

## 5. Findings

The project findings are based on analysis of the site visit summary data sheets completed by participating inspectors during their May 2004 project visits.

### 5.1 Non-compliance detected

A total of 759 instances of non-compliance with OHS falls prevention requirements were detected by inspectors during the 1,347 project visits.

578 instances of non-compliance were dealt with through inspectors' notices, and 181 non-compliances were voluntarily rectified during inspectors' visits without the need for a notice to be issued.

Of the 578 notices written, 206 were Prohibition Notices for instances where the risk of injury necessitated immediate cessation of the particular work activity. Prohibition Notices were issued for 27% of the fall-related non-compliances dealt with during project visits.

Penalty Notices (on-the-spot fines) are currently used in four of the nine jurisdictions, with 22 falls-related Penalty Notices being issued as a result of project visits.

Table 6, below, provides more detail.

*Table 6: Action taken on non-compliance related to fall hazards*

Jurisdiction	No. of Prohibition Notices	No. of Improvement Notices	No. of Voluntary Compliances/ Advice	No. of Penalty Notices*	Total
A.C.T.	3	2	19	NA	24
New South Wales	34	181	5	12	232
Northern Territory	1	0	16	0	17
Queensland	60	58	46	9	173
South Australia	33	11	2	NA	46
Tasmania	11	15	11	NA	37
Victoria	17	12	39	NA	68
Western Australia	15	22	29	NA	66
New Zealand	32	49	14	1	96
<b>TOTAL NUMBER</b>	<b>206</b>	<b>350</b>	<b>181</b>	<b>22</b>	<b>759</b>
<b>Percentage</b>	<b>27%</b>	<b>46%</b>	<b>24%</b>	<b>3%</b>	<b>100%</b>

\*The range for Penalty Notices differs between jurisdictions (ACT \$1,000; NSW \$600, \$1,000 and \$1,500; NT \$250, New Zealand \$NZ100 to \$4,000 in multiples of \$100, Queensland \$50 to \$1,500)

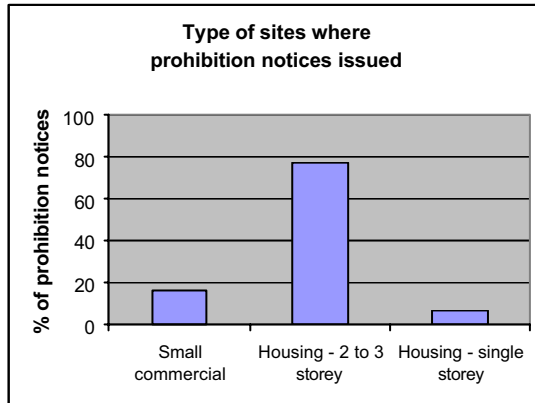
Other, non-falls hazards and risks were also dealt with during project visits wherever non-compliance was detected. Electrical hazards was the most common non-falls issue encountered, followed by lack of adequate OHS training, unsatisfactory amenities, poor housekeeping, exposure to asbestos, excessive noise levels and hazards related to plant and equipment. 624 notices relating to these matters were issued during project visits.

## 5.2 Non-compliance by type of construction

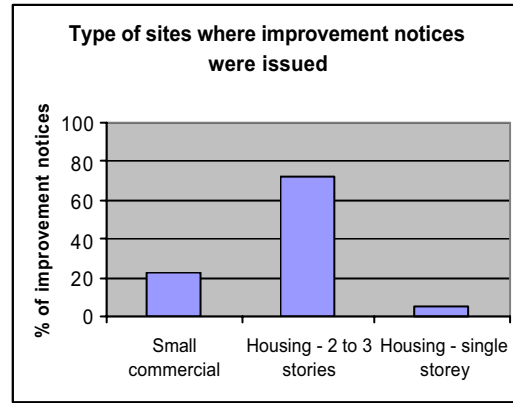
During the project, 83% of the Prohibition Notices and 78% of the Improvement Notices were issued on housing construction sites. (76% of sites visited were housing construction sites.)

Graphs 1 and 2, below, provide further detail.

