

**TASKFORCE ON THE PREVENTION AND MANAGEMENT
OF VIOLENCE IN THE HEALTH WORKPLACE**

DISCUSSION PAPER NO. 2

**Prevention of Occupational Violence
in the Health Workplace**

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Prevention of Occupational Violence in the Health Workplace

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As the first discussion paper for the *Taskforce* identified, the incidence and severity of occupational violence varies across health care occupations because risk factors differ between locations and according to job tasks (Mayhew and Chappell, 2001). Patterns of violence also vary because some health workplaces adopt improved prevention. This second *Taskforce* discussion paper provides an overview of some of the strategies that may reduce the incidence and severity of occupational violence.

Guidelines on the prevention of occupational violence have historically taken one of three approaches:

- Reducing exposure to violence (the *prevention* approach);
- Encouraging appropriate behaviour when violence occurs or appears imminent (the *protection* approach); and
- Diminishing the impact following violence (the *treatment* approach) (Wynne et al, 1996: 30).

Only the *prevention* approach is discussed in-depth in this paper as the ‘protection’ and ‘treatment’ approaches have been comprehensively dealt with elsewhere (see NSW Health (2001a), *Mental Health for Emergency Departments: A Reference Guide*, and NSW Health, (2001b), *Management of Adults with Severe Behavioural Disturbances: Guidelines for Clinicians in NSW*. Many of the preventive strategies discussed in this paper come from other industry sectors and their applications to health workplaces have not yet been fully evaluated.

At the outset it has to be admitted that when tragic ‘sentinel’ violent incidents occur, prevention strategies may be actively sought, although these may not have previously been

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an identified high priority. Even at such crisis times, considered and *systematic* prevention strategies are preferred over reactive decisions initiated in a precipitous rush to ‘do something’. For example, across member states of the European Union:

‘The balance between security measures, treatment measures, protective measures and preventive measures in many of the existing guidelines ... is often confused, and often the focus of the guidelines is such that genuinely preventive measures are not adequately dealt with, if at all’ (Wynne et al, 1996: 39).

Guidelines for the prevention of violence among health care and community service workers have emphasised repeatedly that a mix of risk control measures will usually be most effective. Similarly, the scientific literature recommends consistently that *pre-planned comprehensive multi-faceted* strategies are needed to reduce the risk of occupational violence. (See Peek-Asa and Howard, 1999: 648; CAL/OSHA, 1998, 1995; OSHA 1998a, 1998b; Schneid, 1998: 24; Reich and Dear, 1996: 399415).

‘Preparedness is the key to eliminating or minimizing workplace violence incidents. Prudent employers should identify the potential risks of workplace violence in the specific operations and prepare beforehand to address specific needs during crisis times. Without a preplan and preparation for a workplace violence incident, when and if a situation arises, management and employees will have virtually no knowledge or ability to properly react to the situation and will simply be “running around like a chicken with its head cut off”, which can result in additional harm or damage’ (Schneid, 1998: 23).

The scientific research emphasises that *organisation-wide* policies and strategies are most effective in preventing occupational violence (Standing and Nicolini, 1997: 47). Further, interventions that use multiple components are more likely to be successful than are single measure efforts (Hoel et al, 2001: 58). Off-the-shelf solutions are not appropriate as site-specific strategies have far greater preventive effects. In ‘best practice’ approaches, the employer and workers collaborate to design-out violence systematically across an organisation.

The risk identification, assessment and control framework has been widely accepted as the most appropriate process for the management and prevention of violence in European health workplaces, and this framework also provides a basis for prevention efforts in Australia (Wynne et al, 1996: 39-40; Greaves, 1994: 227). In the UK, the framework is based on the understanding that:

‘... psychosocial and organisational hazards of work, including violence can be managed by using the same framework and principles of more tangible hazards ... The control cycle involves the identification of problems, intervention, monitoring and feedback. Such a problem solving approach

leads to the development and evaluation of control strategies unique to each organisation' (Wynne et al, 1996: 19. See also TUC, 1999: 22; and the 'control cycle' described in Standing and Nicolini, 1997: 47).

The occupational health and safety (OHS) preventive approach is based on a hierarchy of preferred actions. Elimination of hazards through re-design of the work site is the preferred option, and should also be complimented by substitution with a less hazardous work process. Isolation (for example through installing barriers), and administrative controls (such as training and warning signs) are lowest on the list of control priorities (DETIR, 2000: 13-14). Therefore, when violence prevention interventions are designed, priorities identified in the 'hierarchy of control' should be kept in mind. In OHS, this proactive process may include an assessment of work environment layout, job-specific exposures, a review of past events, and implementation of organisation-wide controls (Wilkinson, 2001: 156). For example, a work environment risk assessment could evaluate the overall design and ambience of waiting areas, lighting in and around buildings and design of interview rooms (Wiener, 1999: 250). Such risk assessment and risk control strategies complement violence training preventive efforts. However, one important variation to the usual OHS risk assessment process is that much occupational violence is likely to remain hidden and unreported (Wiener, 1999: 246; Wynne et al, 1996: 43).

There are many similarities between the OHS 'hierarchy of control' approach and a body of knowledge developed by criminologists that is generally known as 'situational crime prevention', 'safer by design', or 'crime prevention through environmental design' (CPTED) (Jeffery and Zahm, 1993: 336). The underlying premise is that the *opportunities* to commit violence can be reduced, and the 'costs' of violence to the perpetrator can be increased to the point where they exceed any possible 'benefits'. Specific strategies developed under 'situational crime prevention' include 'target hardening' (making violence more difficult to execute), 'improved surveillance' (to more easily identify perpetrators), and better cash/drugs/valuables control (to reduce the 'benefits' from instrumental violence).

In the first part of this paper, the OHS-preferred 'hierarchy of control' *prevention* option based on elimination of hazards through re-design of worksites and fittings is discussed. In part two of the paper, administrative control strategies are reviewed, including violence audits/risk assessments, threat response teams, in-depth training, and a brief consideration of post-event support. Both overall approaches are essential components in a comprehensive violence prevention policy and strategy. (This paper assumes that *prevention* of occupational violence will be prioritised over post-event amelioration.)

'An effective occupational safety and health program of security and safety in medical care facilities and community service includes the following major program elements: (i) worksite analysis, (ii) hazard prevention and control, (iii) engineering controls, (iv) administrative controls, (v) personal

protective devices, (vi) medical management and counseling, (vii) education and training, (viii) recordkeeping and evaluation (CAL/OSHA, 1998: 8).

(Note: depending on requirements, further discussion papers may be produced for the *Taskforce* that focus on ‘internal’ violence or bullying, violence in specific sectors of health care, or on ‘systemic’ forms of violence that arise out of wider social and economic developments.)

PART ONE: PHYSICAL CHANGES TO HEALTH WORKPLACES TO REDUCE THE RISK OF OCCUPATIONAL VIOLENCE

‘Design of premises can play an important part in preventing violence to health-care workers’ (Cembrowicz and Ritter, 1994: 18).

1.1 Crime prevention through environmental design (CPTED)

The ‘crime prevention through environmental design’ (CPTED) and ‘situational crime prevention’ concepts are aimed at enhancing those aspects of building design that discourage a range of criminal activities, including violence (OSHA, 1998a: 4; Warshaw and Messite, 1996: 1003). Risks are minimised through design (or re-design) of a facility and its immediate surroundings in ways that reduce the *opportunity* to commit a violent act. CPTED is primarily accomplished through the work of architects, engineers, builders, landscape gardeners, and those who make purchasing decisions at facilities. The focus of attention is the building itself, the doors and windows, the immediate surroundings, and the way that the placement of fittings and furniture can reduce the risks of victimisation (Crowe and Adams, 1995: 36-39; Jeffery and Zahm, 1993; Clarke, 1992). Alterations during refurbishment may be made to workplace layout, interior and exterior lighting, landscaping, car parks, stairwells, or toilets. Overall, the introduction of CPTED in the retail industry has already been shown to be far more effective than administrative strategies (Peek-Asa et al, 2001: 147). Nevertheless, although CPTED concepts have been evaluated as highly effective in the retail industry, the concept has only recently begun to be applied to health workplaces and evaluation in that context is needed (Peek-Asa et al, 2001: 147; Long Island Coalition, 1996: 21).

