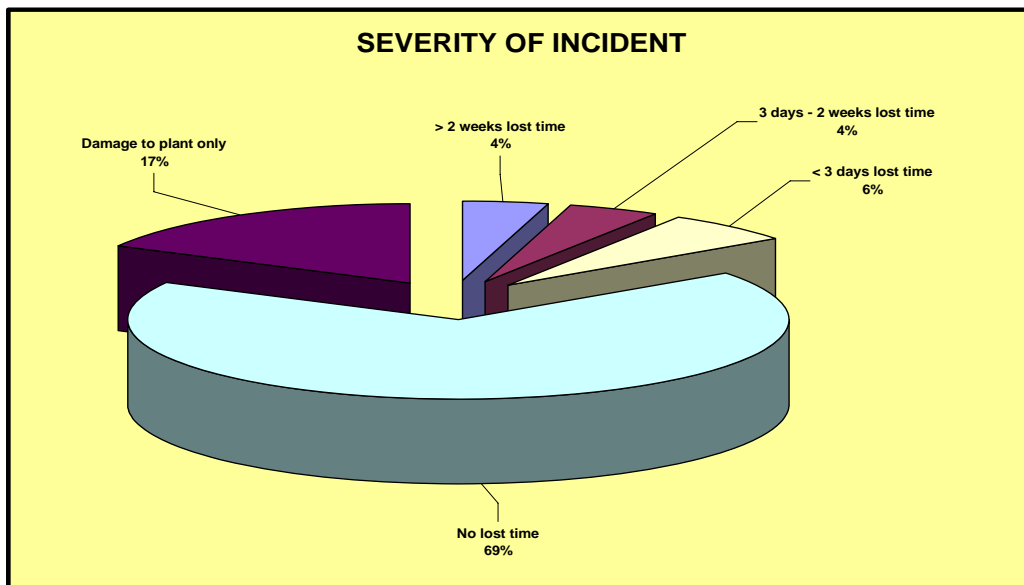
A summary of all reports received is attached as an Appendix to this report.

In addition a summary of some specific findings from the study are attached with initial comments and a comparison where possible with the EFFC results. Members are encouraged to review their own experience and offer their comments and suggestions for improvement of the reporting system and their thoughts on how to use the information collected.

They are specifically invited to submit initiatives that they have applied to improve their own safety performance and which could be used by other members of the Federation.

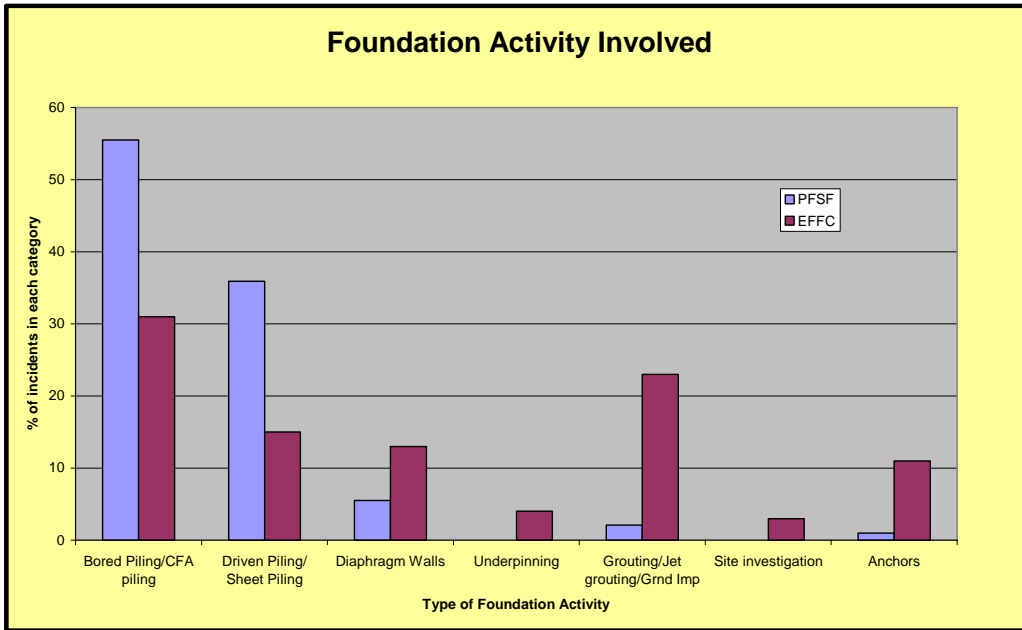
Specific Findings and Comments:

The **Severity of the Incident** as shown by the resulting Time Lost to Personnel or Damage to Plant Only is illustrated below. It is noted that only 16 incidents from 186 would have been reported in the categories of Time Lost 3 days or greater and only 28 incidents involved Lost Time of any duration.



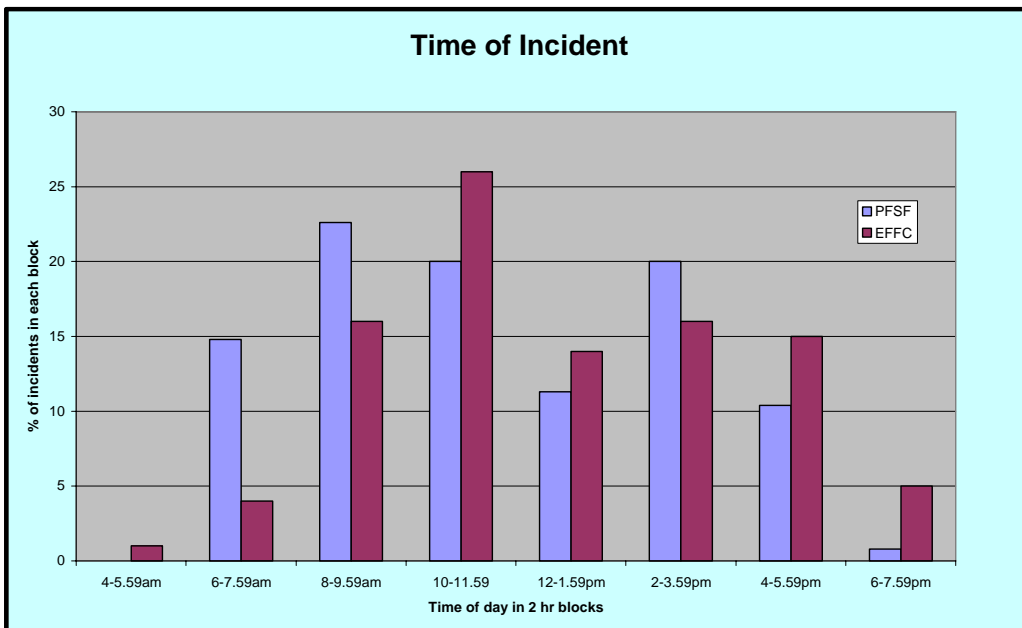
Foundation activity:

Bored piles and CFA piles were the basis for 55% of the activities reported in Australia, compared with only 31% in Europe. The driven piling component was also higher at 36% compared with 15% in Europe. EFFF figures included a much wider range of activities such as anchoring, diaphragm wall underpinning and ground improvement).