**Graph 1: Prohibition Notices by type of construction**



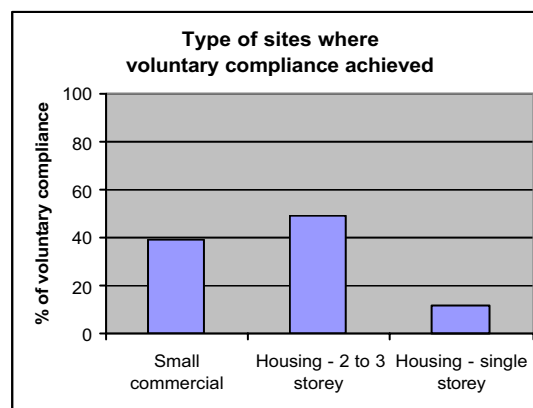
**Graph 2: Improvement Notices by type of construction**



Housing construction sites accounted for 61% of voluntary compliances recorded.

Graph 3, below, provides further detail.

**Graph 3: Voluntary compliance by type of construction**



## 5.3 OHS documentation

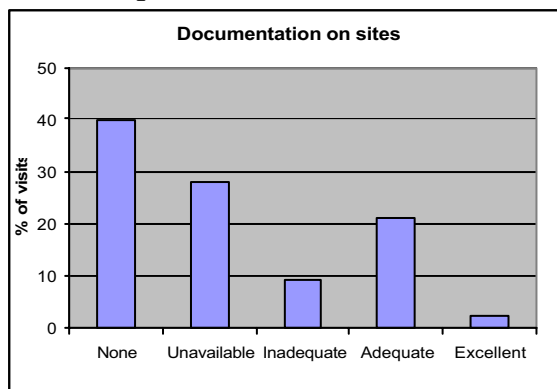
40% of sites visited had no OHS documentation, such as work method statements, safety management plans and/or job safety analyses, setting out how falls were to be prevented when carrying out work at heights.

Where OHS documentation was sighted<sup>1</sup>, inspectors considered it acceptable (excellent or adequate) at only 23% of sites visited.

Graph 4, over the page, provides further detail.

<sup>1</sup> Documentation on safe work is required in NSW, South Australia, Queensland and New Zealand for projects over a certain size. The threshold for value of project where this applies differs between the jurisdictions.

**Graph 4: OHS documentation**



#### 5.4 Roof edge protection and multi-trade scaffolds

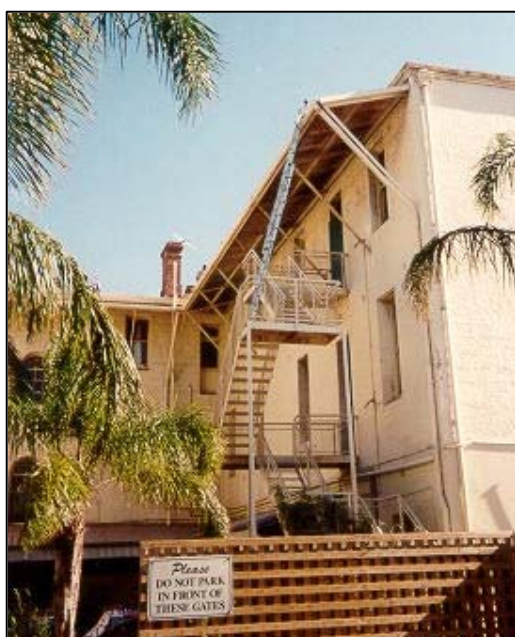
During project visits, inspectors looked at the level of compliance of multi-trade scaffolds and protection for roof edges.

**Roof edge protection.** Where roof edge protection was needed to prevent falls, such as guard railing, controls were either non-existent or inadequate on 33% of such sites. Non-compliance was highest in the Western Australia (55%) and New Zealand (49%). Compliance was highest in South Australia (86%), Victoria (79%) and NSW (74%).

Table 7, below, provides more detail.

**Table 7: Roof edge protection**

Sites	ACT	NSW	NT	NZ	QLD	SA	TAS	VIC	WA	Average
<b>Non compliant</b>	44%	26%	38%	49%	26%	14%	27%	21%	55%	<b>33%</b>
<b>Compliant</b>	56%	74%	63%	51%	74%	86%	73%	79%	45%	<b>67%</b>



*Roof edge protection... what roof edge protection??*

*Workers in Western Australia exposed to the risk of a potentially fatal fall from a roof.*

**Multi-trade scaffolds.** Where a multi-trade scaffold (such as a general purpose perimeter scaffold) was required on site to prevent falls, it was either non-existent or inadequate on 47% of such sites. Compliance was highest in the Northern Territory (73%) and lowest in New South Wales (21%). Table 8, below, provides more detail.