CPTED changes are usually long-term permanent features and do not need continuing financial support (Geason and Wilson, 1989: 8). As a result, CPTED-inspired changes are, over time, reported to be far cheaper than are a spectrum of other violence reduction programs (TUC, 1999). Thus the costs of alterations or site refurbishments can be compared against economic losses from acts of violence through work days lost, damaged

property, turnover of staff, not to mention the tragic impact of such violence on individuals (TUC, 1999: 27).

There are some underlying principles which guide CPTED: ‘territoriality’, ‘natural surveillance’ and ‘image’:

- The ‘territoriality’ principle assumes that people can be encouraged to express feelings of ‘ownership’ over the areas near where they work. For example, if staff-only sites are provided, all workers are likely to watch closely this part of their local environment.
- The ‘natural surveillance’ principle refers to the way in which working areas of buildings have been designed so that higher-risk sections can be overlooked and watched by other people going about their normal business (Gearson and Wilson, 1989: 5). For example, pathways to car parks can be designed to be in full view of all passers-by and overlooked by office windows.
- The ‘image’ principle refers to the deterrent impact produced by a building that appears to be ‘well-cared-for’. The belief is that a run-down structure with graffiti may attract criminal activity and offenders; this has sometimes been called the ‘broken windows’ effect (Kennedy, 1993: 117).

Situational crime strategies are usually tailored to specific sites for maximum benefit. Any new buildings or planned re-furbishments are therefore assessed for the extent to which they enhance violence prevention (OSHA, 1998b: 4; Reich and Dear, 1996: 406). Such modifications also usually assist in relieving employee *fears* of occupational violence.

There is clearly a need for much more systematic investigation of the ways in which such principles may be effectively applied in health workplaces. The therapeutic functions and a safer environment should be the basis of effective safety design. There are some key facets to situational crime prevention.

1.2 Target hardening

‘Target hardening’ involves architectural or engineering designs (or re-designs) that control access to specific areas and hence make violence more difficult. Specific strategies can include deadlocks on drug storage areas, reduced face-to-face contact during the supply of pharmaceutical products, wider and higher counters at inquiry desks with raised floor height on the staff side, designated ‘safe’ escape rooms, and even metal detector sensors built into entrances (OSHA, 1998b: 4-5; Reich and Dear, 1996: 406). Staff working areas may also be accessible only via key or card locks (Mayhew, 2000a: 63-64). In the US (where there are different gun laws), some health workers at high-risk have even had bullet-resistant enclosures installed: *‘Protective devices such as bullet resistant glass should be used to provide protection for triage, admitting or other reception areas where employees*

may greet or interact with the public' (CAL/OSHA, 1998: 14; National Security Institute, 1995: 14).

'Target hardening' is most important in areas where hold-ups are likely. For example, an exponential increase in hold-ups has been seen in Australian chemist shops over the past decade.

There are two particular health care sites where hold-up related violence can be expected to increase: (a) in shops and payment areas in health care complexes where money changes hands; and (b) in pharmaceutical storage and dispensing areas. 'Target hardening' of these high-risk areas can be prioritised. For example, poorly secured drug cabinets may be upgraded in case desperate offenders assume drugs are stored under simple locks. Other strategies to reduce the 'attractiveness' of these targets include ensuring the high-risk site or activity is within sight of as many passers by as possible, reduction of the amount of cash and drugs to the minimum, and the installation of deep service counters (OSHA, 1998b: 5; Reich and Dear, 1996: 406). Information on how to prevent hold-ups is widely available, including some draft checklists (see DWH&S, 1997; Mayhew, 2000b). Nevertheless, in high-risk locations, security measures will need to be regularly evaluated to stay ahead of innovative offenders who are usually on the look-out for weak spots.

Electronic access controls and metal detection devices can be installed, although over-reliance on technological measures should be avoided (Witkowski, 1995: 214-215). Similarly, clients being interviewed after leave away from hostels, psychiatric support units, or community homes, may be screened for potential weapons (CAL/OSHA, 1998: 10; Simonowitz, 1996: 281).

Emergency departments are major areas of risk and better screening of clients has been a suggested strategy:

'Metal detection systems such as hand held devices or other systems to identify persons with hidden weapons should be considered. These systems are in use in courts, boards of supervisors ... Some system of identifying persons who are carrying guns, knives, ice picks, screw drivers, etc., may be useful and should be considered' (CAL/OSHA, 1998: 10).

Duress alarms may be fitted at desks and worn by all staff so they can call for assistance if dangerous situations arise. *'An emergency personal alarm system is of the highest priority'* (CAL/OSHA, 1998: 12). The alarms may be silent internally and connected with security or other staff offices (TUC, 1999: 16; Long Island Coalition, 1996: 22). A range of systems are available that link personal alarms with room alarms and centralised computers which can print out details as soon as the alert is triggered (Cembrowicz and Ritter, 1994: 19). While many sites have emergency call numbers placed on all phones, or have

emergency numbers pre-programmed so that alerts can be activated rapidly, systems must not depend solely on the telephone for assistance (Reich and Dear, 1996: 406).

'Alarm systems which rely on the use of telephones, whistles or screams are ineffective and dangerous. A proper system consists of an electronic device which activates an alert to a dangerous situation in two ways, visually and audibly. Such a system identifies the location of the room or action of the worker by means of an alarm sound and a lighted indicator which visually identifies the location. In addition, the alarm should be sounded in a security area or other response team areas which will summon aid' (CAL/OSHA, 1998: 10).

Situational crime prevention principles can be applied in close proximity *outside* a health site to reduce the risk of violence. For example, the number of entries to a site can be minimised, pathways can be designed to make pedestrian and vehicle traffic ways clear, bollards can be used to restrict vehicle access near doorways, bushes planted only in places where muggers are unlikely to want to hide, and narrow dark underpasses or lanes leading to public transport designed-out as these are ideal for assailants to hide in. Another important violence prevention measure is to separate staff car parks from client and visitor parking (CentreLink, 2000: 26).

The congregation or loitering of people in non-preferred places may be discouraged by applying situational crime prevention principles inspired by CPTED (Clarke, 1995). For example, the removal of seating outside shopping precincts has been used to stop youths from gathering in the vicinity (Willis et al, 1999). Conversely, visitors can be encouraged towards appropriate places to gather through provision of comfortable seats, cold water drinking containers, or telephones.

There may, however, be unanticipated consequences from CPTED-based preventive interventions. For example, security grills and doors may trap workers in the room with violent clients (Bowie, 2000: 447). Another criticism of the 'target hardening' approach to violence prevention is that:

'... some security experts are convinced that the greater the degree of protection provided for staff, then the greater the degree of force/violence which offenders are likely to employ during an incident. In security jargon, the harder the target the harder it could be hit' (Reynolds 1994, cited Wynne et al, 1996: 7).

1.3 Improved surveillance and lighting

'Increased visibility' is another cornerstone of situational crime prevention, aimed at discouraging offenders through improving their identification. The underlying belief is that if

the risk of an offender being caught is increased, this may act as a deterrent. Thus careful design of buildings and fittings to increase visibility is a core component of an overall violence prevention strategy. Ideally an activity that creates a risk of attracting potentially violent offenders is placed where many passers-by and other potential witnesses gather. This principle is commonly applied to decisions about where to locate ATM's in Australia. These machines are now placed routinely near high pedestrian or high traffic areas for maximum visibility.

Following the 'increased visibility' principle, the location of drugs cabinets can be carefully selected to ensure that appropriate witnesses are routinely going about their job tasks in the vicinity. If 'high-risk' times have been identified, the number of potential witnesses can be increased around such periods. Similarly, interview rooms can be designed with large shatterproof glass windows so that client/staff interactions are clearly visible to outsiders.