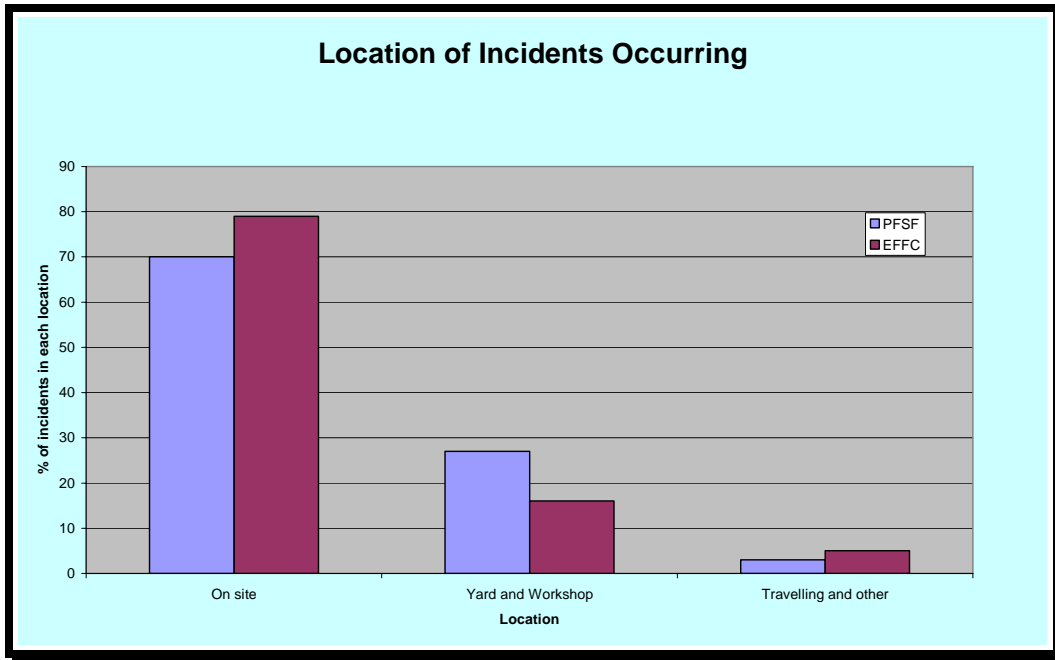
Time of incident:

There does not appear to be any specific “most common” time for an incident – they can happen at any time during the day and normally do!



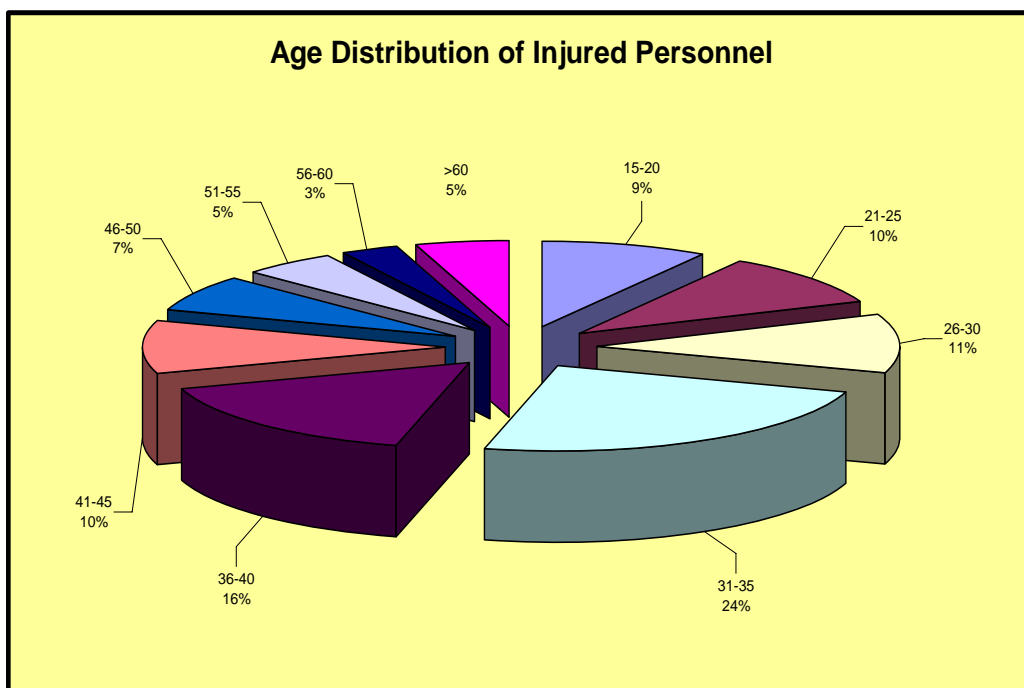
Place of incident:

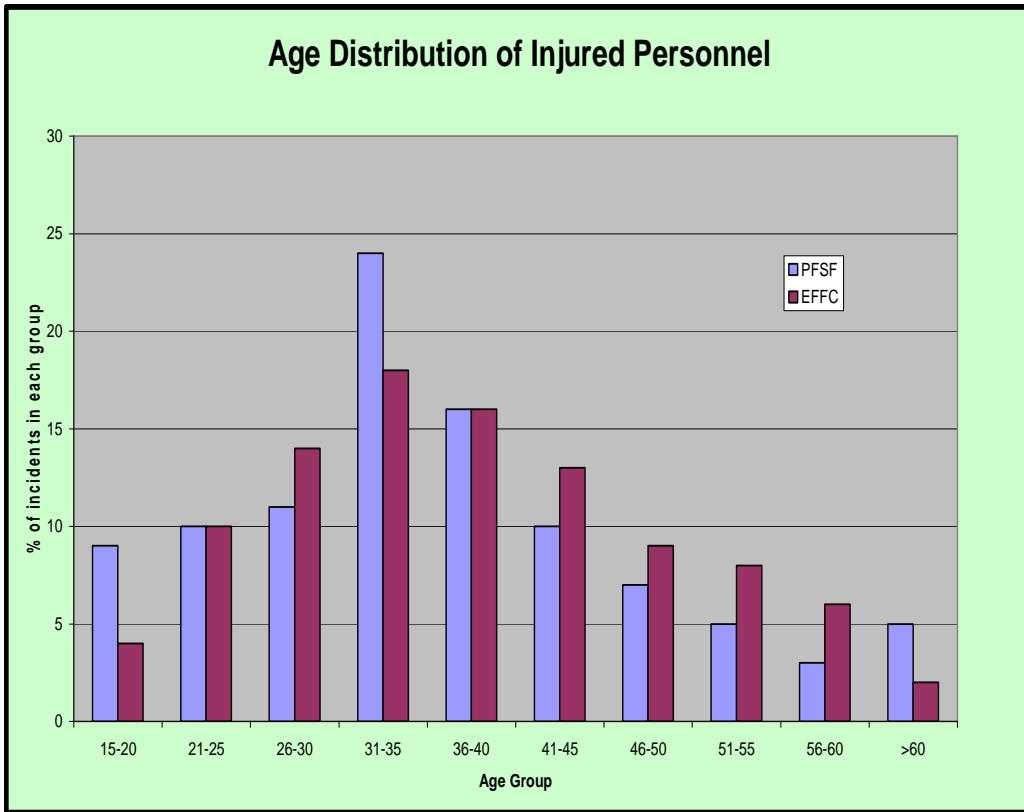
27% of all incidents reported took place in the yard or workshop (16% in EFFC). It should also be noted that several of the site incidents also involved mechanics, welders and electricians working on equipment. This is an obvious area of concern.



Age of persons injured:

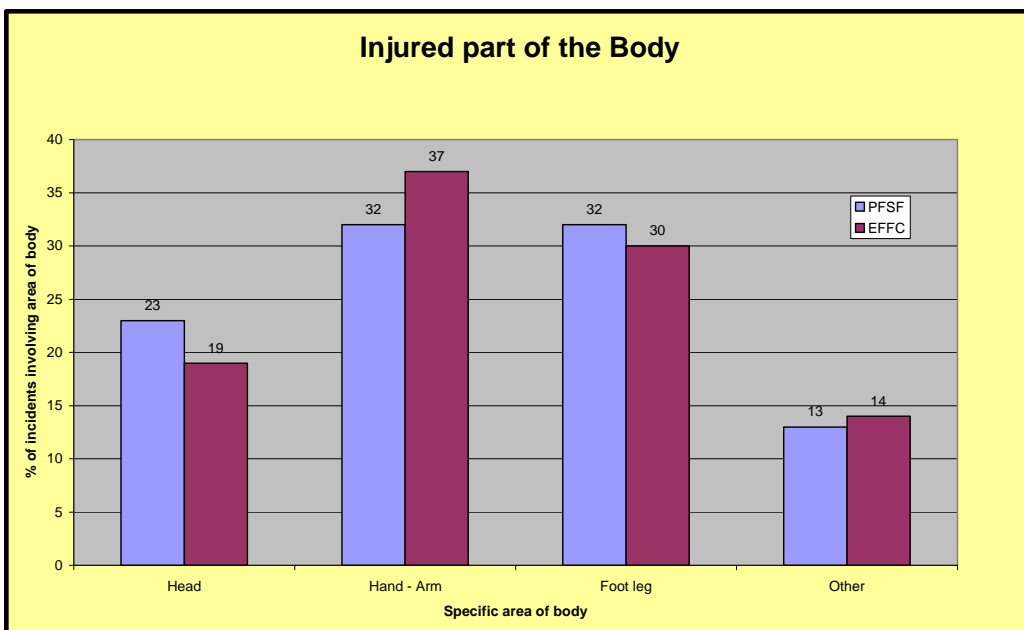
Our figures indicate a similar age distribution in general as EFFC but with a much higher peak in the aged 31-35 group and the 15-20 and over 60 age groups.

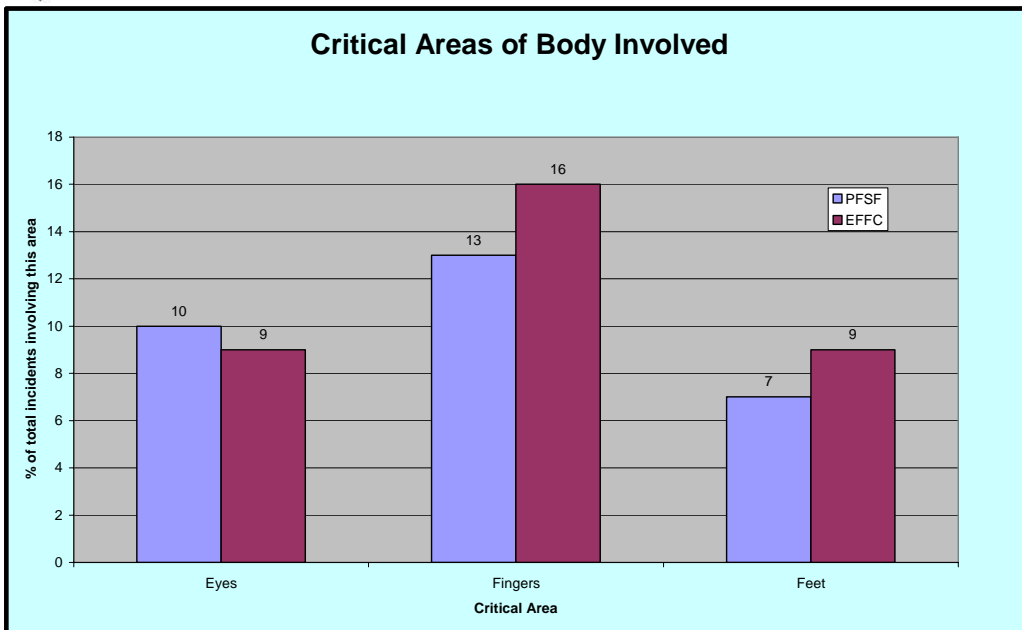




Injured parts of the body:

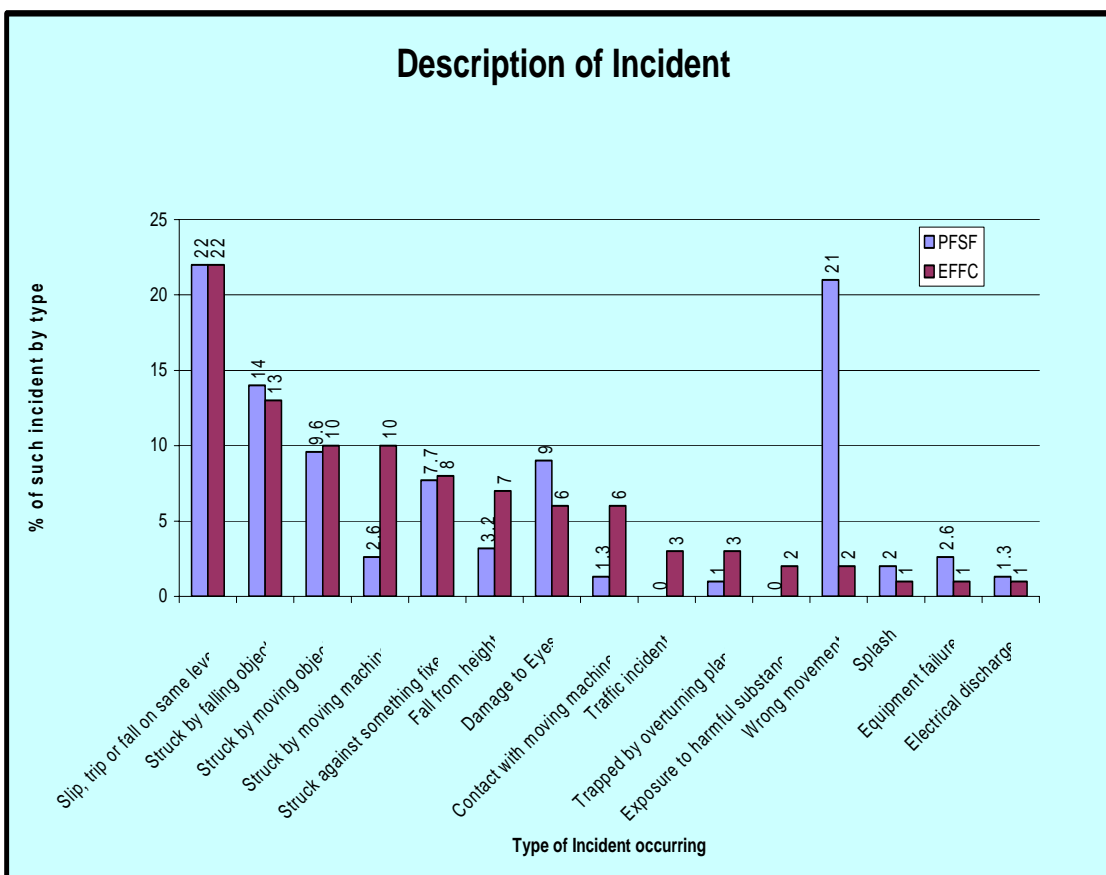
The distribution of injuries to various parts of the body resulting from an incident follows the EFCF very closely even with a low database. Injuries to Fingers, Eyes and Feet are a standout representing 30% of all injuries.