**Table 8: multi-trade scaffolds**

Sites	ACT	NSW	NT	NZ	QLD	SA	TAS	VIC	WA	Average
<b>Non compliant</b>	50%	79%	27%	46%	44%	44%	60%	31%	42%	<b>47%</b>
<b>Compliant</b>	50%	21%	73%	54%	56%	56%	40%	69%	58%	<b>53%</b>



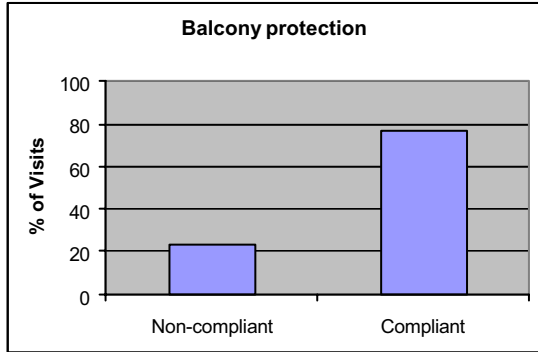
*A selection of scaffolding “shockers” encountered by inspectors during the project. Top, from left, shockers seen in Tasmania, New Zealand and Western Australia. Above left, a shocker in Western Australia and, above right, one in South Australia.*

### 5.5 Balcony protection and stair void protection

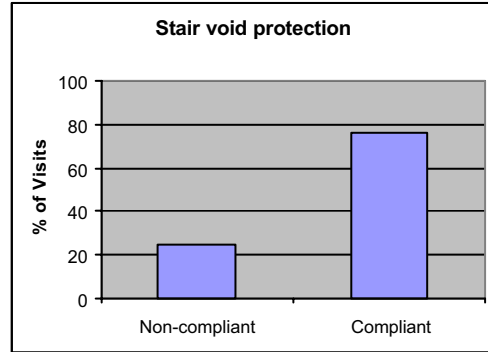
Where controls were needed to prevent workers falling from balconies or down stair voids, they were either non-existent or inadequate on 24% of such sites.

Graphs 5 and 6, below, provide further detail.

**Graph 5: Balcony protection**



**Graph 6: Stair void protection**



*Workers at risk from lack of stair void protection in New Zealand (top left) and the ACT (top right). Lack of balcony protection in South Australia, (above) and Queensland (right).*

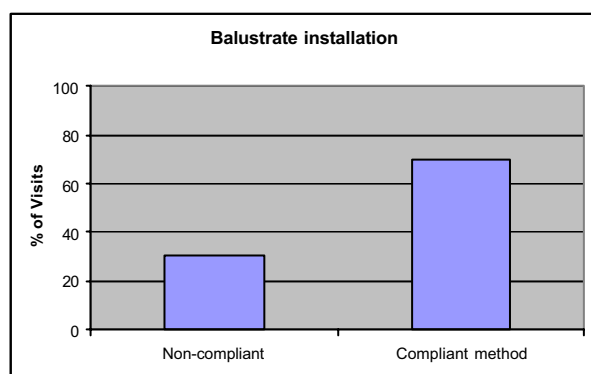
## 5.6 Balustrade and stairway installation

Where relevant, inspectors assessed the fall-prevention adequacy of work methods adopted for the installation of balustrades and stairways.

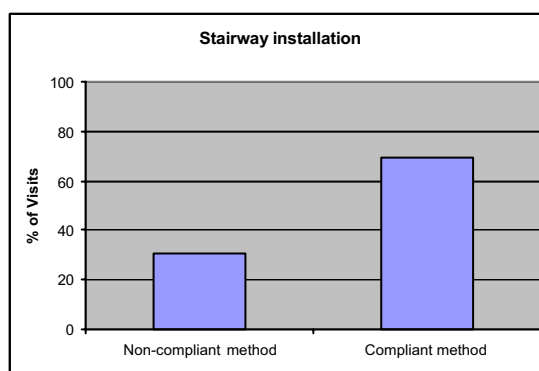
Work systems for both tasks were found to be non-compliant at 30% of such sites.