The installation of closed circuit television (CCTV) may also deter violent acts if potential offenders know they are being filmed (NHS, 2000: 2; Warshaw and Messite, 1996: 1003). Video recording also provides evidence if a violent act does occur. Prominently displayed signs that monitoring of the site is continuous may further reduce the risk of violence.

'Video screening of high risk areas or activities may be of value and permits one security guard to visualize a number of high risk areas, both inside and outside the building' (CAL/OSHA, 1998: 10).

However, a weakness with the 'increased visibility' approach is that it assumes that offenders think rationally and pre-plan their violent acts.

Good lighting and high visibility are of increased importance during non-standard working hours and at night, particularly in staff car parks, corridors, and storage areas where there are fewer potential witnesses (Long Island Coalition, 1996: 22; National Security Institute, 1995: 7-8; Cembrowicz and Ritter, 1994: 19). Within buildings, convex mirrors can be installed near dark corners so potential offenders cannot hide from view (CAL/OSHA, 1998: 9). The type and intensity of lighting can also be varied according to site-specific risks (Geason and Wilson, 1989: 16-17). Increased lighting outside a building can both minimise crimes against a person and help protect property (Sarkissian Associates & ACT Government, 2000: 12). However, enhanced street lighting may also attract groups of young people at night time (Painter & Farrington, 1997: 225). It is well recognised that young males are over-represented as perpetrators of violence. However, a form of sodium lighting commonly referred to as 'zit lighting' may accentuate pimples, and an area with these lights installed may be avoided by young males (See Painter and Farrington, 1997; NSW Crime Prevention Division 2000: 9). (Note that many lighting preventive measures have not been scientifically tested and therefore the results are not reliable.)

1.4 Fittings and furniture

Fittings can be designed and arranged to reduce the risk of violence using the underlying principles of 'situational crime prevention'. Waiting areas should be comfortable, decorated in muted colours, spacious, and have a clear path to popular common-use fittings (e.g. water dispensers) so that clients are more relaxed (Mayhew, 2000a: 63; CAL/OSHA, 1998: 9). Ventilation and thermal controls are also important as violence has been reported to occur more frequently at higher temperatures (Chappell and Di Martino, 2000: 115; Flannery et al, 1994: 25). *'... poor air quality, high noise levels, crowding, poor lighting, uncomfortably high or low temperature, and high humidity are factors that are associated with negative affect (unpleasant internal states), increased levels of stress, and aggression'* (Neuman, 1998: 15).

Pastel colour schemes and soft furnishings can easily coexist with CCTV, discreet alarm systems and the fixing of movable objects which could be used as weapons (Whitaker, 1999: 454; National Security Institute, 1995: 7). A balance needs to be maintained between creating a welcoming relaxing environment and process of delivering the service to the client, while ensuring the safety of staff and other clients (Reich and Dear, 1996: 407-9). The balance will need to be worked out by each specific site and according to the degree of risk (WorkCover South Australia, 1998). *"Examination of the workplace and its furnishings and equipment can suggest changes that would lead to greater tranquillity and increased security"* (Warshaw and Messite, 1996: 1003). Detailed and still relevant guidance on how to reduce the risk of violence was provided by Swanton and Webber in 1990.

'Seating is critical in all public contact areas in which any degree of waiting is involved. Public offices, waiting rooms, concourses and similar places in which clients are kept waiting should cater for the seating needs of the elderly, the weak, the disabled and the pregnant, as well as the able-bodied. Important considerations associated with seating are: comfort, hygiene, durability, and positioning. All can influence a client's emotional state and, thus, lead to aggression ... Seating should be either individual or bench type but not designed for two persons only. Dual seating runs a risk of personal space invasion by strangers. Seats should not be concentrated in too small an area for the same reason' (Swanton and Webber, 1990: 14, 15).

Members of the public may have escalated anxiety levels if there are long waiting times so the potential for aggression needs to be managed (Warshaw and Messite, 1996: 1000). Television and reading materials can be provided. If some clients are perceived to be successful 'queue jumpers' aggressive tendencies can escalate (Simonowitz et al, 1997: 313; Greaves, 1994: 238). Therefore clear signs and explanations for any delays in procedures and timing may reduce the risks.

At inquiry desks, the following *counter design* guidelines have been suggested from a number of sources:

- Counters can be designed to be sufficiently *wide* that it is difficult for a client to strike a worker (Swanton and Webber, 1990: 21-24)
- Counters can be built so they are *high* enough to make it difficult for an adult to climb over (Mayhew, 2000a: 63-64)
- The floor height can be raised on the side of the workers so that they are *higher* than clients (Chappell and Di Martino, 2000: 118)
- A horizontal fixture can be built-in along the length of the counter at about 165 cm from the floor on the client side (i.e. just below the top of the head of most clients). This fitting can be decorative, but if made of solid material will probably reduce the risk of downward blows from a client (Swanton and Webber, 1990: 21-24. See also CAL/OSHA, 1998: 9)
- If there are a series of interviewing positions along a counter, and if personal information is to be divulged by clients, vertical partitions may be inserted to improve privacy (Swanton and Webber, 1990: 21-24), and
- Duress alarms may be installed at every counter workstation (Swanton and Webber, 1990: 21-24).

Research reports suggest that *interview rooms* could include the following design guidelines (although the applicability of these suggestions to Australian health care settings requires systematic evaluation):

- Two doors can be fitted to each room and staff members should sit close to one of these (OSHA, 1998a)
- Client access to interview and consulting rooms can be controlled (CAL/OSHA, 1998: 9)
- A duress alarm may be installed in a discreet place in each room (National Security Institute, 1995: 9)
- Windows made of shatterproof glass can be installed so that workers are overlooked while retaining client privacy (CAL/OSHA, 1998: 9)
- Furniture should be comfortable and kept to a minimum, and yet be robust enough not to be thrown (OSHA, 1998: 5)
- Equipment can be minimised, for example, a stapler can be used as a weapon (Mayhew, 2000a: 63-66).

Caple (2000) has described the violence prevention strategies implemented in the reception area of a Melbourne building. These re-furbishments resulted in a significantly reduced risk to staff.

‘The solid walls of the interview rooms were modified to include sections of glass which allowed visual contact with the outside and a greater sense of space. This addressed the perception that the totally enclosed interview rooms were claustrophobic and uncomfortable for the staff, who felt vulnerable when clients became angry ... Design changes to the reception waiting area provided a view to the outside for the clients and an opportunity to have some visual relief for both clients and staff. As an alternative form of stimulus for clients while waiting to see consultants, a TV was also placed in the waiting area ... The actual counter itself was redesigned to be over 1,100 mm high, with a recessed sloping fascia to minimise the risk of clients leaping over the counter surface. The width of the counter was also made in excess of 1,000 mm to reduce the probability of clients reaching across the counter and striking reception staff’ (Caple, 2000: 439-440).

A quite different solution was identified in the accident and emergency department of a hospital in The Netherlands. Here the local risk factors were identified as: annoyance at being kept waiting, dissatisfaction with treatment, intoxication with alcohol and/or illicit drugs, understaffing, no smoking rules, impersonal waiting areas, and small treatment rooms. The most effective prevention measures for this site were found to be an extra nurse on night shift, a silent alarm, and security surveillance (Chappell and Di Martino, 2000: 94; Birman 1999). In Britain, the National Health Service has provided guidance for the reduction of risk in accident and emergency departments that includes both furniture and fittings design elements as well as procedural guidelines (NHS, 1997). This guide includes many of the ‘situational crime prevention’ strategies discussed above, as well as some administrative controls to reduce the risks. Some specific accident and emergency room control strategies are discussed, including for treatment areas, triage, storage areas, and plaster rooms (NHS, 1997).

1.5 Working off-site or in the community

Those who work alone, off-site, in mobile work places, or in community settings will need additional security. For example, Global Positioning Systems (GPS) can be fitted to cars as these are less likely to have ‘black spots’ than are some mobile phone networks in *particular* geographical areas. GPS systems have been implemented for other mobile workers and have been reported to be cost-effective in taxi operations, construction-linked activities, and in other business sectors (see Hanly, 2001). To some extent, lessons may be learnt from the ambulance service as: *‘Back-up systems in terms of traceability and communications were usually much more developed than for other groups of staff’* (Beale et al, 1999: 96). In addition, mobile phones with broad coverage are a priority.