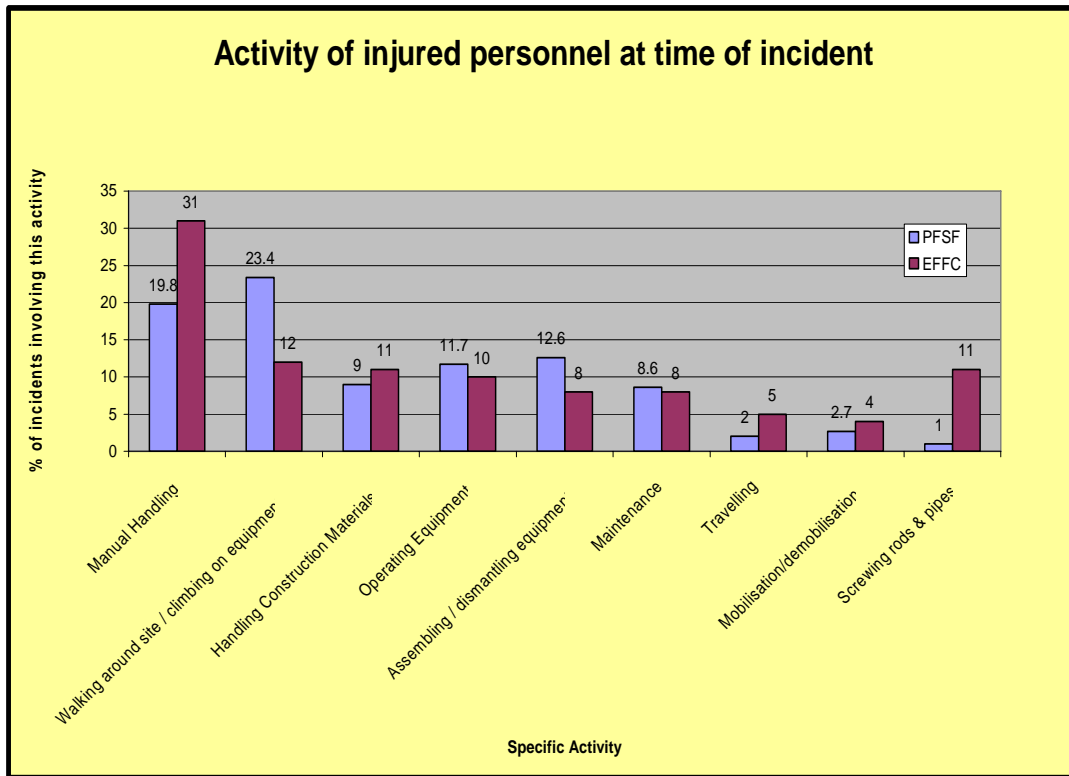


Incident description:

Similar experience to Europe. Most common cause of incident is “Slipping, tripping or falling on same level” – 22%; “Wrong movement” (primarily when lifting or manual handling) -21%; “Struck by falling object” – 14%; “Damage to eyes” – 9%. Many of these could point to poor housekeeping on site, or the need for more emphasis and training in relation to manual handling techniques.



Activity of the injured person at time of incident: 23% of all accidents occurred when “Walking around site or climbing on equipment” with “manual handling” at almost 20% as the next most common activity.



General comments:

The results obtained follow quite closely to those recorded in Europe in the same industry sector but with a few specific exceptions. The following specific comments are suggested as discussion points within individual members' organisations:

- **One in six incidents reported result in a lost time injury to personnel.**
- **Incidents involving leading hands, driver/operators, foremen and engineers are collectively of similar frequency as incidents involving general site labourers.**
- **Many incidents appear to be occurring with specialised equipment both in the workshop/yard and on site whilst assembling/disassembling or undertaking maintenance. There appear to be a high percentage of incidents involving welders/mechanics/fitters on site – presumably working on equipment.**
- **Damage to eyes, and injuries resulting from manual handling activities rate very highly in the reports.**
- **Injuries resulting from falling, slipping, tripping etc whilst walking around site, or climbing on equipment are the most common accident reported.**
- **We appear to have more injuries to the youngest (under 20) and oldest (over 60) members of the work force than in Europe. Possibly a product of a growth market with an ageing experienced workforce and many new employees.**

ALL members are encouraged to participate in the 2008 – 2009 survey which is now underway! Regular monthly reports (and any comments on this report) should be emailed to Peter Goodman as in the past.