Graphs 7 and 8, below, illustrate this.

**Graph 7: Balustrade installation method**



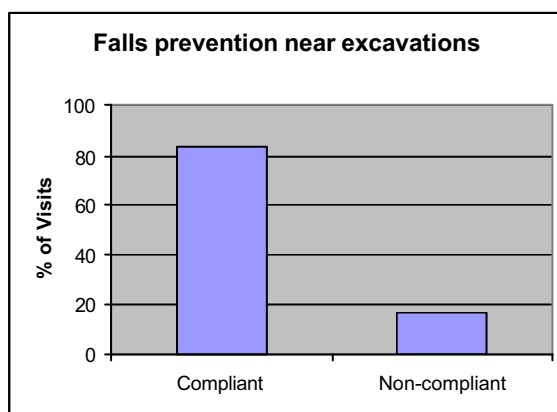
**Graph 8: Stairway installation method**



## 5.7 Falls prevention near excavations

On sites with excavations, required fall protection around excavations was either absent or inadequate at 17% of such sites, as illustrated in Graph 9, below.

**Graph 9: Falls prevention near excavations**



## 5.8 Typical fall heights for targeted occupation groups

The potential fall heights at which targeted trades were working were estimated during project visits.

Between 61% and 85% of the targeted occupation groups were assessed to be (at least in part) working at heights of 3 metres and above. 25% of plumbers' and glaziers' work included fall heights of 6 metres and more.

Table 9, over the page, provides further detail.

**Table 9: Estimated fall heights for targeted occupation groups**

Fall height	Plumbers	Electricians	Air-con. Installers	Wall plasterers	Render plasterers	Painters	Glaziers
2 m	25%	21%	39%	17%	22%	24%	15%
3 m	16%	20%	17%	43%	43%	28%	30%
4 m	21%	15%	17%	21%	14%	19%	10%
5 m	13%	22%	13%	13%	10%	16%	20%
6 m +	25%	21%	13%	6%	10%	12%	25%

### 5.9 Use of fall prevention measures by targeted occupation groups

Inspectors were asked to collect data for each of the seven targeted occupation groups in relation to their use of scaffolds, elevating work platforms, ladders and safety harnesses.

This data has not yet been analysed, but it is available for future use if and when required.

### 5.10 Prior knowledge of the project on sites visited

As detailed earlier, the project included news releases in most of the participating jurisdictions, information being posted on the participating workplace safety authorities' websites and briefings to employer bodies and unions.

Inspectors were asked to inquire into prior knowledge of the compliance campaign on the sites they visited, and to determine how on-site personal had become aware of it.

In general, the workplace safety authorities that made early use of the project's template media release and promptly provided dedicated project webpages gained a higher level of awareness on the sites visited within their jurisdiction.

For example, in the Australian Capital Territory, on 63% of sites, people already knew of the campaign. In Victoria, the figure was 45%. Other areas with good awareness levels were New Zealand (23%) and the Northern Territory (20%).

Of those who knew about the campaign prior to inspectors visiting their site:

- 42% knew through the mass media,
- 24% knew through employer bodies or unions,
- 18% knew through word-of-mouth, and
- 16% knew through the workplace safety authorities.

In New Zealand, the campaign gained the greatest coverage on television and radio, and in the press. As a result, of all those with prior knowledge of the campaign on the New Zealand sites visited by inspectors, 86% knew of it through the mass media.

### 5.11 Examples of best practice identified

Many inspectors provided the project management group with photographs taken during project visits. These included typical examples of dangerous non-compliance, and examples of what good levels of compliance looks like.

The photographs shown on the following page are a selection from the many examples of best practice for falls prevention encountered by inspectors during project visits.



*Compliant perimeter scaffolds on housing sites in Melbourne (above left) and Adelaide (above right).  
Below left: An edge protection system on a housing site in Sydney.  
Below right: Stair void protection on a housing site in Melbourne.*



*Above left: Roof edge full-perimeter guardrailing on an Adelaide housing site.  
Above right: Guardrailing on a commercial site in Melbourne for roof access by services installation trades.*

Approximately 50% of sites visited during the campaign were assessed by inspectors as being in broad compliance with OHS fall prevention requirements.