Workers making home visits face a range of risks and may have limited influence over the clients they work with. Substantive research on ways to control the risks faced by home

health care workers have been reported from Canada, and there are lessons for the Australian experience (see Barling et al, 2001; Denton et al, 2000). For example, community health nurses can be issued with mobile phones and personal alarms, and some unions have negotiated the right to work in pairs (Denton et al, 2000: 426). Three different studies have recommended that escorts be provided for health care workers likely to encounter hostile situations, or working at night and in high risk neighbourhoods (National Security Institute, 1995: 16; Fazzino et al, 2000: 47; Denton et al, 2000: 426).

Detailed call-in check systems and pre-planned covert distress messages are essential (NHS, 2000: 4). For example, there should be careful recording of each address to be visited, pre-recording of times of visits (with checks made after each one), and predetermined interval phone-ins. Similar strategies have been recommended for social workers (Bibby, 1994). However, call-in systems are not always popular with staff, particularly if they are used to check-up on productivity (Fazzino et al, 2000: 49). The clothing worn by the staff member should also be appropriate. For example, low heeled and non-slip shoes can be worn in case a quick escape is needed.

PART TWO: ADMINISTRATIVE CONTROLS IN HEALTH WORKPLACES TO REDUCE THE RISK OF OCCUPATIONAL VIOLENCE

Since violence prevention does not exist separately to other parts of effective organisational planning, each CEO needs to ensure that all workplace policies complement each other and that the violence prevention policy and strategy is integrated with the overall strategic plan. There are, however, a number of essential administrative steps that need to be taken to establish a comprehensive violent prevention strategy.

2.1 Zero tolerance policy and risk control strategies

The first step in any comprehensive violence prevention strategy is suggested to be a clear statement from the CEO, or related policy, that identifies commitment to zero tolerance of violence, or related principles (Keith, 2000: 10). Enforcement of this zero tolerance policy (or similar principle) is essential, and penalties have to be seen to be applied to all forms of violence from all types of perpetrators (Wilkinson, 2001: 156; Long Island Coalition, 1996: 17). It has also been recommended that a violence prevention policy should define acceptable behaviours and state the consequences of violation (Wolf, 1998: 59).

Any zero tolerance policy ought to be supported by detailed risk identification, assessment and control procedures that *design out the violence risks* in health workplaces as far as is

possible (Estreich, 1999: 11; Greaves, 1994: 231). The strategies and procedures need to be written down in some detail, including, for example, risk minimisation procedures for employees working late at night (Long Island Coalition, 1996: 23). Examples of the detailed minutiae that can be included in draft policies and procedures have been provided elsewhere (see Long Island Coalition, 1996; Mayhew, 2000a). United States authorities also argue that risk control strategies must include ‘universal precautions’ so that new staff, casuals and changeover shift staff are warned of potentially violent clients and situations (CAL/OSHA, 1998: 11; Reich and Dear, 1996: 399-415). Nevertheless, strategies that assist the development of an organisation culture within which violence is minimised is an area which may need to be further researched.

In their occupational violence risk management guides, violence prevention experts in Australia, the United Kingdom, and the United States have recommended a range of steps that can be developed in violence prevention strategies:

- Establishment of violence prevention and emergency response teams (Centrelink, 2000: 14; Coffey and Hanley, 2000; Standing and Nicolini, 1997: 50, 56-57; Capozzoli and McVey, 1996: 113-116; Long Island Coalition, 1996: 18-26; Simonowitz, 1996: 283-287)
- Regular violence vulnerability audits (also known as risk assessments) (Centrelink, 2000: 14; Coffey and Hanley, 2000; Estreich, 1999: 10; Standing and Nicolini, 1997: 50,56-57; Long Island Coalition, 1996: 18-26; Simonowitz, 1996: 283-287; Cembrowicz and Ritter, 1994: 18)
- Worksite security analysis, including control of access and egress to premises (Schneid, 1998: 24; Long Island Coalition, 1996: 18-26; Reich and Dear, 1996: 403-409; Simonowitz, 1996: 283-287)
- Correction of all unsafe sites and work processes eg. locks, lighting, alarms, CCTV, or the provision of mobile phones if working alone (Peek-Asa et al, 2001: 146; Centrelink, 2000: 14; CAL/OSHA, 1998; Long Island Coalition, 1996: 18-26; Reich and Dear, 1996: 403-409; Simonowitz, 1996: 283-287)
- Investigation and assessment of all threats (Peek-Asa et al, 2001: 146; Centrelink, 2000: 14; Schneid, 1998: 24; Standing and Nicolini, 1997: 50, 56-57; Reich and Dear, 1996: 403-409)
- A system to communicate with workers (Peek-Asa et al, 2001: 146; Centrelink, 2000: 14; Standing and Nicolini, 1997: 50, 56-57; Capozzoli and McVey, 1996: 113-116; Long Island Coalition, 1996: 18-26; National Security Institute, 1995: 5, 10)
- Increased security awareness with training of all employees, supervisors and managers (Peek-Asa et al, 2001: 146; Coffey and Hanley, 2000; Estreich, 1999: 10; Reich and Dear, 1996: 403-409; Simonowitz, 1996: 283-287; Cembrowicz and Ritter, 1994: 18)
- Security personnel in high-risk areas (CAL/OSHA, 1998)

- Development of relationships with other key agencies eg police, including reviews of premises by crime prevention officers (Centrelink, 2000: 14; CAL/OSHA, 1998; Schneid, 1998: 24; Capozzoli and McVey, 1996: 113-116; Reich and Dear, 1996: 403-409; Cembrowicz and Ritter, 1994: 18)
- Updated restraint policy and guidelines for violent patients (CAL/OSHA, 1998; Reich and Dear, 1996: 403-409)
- Clear instructions to patients and their relatives/friends who are aggressive to staff (Reich and Dear, 1996: 403-409); and
- Maintenance testing of security measures (Reich and Dear, 1996: 403-409; National Security Institute, 1995: 5, 10).

If the risks cannot be eliminated, then the organisation of work can be reconfigured to minimise the risks, for example, two staff members can be rostered to work together (Mayhew, 2000a; Chappell and Di Martino, 2000; WCBBC, 1995: 4; Flannery et al, 1994: 29; Lamplugh 1994: 6-7; Seger 1993).

2.2 Violence audits / risk assessment

There should be regular objective assessments of the probability of violent incidents, identification of factors that contribute to the risks, and evaluation of existing violence control measures (WorkSafe Western Australia 1999; Greaves, 1994: 233). Wishful thinking ('it can't happen with these clients') should be avoided.

*'An audit should look not only at **what** is done, but also **how** things are done; it is here where problems often arise... An audit will raise both awareness and expectations among employees, and it is therefore important that action on its findings does in fact follow'* (Bibby, 1995: 40).

During the audit, the whole worksite should be inspected methodically. The team may include senior management, operations, security, OHS, legal and outside 'experts' when appropriate (Reich and Dear, 1996: 404). Ideally, local crime prevention police officers with expertise in violence prevention will participate in some shopfloor audits. Checklists may be used to rank risk components (eg. building features, type of client), and assess whether the risk factors have been reduced or eliminated to the maximum extent feasible. Conditions that put workers at risk may include: doors that are propped open for fresh air, or poorly lit outdoors areas favoured by smokers (Simonowitz et al, 1997: 312). Some draft checklists have been developed that can assist with the audit process in health worksites, although these should be modified for specific sites (CAL/OSHA, 1995; Mayhew, 2000a, 2000b). The violence vulnerability audit may also include local community violence data as part of the risk assessment process. Local police may be able to assist with this information, as well as providing warnings about patterns of 'hold-ups' in a given area

(Simonowitz et al, 1997: 312). After conclusion of the audit, the findings can be benchmarked against previous violence audits and evaluated.