Peter Goodman
July 2008

Email: petergppq@tpg.com.au

Attached:

Summary of Reports received 2007 - 2008



GENERAL INFORMATION		FOUNDATION SITE ACTIVITY		EQUIPMENT		TRADE		INJURED PART		ACCIDENT / INCIDENT DESCRIPTION	
AGE		Piling		Piling Rig	1	Operator/Driver	19	Head	8	Contact with Moving	
EMPLOYMENT STATUS		• bored	36	• bored	18	Leading Hand	17	Eyes	15	Machinery	2
Monthly paid		• CFA	15	• CFA	17	Off-sider	13	Face	5	Struck by Moving	
Hourly paid		• driven	33	• driven	30	Concreting/Grouting		Ear		Machine/equipment	4
trainee				• tripod		Operative		Nose	1	Struck by Moving	
Other		Diaphragm Wall Works	5			Steel Fixer	1	Teeth	1	Object	15
DAY AND LOCATION		Steel sheet piling		Drilling rig	8	General Site Labourer	38	Neck	3	Struck by Falling	
LOCATION (State of Australia):		Underpinning		Crane	13	Welder	14	Shoulder	8	Object	22
Queensland	112	Grouting		Drilling Machine	2	Mechanic/Electrician	11	Arm	7		
NSW	41	Jet Grouting	1	Diaphragm Wall		Foreman	4	Elbow	3	Splash	3
		Other Ground Improvement	1	Rig	4	Site Manager		Wrist	4	Struck against something Fixed or Stationary	
Victoria	27	Water Wells + Dewatering		Earth Moving Equip	3	Engineer	2	Hand	6		
SA	3	Site Investigation		Grout / Bentonite / Polymer		Other	6	Fingers	19		12
WA	2	Anchors (inc. soil nails, rock bolts)	1	Mixing Unit				Chest	1	Equipment Failure	3
ACT	1	TOTAL	92	Low Pressure Pump		TOTAL	125	Back	13	Trapped by something	4
TOTAL	186	ACTIVITY OF INJURED (At time of accident)		<10 bar		TYPE OF INJURY		Side	1	Collapsing or	
PLACE OF ACCIDENT/INCIDENT				High Pressure Pump		Bruise	19	Pelvis	2	Overturning	
Site	131	Manual Handling	22	>10 bar		Fracture	4	Leg	18	Slip, trip or fall on	1
Workshop	51	Screwing/unscrewing		Air Compressor		Laceration	33	Knee	18	Same level	
Yard		Pipes, rods, etc	1	Casing Oscillator		Abrasion	5	Ankle	6	Fall from height	35
Office		Assembling/dismantling		Electric/hydraulic		Amputation	1	Foot	4	Exposure to or contact	5
Travelling	4	equipment	14	Vibrator		Twist/Sprain/Dislocation	49	Toes		With harmful substance	
TOTAL	186	Walking		Vibroflot		Crushing	4	Other	2	Explosion or Fire	3
ACCIDENT CLASSIFICATION		Operating Equipment	26	Welding or Maintenance		Burn	3	None (eg shock)	1	Electricity or electrical	2
FATAL	0	Handling Construction		Equipment	10	Infection/Contamination	6			discharge	
More than 2 weeks	8	Materials	15	Truck	4	Shock	4			Damage to Eyes	14
3 days to 2 weeks	8	Maintenance	10	Car	1	Other	6			Other - mainly lifting	33
Less than 3 days	12	Mobilisation/Demobilis		Ladder		No-one injured					
No time lost	158	Travelling / Other	8	None	6					Damage to plant only	31
		Other Welding.....	2	Other							
TOTAL	186	TOTAL	111	TOTAL	117	TOTAL	134	TOTAL	146	TOTAL	186