The project management group takes this opportunity to commend all builders, sub-contractors and workers who were found to be operating in full compliance with their OHS obligations.

## **6. Were the Project's Objectives Achieved?**

The project management group believes that the first three of the project's four broad objectives (as set out in Section 3.2 of this report) have been substantially achieved, with this report providing the basis for achieving the fourth objective.

### **6.1 Improving the level of compliance**

Approximately 50% of the sites visited during the campaign had issues of falls-related non-compliance with OHS requirements identified and rectified, meaning that those sites were left in a safer condition than when they were first visited.

It is also generally accepted that strong compliance action can have a "residual" effect on duty holders, reducing their likelihood of repeating non-compliance on the particular issues in question.

On a broader level, it is reasonable to conclude that the widespread distribution of guidance material during project visits, the advice provided on-site by inspectors, the supporting efforts of many of the employer bodies and unions, and the impact of the project's media strategy has contributed to improved compliance within the targeted construction sectors and occupation groups.

### **6.2 Improving the OHS capability of builders and sub-contractors**

This objective was achieved by:

- Utilizing project visits to widely distribute selected guidance material,
- Utilizing project webpages to link users to the relevant guidance material, and
- Using media releases and leaflets to take people to the project's webpages and the selected guidance material.

It is therefore reasonable to conclude that the campaign has improved the OHS capability of many builders and sub-contractors within the housing and small commercial construction sectors.

### **6.3 Increasing perceptions of the risk of detection and sanctions**

Data provided by the participating inspectors indicates that personnel on many of the sites visited were already aware of the campaign, and therefore the likelihood of receiving a compliance visit.

It is therefore reasonable to conclude that this objective was achieved.

### **6.4 Identifying and promoting best practice**

This objective can now be achieved through the publication of this report and its use by:

- Workplace safety authorities and their media units,
- Employer bodies and unions,
- Industry and trade journals,
- Industrial skills training organisations,
- Site safe committees, workers' health & safety representatives, managers and supervisors, and OHS professionals.

This report can now be used to produce shorter, targeted summaries aimed directly at the various dutyholders in the housing and small-scale construction sectors.

## 7. Recommendations

The project management group makes the following recommendations to the Heads of Workplace Safety Authorities:

- (1) That HWSA initiate a re-run of this project in approximately two years time so that, amongst other things, the compliance levels of the targeted construction sectors can be re-measured against the baseline data that has now been established.
- (2) That HWSA consider the possibility of mounting similar campaigns within the construction industry to focus on other construction sectors and/or other key issues.

The project management group recommends to any builders, sub-contractors or workers who may be concerned about this report's findings, or who wish to learn more about compliance with fall prevention requirements, that they contact their employer association, union or local workplace safety authority for further advice and assistance.

## 8. Acknowledgements

The project management group records its thanks to:

- the 134 inspectors who participated in the project.
- the support staff within each workplace safety authority that helped coordinate their authority's involvement in the project.
- WorkSafe Victoria's Communications Manager, Larissa Garvin.
- WorkSafe Victoria's Business Monitoring & Evaluation Branch, and in particular, the Branch's research officer, Maree Hogan.

The project management group was:

PROJECT MANAGEMENT GROUP	WORKPLACE SAFETY AUTHORITY
Phil Court (Project Coordinator)	WorkSafe Victoria
Barry Naismith	WorkSafe Victoria
Kerry Whitehead	Workplace Standards Tasmania
Julia Collins and Margaret Kennedy*	ACT WorkCover
Tim Campbell and Bob Bills**	Workplace Health & Safety, Queensland
Ian Markos and Mary Nizamis***	Workplace Services, South Australia
Roger Perfrement	NT WorkSafe
Lucio Figueiredo	WorkSafe Western Australia
John Sharpin and Brent Turner****	WorkCover New South Wales
Alan Barrett	OSH, New Zealand
* Margaret Kennedy deputised for Julia Collins at the first project management group meeting ** Bob Bills replaced Tim Campbell from the third meeting onwards. *** Mary Nizamis accompanied Ian Markos at the third meeting, and replaced him for the final meeting. **** Brent Turner accompanied John Sharpin for the final project management group meeting.	

PART TWO ENDS