'... a series of questions [can be asked] about where, when, and how the worker performs the job. The review helps to identify hazards such as insufficient lighting in the parking lot, exit doors that permit easy entry into a facility, transaction areas that fail to provide sufficient protection from the public, or a predictable time and location that large amounts of money are transacted' (Cabral, 1996: 305).

A *verbal* audit may also be conducted at regular intervals to find out if violent incidents are not being reported for fear of victimisation or because it may reflect badly on victims. It is important that independent and *trusted* people do this verbal stocktake, for example union representatives or OHS committee members. Verbal audits may identify what really happens, as opposed to official written records. Maintenance of anonymity is essential. Employers can also assess whether journeys to or from work are safe for staff working afternoon and night shifts, and adopt procedures to reduce the risks, for example, car park security can be improved.

In sum, regular *systematic* violence audits/risk assessments provide a baseline for violence prevention planning (TUC, 1999: 3).

2.3 Data collection and examination

A core requirement in risk assessment is access to good data on which to base decisions. Unfortunately, occupational violence recording systems are often subject to a number of weaknesses. For example, databases tend to be poor at recording psychological sequelae; their sensitivity depends on the definition of violence used; under-reporting is very common; and they tend not to include successful intervention strategies (Mayhew and Chappell, 2001; Wynne et al, 1996: 45). However if data systems are supplemented by intermittent anonymous surveys, the risk identification and control process is likely to be far more effective.

'... records also need to include a description of the environment, location or any contributing factors, corrective measures identified, including building design, or other measures needed' (CAL/OSHA, 1998: 18).

It is important that *all* violent incidents be recorded and examined, including threats, bullying from other workers, 'near miss' events, workers' compensation claims, property damage insurance claims, as well as security incidents (National Security Institute, 1995: 7). Past incident records need to be grouped, analysed, and the patterns identified. These can be separated into:

- Severity categories (major, minor, and near miss events)
- Incidence in particular unit/task categories (Mayhew, 2000a)
- Client perpetrator characteristics (for example, medical condition, history of aggression, and type of service being provided) (Greaves, 1994: 239)
- Possible causes/contributing factors, for example, delays in service provision (Mayhew, 2000a)
- Location categories (for example, home visit, accident and emergency, geriatric ward) (Reich and Dear, 1996: 405-406)
- Other risk factors such as time of day/night (National Security Institute, 1995: 7; Greaves, 1994: 239); and
- Identified persons affected, for example, numbers etc.

If high-risk times, clients, or places are identified, interventions can be targeted tightly. For example, a recent Australian study reported that the first five days after admission to an acute psychiatric care setting was a high risk period for aggression (Delaney et al, 2001). Quite different patterns may be identified in acute surgical wards, among clients with different conditions, or in particular geographical localities.

2.4 High-risk clients and staffing ratios

Regular objective assessment of client/staff interactions may disclose features that increase levels of anxiety and contribute to violence risks (Warshaw and Messite, 1996: 1003). For example, a high-risk situation that has been identified in the US is when members of opposing street gangs are treated simultaneously in accident and emergency rooms (Simonowitz et al, 1997: 308). If such situations arise in Australian health care sites, immediate changes in staffing levels may be essential to control the risks.

‘Changing work practices to limit dissatisfaction from clients is also extremely important. The most influential factors for reducing client aggression are speedy and efficient service, which can be stimulated by various strategies such as staff rotation for particularly demanding jobs, rostering more staff at peak periods, designing how staff move between different working areas, tailoring client flow systems to suit needs and resources, and keeping waiting times to a minimum ...’ (Chappell and Di Martino, 2000: 116-117).

If staff numbers are limited, control of escalating aggression may be more difficult. For example, staff may have to see known high-risk clients alone, rather than two employees being present during the delivery of services. In such cases, the most appropriate prevention strategy may be to review staffing levels and service delivery patterns. In a workplace

where the prevention of violence has been prioritised, there can be sufficient flexibility in staffing levels to adjust numbers in higher-risk situations (Greaves, 1994: 239).

‘Staffing of units where aggressive behavior may be expected should be such that there is always an adequate, safe staff/patient ratio. The provision of reserve or emergency teams should be utilized to prevent staff members from being left with inadequate staff’ (National Security Institute, 1995: 11).

Clear messages must be given to clients about non-violence, and at times the zero tolerance or related policy will need to be enforced, including among clients and their visitors who are affected by alcohol and/or drugs. One recommendation from WorkCover New South Wales is that on admission a ‘code of behaviour’ is made clear to all patients. This code can include curfew, visitors, drug and alcohol use, security and general conduct expectations (WorkCover New South Wales 1996: 7). Warnings to aggressive clients about the possibility of charges being laid may need to be repeated.

Access to some specific areas may need to be restricted to staff members. Therefore the compulsory wearing of identification badges with up-to-date photographs should link in with an overall violence prevention strategy (CAL/OSHA, 1998: 14; Schneid, 1998: 33). The administrative procedures may also require compliance with a sign-in pass system (eg in paediatric wards), establishment of a list of ‘restricted’ visitors which is held at reception and security checkpoints, control of access to pharmacy facilities, and discouragement of staff carrying items that can be used as weapons against them (OSHA, 1998a). Administrative controls may also ensure ‘float’ staff, new personnel, and changeover shifts are pre-warned of potentially violent activities and behaviours amongst clients and/or their visitors. In sum, violence prevention is ideally integrated into overall human resource management planning.

2.5 Violence threat response team

A detailed plan for emergencies should be developed and include immediate assistance to staff at risk, security measures, evacuation routes, emergency notification numbers, chain of command with delineated responsibilities, methods of communication, site security, evacuation alarms, and people available for crisis debriefing (Schneid, 1998: 27; Reich and Dear, 1996: 402).

‘It is necessary to establish on-call teams, reserve or emergency teams of staff who may provide services in hospitals such as, responding to emergencies, transportation or escort services ...’ (CAL/OSHA, 1998: 11).

2.6 Information to staff

There is a range of information that may be provided about occupational violence. First, the organisational policy and strategies need to be publicised to raise awareness, and provide concise information on the prevention of violence. Disseminated guidelines can identify 'best practice' and involve a range of related agencies in their development and distribution (Wynne et al, 1996: 41). For example, in the United Kingdom, UNISON has developed a model agreement on tackling violence in the health system which spells out strategies to control the risks (UNISON, 1996; Chappell and Di Martino, 2000: 100-101). Regular reminders about violence prevention strategies can also be published at accessible places. For example, those reminders can be attached to pay slips, or placed on notice boards in wards and in canteen areas. Strategies may be developed to ensure those who are on-site for only a short period of time (e.g. casuals) are aware of violence protocols. Information may also be provided to employees about what they can do if they have concerns, that identifies communication channels, and which warns staff about prior incident patterns (Wilkinson, 2001: 157).

2.7 Training

Regular training and re-training is an essential component in any comprehensive violence reduction strategy. It has been recommended that staff training should aim to raise awareness about the risks of violence, enhance violence prevention knowledge (eg CPTED), increase recognition of early warning signs of aggressive behaviour, and to improve the aggression diffusion skills of workers (Wilkinson, 2001: 158; Wiener, 1999: 245; Flannery et al, 1994: 29). *'Every worker and manager should be prepared to react appropriately in a crisis'* (Cabral, 1996: 306). Skilling up of the workforce to focus on prevention rather than reactive approaches is of core importance.

'Training in risk management should aim to make full risk assessment, using all relevant evidence, a routine part of clinical practice for all "front-line" staff – those in contact with high-risk patients at high-risk times, including both community and ward staff' (Appleby, 2000: 8).

Essential components recommended for inclusion in training programs include 'universal precautions' against violence, the violence response action plan, diffusion and control of escalating aggressive behaviour, risk factors, legal rights, respectful treatment of clients in difficult situations, sensitivity to multicultural diversity, progressive behaviour control methods, the organisational violence strategy, and appropriate behaviour to other employees who may be aggressive (Mayhew, 2000a: 71-72; OSHA, 1998a: 7; Flannery, 1996: 63; Reich and Dear, 1996: 411; Simonowitz, 1996: 288, 313; Cembrowicz and Ritter, 1994: 22-39). Hands-on training with the on-site security hardware should also be provided (Long Island Coalition, 1996: 25). Staff can be encouraged to contribute to the

design and content of violence training programs, and follow-up evaluation and feedback is essential (Whitaker, 1999: 455; Cabral, 1996: 313; Reich and Dear, 1996: 403).

Verbal and non-verbal skills enhancement are probably essential components. The concept of de-escalation – otherwise known as defusion or ‘talkdown’ – refers to a set of verbal and non-verbal responses which may reduce the risk of violence (Paterson et al, 1997). These ‘talkdown’ skills can be practised by all health workers so that they learn to respond to client aggressiveness by being quietly assertive, can express facts calmly and quietly, avoid expressing strong opinions, and are aware of how to take firm appropriate action. The warning signs of aggression and violence have been well documented elsewhere and will not be re-visited here (See Chappell and Di Martino, 2000; Mayhew, 2000a). It is sufficient to note that any training program should include role plays to ensure staff feel competent to deal with intimidating behaviour (USOPM, 1998: 17-20). A detailed discussion of health care workers training needs has been provided by Bibby (1995: 124-128), while the particular training needs of community workers have been addressed by Beale et al (1999).

Security officers also need to be trained and informed about site-specific risks and appropriate responses (Warshaw and Messite, 1996: 1004). For example, the transfer of a hostile or agitated client (or one who has relatives, friends or enemies who pose a security risk) is a high-risk task and a security presence may be a useful deterrent (CAL/OSHA, 1998: 14).

‘Security guards trained in principles of human behavior and aggression ... reduces the threatening or aggressive behavior demonstrated by patients, relatives, friends, or those seeking drugs’ (CAL/OSHA, 1998: 14).

Nightshift, rotating shiftwork, tasks requiring intense concentration, unremitting intensive work, and unpredictable workloads can all lead to fatigue and a diminished ability to recognise and identify early warning signs of impending violence. Workers experiencing such conditions may also fail to cope competently with a violent situation (Greaves, 1994: 239). Staff need to be informed about these basic biological factors which can affect their performance and increase the risk.

Finally, it is important to caution that using training as the primary violence prevention strategy is unlikely to lead to successful outcomes. One recent study even found that : *‘Training in violence prevention also was not correlated with a lower risk for assault’* (Little, 1999: 27). Training can only be really useful in reducing the risks of occupational violence if it is embedded in a management structure which has addressed prevention comprehensively, and if sufficient and appropriate resources have been provided (CAL/OSHA, 1998: 5; Cembrowicz and Ritter, 1994: 21). Further, if violence prevention

training is restricted to specific sections of the workforce, untrained workers in other units may be exposed to a heightened risk of violence.

2.8 Legal remedies

The criminal law has been seen historically as a primary bulwark against overt acts of violence. More recently some member states of the European Community have passed legislation which seeks to produce a much broader approach, including providing protection from harassment and related 'improper conduct' (see European Parliament, 2001; Chappell and Di Martino, 2000: 86, 93-94). The Netherlands and Sweden have introduced legislation that relates specifically to violence at work, while Belgium has legislated against harassment. Ireland, the UK, Denmark, France and Finland have all incorporated violence within obligations imposed under their OHS legal frameworks, as well as under the respective criminal codes (Wynne et al, 1996: 6, 25-26). However, criminal provisions are less able to deal effectively with, let alone prevent, more subtle forms of violence such as covert bullying from other staff members, or veiled threats from clients.

In Australia, the OHS authorities have not embraced an explicit legislative approach to managing occupational violence. Only in Western Australia has a Code of Practice been passed, although a comprehensive code is under development in Victoria. Barron (2000) has also produced guidance for individual victims of occupational violence through the assistance of the Victorian WorkCover Authority. Most of the State and Territory OHS authorities rely on provisions to provide a safe worksite and a safe process of conducting work as enshrined within the 'duty of care' in each OHS Act. Common law 'duty of care' provisions also provide victims of violence with an avenue for redress. Other forms of redress include a recently enacted Northern Territory Public Order and Anti-Social Conduct Act (2001). This new law allows police greater powers if an officer *'has a reasonable apprehension that a person has engaged in, is engaging in or is about to engage in anti-social conduct'* in or near a public place, including a workplace (July 2001: 5). Apprehended Violence Orders (AVO's) may also be considered for clients who have threatened staff repeatedly.

2.9 Post-incident support

Post-incident support is important as victims are usually thrown off-balance by these abnormal violent events and are at risk of physical and emotional illness (Wykes 1994: 5). Sensitive and appropriate post-incident support may reduce the impact (Cook et al, 1999; Paterson et al, 1999; Raphael, 1991). Any person with an injury or adverse symptom following exposure to violence should be encouraged to consult a physician of his/her choice, or be referred to an Employee Assistance Program or other supports (WCBBC, 1995: 6). If the victim is unable to perform his/her former duties as a result of the incident(s),

a change of duties/location should be arranged if at all possible, without prejudice to future prospects. In some countries, 'Assaulted Staff Action Programs' (ASAP) have been implemented which involve trauma-crisis counselling or critical incident debriefing and follow-up activities (Hoel et al, 2001: 59). However, overall, the evaluation data are equivocal. In one recent study it was reported that the implementation of an ASAP team resulted in a sharp decline in levels of assault. This unexpected decline in violence on health care sites was reported to be due to the associated risk management strategies which alerted workers to early warning signs of violence (Flannery, 2000: 231). Nevertheless, irrespective of how competent, comprehensive and effective post-event support provisions are, prevention of occupational violence is preferred.

2.10 Evaluation

Finally, any violence prevention strategies introduced in a workplace need to be subjected to independent evaluation. Did the strategies work? If not, the search for new preventive interventions can begin – and these too need to be evaluated. The evaluation process may include a review of findings from violence audits, assessment of the available violence data reporting system, analysis of staff verbal reports, scrutiny of minutes from OHS and security meetings, analysis of trends, and objective assessment of new interventions aimed at the reduction of occupational violence (OSHA, 1998a: 8; Reich and Dear, 1996: 413; National Security Institute, 1995: 20). It is important that these evaluations are *systematic* and cover facilities, fittings, work processes, administrative procedures, staffing, training, and resourcing.

There is a particular need for more systematic research to assess the effectiveness of violence prevention strategies at health workplaces. This research should address the variable risks on different health sites, evaluate the effectiveness of a range of violence prevention strategies among various groups of health workers, and assess the implications of violence on the workforce.

3. CONCLUSION

In this paper we have contended that a *multi-faceted* and *organisation-wide* approach has to be adopted in the prevention of occupational violence on health care facilities. We have also argued that the well-known OHS 'hierarchy of control' approach to managing hazards is consistent with the criminological construct of 'situational crime prevention'. As with other OHS problems, the risk identification, assessment, and control process has been found to be an effective preventive strategy, as well as being a legal requirement under OHS statutes.

The highest priority may be given to interventions that ‘design out’ the risks through utilising ‘situational crime prevention’ principles. While in the short-term ‘situational crime prevention’ interventions may appear costly, in the longer term such strategies may well be far cheaper and have much greater preventive benefits. Any comprehensive violence prevention strategy also requires a range of organisational and administrative elements to help control the risks of occupational violence. These organisational elements include an explicit commitment to a violence-free environment, a far-reaching risk identification process that incorporates regular violence audits, comprehensive violence reporting systems, formal identification of high-risk clients and situations, the introduction of appropriate interventions accompanied by formal evaluation procedures, post-incident supports, and an effective regulatory underpinning. Thus the prevention of occupational violence requires the implementation of multi-faceted strategies that are tailored to site-specific risks.

Formal and *systematic* evaluation of these interventions is essential, with attention being paid to reduction of the risks at particular health care sites and among specific groups of ‘at risk’ health workers. Such evaluations should review the effectiveness of both the ‘situational crime prevention’ interventions and the administrative control strategies; both of which are essential components in any comprehensive violence prevention strategy.

References

- Appleby, L. (2000), ‘Safer services: conclusions from the report of the National Confidential Inquiry’, *Advances in Psychiatric Treatment*, vol. 6 (1): 5-15.
- Barling, J. Rogers, A. and Kelloway, E. (2001), ‘Behind closed doors: in-home workers’ experience of sexual harassment and workplace violence’, *Journal of Occupational Health Psychology*, vol. 6 (3): 255-269.
- Barron, O. (2000), *Workplace Violence: Your Rights, What To Do, and Where to Go For Help!*, a joint publication by Job Watch and the Victorian WorkCover Authority, Melbourne.
- Beale, D. Leather, P. Cox, T. and Fletcher, B. (1999), ‘Managing violence and aggression towards NHS staff working in the community’, *Nursing Times Research*, vol. 4 (2): 87-99.
- Bibby, P. (1995), *Personal Safety for Health Care Workers*, report commissioned by the Suzy Lamplugh Trust, UK.
- Bibby, P. (1994), *Personal Safety for Social Workers*, report commissioned by the Suzy Lamplugh Trust, UK.
- Birman, J. (1999), ‘Covert violence in nursing’, *Australian National Safety Journal*, vol. 7 (2): 17-21.
- Bowie, V. (2000), ‘Preventing and managing violence by intruders in the workplace: a situational, organisational and societal response’, *The Journal of Occupational Health and Safety – Australia and New Zealand*, vol. 16 (5): 443-448.
- Cabral, R. (1996), ‘Policies for developing workplace violence prevention strategies’, *Occupational Medicine: State of the Art Reviews*, vol. 11 (2): 303-314.

- CAL/OSHA(1998), *Guidelines for Security and Safety of Health Care and Community Service Workers*, Division of Occupational Safety and Health, Department of Industrial Relations, San Francisco. See www.dir.ca.gov/DOSH/dosh_publications/hcworker.html
- CAL/OSHA (1995), *Injury and Illness Prevention Model Program for Workplace Security*, Division of Occupational Safety and Health, Department of Industrial Relations, San Francisco.
- Caple, D. (2000), 'Reduction of occupational violence through architectural controls and work procedures', *The Journal of Occupational Health and Safety – Australia and New Zealand*, vol. 16 (5): 437-441.
- Capozzoli, T. and McVey, R. (1996), *Managing Violence in the Workplace*, St. Lucie Press, Delray Beach, Florida.
- Cembrowicz, S. and Ritter, S. (1994), 'Attacks on doctors and nurses', in J. Shepherd (ed), *Violence in Health Care: A Practical Guide to Coping with Violence and Caring for Victims*, Oxford University Press, United Kingdom: 13-41.
- Centrelink (2000), *Applying Best Practice Principles to the Prevention and Management of Customer Aggression: A Risk Management Guide for Customer Service Providers*, a joint Centrelink and Comcare publication, Commonwealth of Australia, Canberra.
- Chappell, D. and Di Martino, V. (2000), *Violence at Work*, second edition, International Labour Office, Geneva.
- Clarke, R. (1995), 'Situational crime prevention', in Tonry, M. and Farrington, D. (eds), *Building a Safer Society: Strategic Approaches to Crime Prevention*, University of Chicago Press, Chicago: 91-150.
- Clarke, R. (ed.) (1992), *Situational Crime Prevention: Successful Case Studies*, Harrow and Heston, New York.
- Coffey, M. and Hanley, J. (2000), 'Population-based strategy for preventing violence in the health care workplace', *Nurse Advocate*. See www.nurseadvocate.org/coffey.html
- Cook, B. David, F. and Grant, A. (1999), *Victims' Needs, Victims' Rights: Policies and Programs for Victims of Crime in Australia*, Research and Public Policy series no. 19, Australian Institute of Criminology, Canberra.
- Crowe, T. and Adams, J. (1995), 'CPTED: applying principles to offices and large sites', *Security Australia*, vol. 15 (2): 36-39.
- Delaney, J. Cleary, M. Jordan, R. and Horsfall, J. (2001), 'An exploratory investigation into the nursing management of aggression in acute psychiatric settings', *Journal of Psychiatric and Mental Health Nursing*, vol. 8: 77-84.
- Denton, M. Zeytinoglu, I. and Webb, S. (2000), 'Work-related violence and the OHS of home health care workers', *The Journal of Occupational Health and Safety – Australia and New Zealand*, vol. 16 (5): 419-427.
- Department of Employment, Training and Industrial Relations (DETIR) (2000), *Workplace Health and Safety Risk Management Advisory Standard 2000*, Division of Workplace Health and Safety, Queensland Government, Brisbane.
- Division of Workplace Health and Safety (DWH&S) (1997), *Personal Security in the Retail Industry: Managing the Risk of Cash-Related Assault*, Department of Training and Industrial Relations, Brisbane.

- Estreich, P. (1999), 'The management of violence in the workplace – a best practice approach', unpublished paper presented at seminar at University of Sydney 25/8/99, Health and Community Service Team, WorkCover NSW, Sydney.
- European Parliament (2001), *Report on Harassment at the Workplace*, Committee on Employment and Social Affairs, final document no. A5-0283/2001. See www.eurofound.ie/working/news230701.htm
- Fazzone, P. Barloon, L. McConnell, S. and Chitty, J. (2000), 'Personal safety, violence, and home health', *Public Health Nursing*, vol. 17 (1): 43-52.
- Flannery, R. (2000), 'Post-incident crisis intervention: a risk management strategy for preventing workplace violence', *Stress Medicine*, vol. 16: 229-232.
- Flannery, R. (1996), 'Violence in the workplace, 1970-1995: a review of the literature', *Aggression and Violent Behaviour*, vol. 1 (1): 57-68.
- Flannery, R. Hanson, M. Penk, W. (1994), 'Risk factors for psychiatric inpatient assaults on staff', *The Journal of Mental Health Administration*, vol. 21 (1): 24-31.
- Geason, S. and Wilson, P. (1989), *Designing Out Crime: Crime Prevention Through Environmental Design*, Australian Institute of Criminology, Canberra.
- Greaves, A. (1994), 'Organizational approaches to the prevention and management of violence', in Wykes, T. (ed), *Violence and Health Care Professionals*, Chapman and Hall, London.
- Hanly, E. (2001), 'Where are your employees: implementing occupational health and safety in a mobile workforce', *Occupational Health & Safety Magazine*, August/September, CCH Australia, Sydney: 22-23
- Hoel, H. Sparks, K. and Cooper, C. (2001), *The Cost of Violence/Stress At Work and the Benefits of a Violence/Stress-Free Working Environment*, University of Manchester Institute of Science and Technology, report commissioned by the International Labour Organisation, Geneva.
- Jeffery, R. and Zahm, D. (1993), 'Crime prevention through environmental design, opportunity theory, and rational choice models', in Clarke, R. and Felson, M. (eds.), *Routine Activity and Rational Choice: Advances in Criminological Theory*, Vol. 5, Transaction publishers, New Jersey.
- Keith, N. (2000), 'Violence: bullying's big brother', *Accident Prevention*, vol. 47 (3): 9-10.
- Kennedy, D. (1993), 'Architectural concerns regarding security and premises liability', *Journal of Architectural Planning and Research*, vol. 10 (2): 105-29.
- Lamplugh, S. (1994), *Violence and Aggression at Work: Reducing the Risks*, Guidance for Employers on Principles, Policy and Practice, Suzy Lamplugh Trust, The National Charity for Personal Safety, London.
- Little, L. (1999), 'Risk factors for assaults on nursing staff', *Journal of Nursing Administration*, vol. 29 (12): 22-29.
- Long Island Coalition for Workplace Violence Awareness and Prevention (1996), *Workplace Violence Awareness and Prevention: an Information and Instructional Package for use by Employers and Employees*, Long Island Coalition, United States. See www.osha-slc.gov/workplace_violence/wrkplaceviolence.intro.html
- Mayhew, C. (2000a), *Preventing Client-Initiated Violence - A Practical Handbook*, Research and Public Policy Series, no. 30, Australian Institute of Criminology, Canberra.

- Mayhew, C. (2000b), *Violence in the Workplace-Preventing Armed Robbery: A Practical Handbook*, Research and Public Policy Series no. 33, Australian Institute of Criminology, Canberra.
- Mayhew, C. and Chappell, D. (2001), 'Occupational violence: types, reporting patterns and variations between health sectors', *Working Paper Series no. 139*, School of Industrial Relations and Organisational Behaviour and the Industrial Relations Research Centre, paper written for the *Taskforce on the Prevention and Management of Violence in the Health Workplace*, University of New South Wales, Sydney.
- National Health Service (NHS) (2000), *We Don't Have To Take This Resource Pack*, NHS Zero Tolerance Zone, NHS, UK. See www.nhs.uk/zerotolerance
- National Health Service (NHS) (1997), *Effective Management of Security in A&E*, Corporate Affairs Division, NHS, UK.
- National Security Institute (1995), *Guidelines for Workplace Violence Prevention Programs for Health Care Workers in Institutional and Community Settings*, National Security Institute, USA. See <http://nsi.org/library/work/violenc1.html>
- Neuman, J. (1998), 'Workplace violence and workplace aggression: evidence concerning specific forms, potential causes, and preferred targets', *Journal of Management*, vol. 24 (3): 391-419.
- Northern Territory Parliament (2001), *Public Order and Anti-Social Conduct Act* (serial no. 335).
- NSW Health (2001a), *Mental Health for Emergency Departments: A Reference Guide* (colloquially known as the 'red' book), NSW Health, Sydney.
- NSW Health (2001b), *Management of Adults with Severe Behavioural Disturbances: Guidelines for Clinicians in NSW* (colloquially known as the 'green' book), NSW Health, Sydney.
- Occupational Safety and Health Administration (OSHA), (1998a), *Guidelines for Preventing Workplace Violence for Health Care and Social Service Workers*, US Department of Labor, Washington DC.
- Occupational Safety and Health Administration (OSHA) (1998b), *Recommendation For Workplace Violence Prevention Programs in Late-Night Retail Establishments*, United States Department of Labor, Occupational Safety and Health Administration, Washington DC.
- Painter, K. and Farrington, D.P. (1997), 'The crime reducing effect of improved street lighting: The Dudley Project' in Clarke, R.V. (ed.) *Situational Crime Prevention Successful Case Studies (2nd ed)*, Harrow and Heston, New York.
- Paterson, B. Leadbetter, D. and Bowie, V. (1999), 'Supporting nursing staff exposed to violence at work', *International Journal of Nursing Studies*, vol. 36: 479-486.
- Paterson, B. Leadbetter, D. and McComish, A. (1997), 'De-escalation in the management of aggression and violence', *Nursing Times*, vol. 93 (36): 368-375.
- Peek-Asa, C. and Howard, J. (1999), 'Workplace-violence investigations by the California Division of Occupational Safety and Health, 1993-1996', *Journal of Occupational and Environmental Medicine*, vol. 41 (8): 647-653.

- Peek-Asa, C. Runyan, C. and Zwerling, C. (2001), 'The role of surveillance and evaluation research in the reduction of violence against workers', *American Journal of Preventive Medicine*, vol. 20 (2): 141-148.
- Raphael, B. (1991), 'Psychiatric aspects of preventative intervention with victims of violence', in Chappell, D. Grabosky, P. and Strang, H. (eds), *Australian Violence: Contemporary Perspectives*, Australian Institute of Criminology, Canberra: 241-262.
- Reich, R. and Dear, J. (1996), 'Guidelines for preventing workplace violence for health care and social service workers', in G. Vandenbos and E. Bulatao (eds), *Violence on the Job: Identifying Risks and Developing Solutions*, American Psychological Association, Washington DC: 399-415.
- Sarkissian Associates Planners & ACT Planning and Land Management (2000), *Australian Capital Territory Crime Prevention and Urban Design Resource Manual*, ACT Department of Urban Services, Canberra.
- Schneid, T. (1998), *Occupational Health Guide to Violence in the Workplace*, Lewis Publishers, New York.
- Seger, K. (1993), 'Violence in the workplace: an assessment of the problem based on responses from 32 large corporations', *Security Journal*, vol. 4 (3): 139-149.
- Simonowitz, J. Rigdon, J. and Mannings, J. (1997), 'Workplace violence: prevention efforts by the occupational health nurse', *AAOHN Journal*, Vol. 45 (6): 305-316.
- Simonowitz, J. (1996), 'Health care workers and workplace violence', *Occupational Medicine: State of The Art Reviews*, vol. 11 (2): 277-291.
- Standing Committee on Law and Justice 2000, *Crime Prevention Through Social Support* (second report) Parliamentary paper no. 437.
- Standing, H. and Nicolini, D. (1997), *Review of Workplace-Related Violence*, report by The Tavistock Institute for the Health and Safety Executive, London.
- Swanton, B. and Webber, D. (1990), *Protecting Counter & Interviewing Staff From Client Aggression*, Australian Institute of Criminology, Canberra.
- Trades Union Congress (TUC) (1999), *Protect Us From Harm: Preventing Violence at Work*, a TUC health and safety report by Julia Gallagher, TUC Health and Safety Unit, United Kingdom.
- UNISON (1996), *Bullying at Work: Guidance for Safety Representatives and Members on Bullying at Work and How to Prevent It*, UNISON, London.
- United States Office of Personnel Management (USOPM) (1998), *Dealing With Workplace Violence: A Guide For Agency Planners*, United States Office of Personnel Management, USA. See www.opm.gov/workplac/index.htm
- Warshaw, L. and Messite, J. (1996), 'Workplace violence: preventive and interventive strategies', *Journal of Occupational and Environmental Medicine*, vol. 38 (10): 993-1005.
- Whitaker, S. (1999), 'Violence at work', in Sadhra, S. and Rampal, K. (eds.), *Occupational Health Risk Assessment and Management*, Blackwell Science, United Kingdom.
- Wiener, R. (1999), 'Training on violence and aggression', in Kemshall, H. and Pritchard, J. (eds.), *Good Practice in Working With Violence*, Jessica Kingsley, London: 241-262.
- Wilkinson, C. (2001), 'Violence prevention at work: a business perspective', *American Journal of Preventive Medicine*, vol. 20 (2): 155-160.

- Willis, A. Beck, A. and Gill, M. (1999), 'Violent victimization of staff in the retail sector', *Journal of Security Administration*, vol. 22 (2): 23-30.
- Witkowski, M. (1995), 'Workplace violence: problems and preventions suggested by CAL/OSHA workplace security guidelines', *Security Journal*, vol. 6: 213-18.
- Wolf, K. (1998), 'Implementing a workplace violence prevention and threat management system', in Wilkinson, C. (ed.), *Violence in the Workplace: Preventing, Assessing and Managing Threats at Work*, Government Institutes, Rockville, Maryland, United States: 53-69.
- WorkCover NSW (1996), *Preventing Violence in the Accommodation Services of the Social and Community Services Industry*, WorkCover Corporation of New South Wales, Sydney.
- WorkCover South Australia (1998), *Managing the Risks of Violence at Work in the Home and Community Care Industry*, WorkCover Corporation, Adelaide.
- Workers' Compensation Board of British Columbia (WCBBC) (1995), *Take Care: How To Develop and Implement a Workplace Violence Program: A Guide For Small Business*, Workers' Compensation Board of British Columbia, Vancouver.
- WorkSafe Western Australia (1999), *Code of Practice Workplace Violence*, WorkSafe Western Australia, Perth.
- Wykes, T. (ed) (1994), *Violence and Health Care Professionals*, Chapman and Hall, London.
- Wynne, R. Clarkin, N. Cox, T. and Griffiths, A. (1996), *Guidance on the Prevention of Violence at Work*, European Commission, Brussels. See: www.wrc-research.ie.