

Condensed version of research findings taken from:

An Investigation into the Quality of Emergency Lockdown Procedures in New Zealand Secondary Schools

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Overview

In 1992, the New Zealand government introduced the Health and Safety in Employment Act. The aim of which was to replace numerous different pieces of legislation with one encompassing legislative framework that was to apply to all workplaces in New Zealand. The legislation was reviewed in 2001 and recommendations from this review lead to a number of amendments being made to the act, known as the 2002 amendments.

As educational establishments are a major employer in New Zealand, they are obligated to comply with the Health and Safety in Employment (Act 1992) and the Amendments (2002).

In order to assist schools in this process the Ministry of Education produced Health and Safety in Schools: Guidelines to the Health and Safety in Employment Act and The Health and Safety Code of Practice for State and State Integrated Schools.

The requirements for schools to comply with this legislation are made explicitly clear within the National Administration Guidelines:

NAG 5 Each board of trustees is also required to:

- 1) provide a safe physical and emotional environment for students;
- 2) promote healthy food and nutrition for all students; and
- 3) comply in full with any legislation currently in force or that may be developed to ensure the safety of students and employees.

Introduction

On July the 4th 2010, the Northern Advocate newspaper that covers stories in Northland, New Zealand, displayed the headline: “Local schools to re-address ‘lockdown’ procedures” after a man who was being pursued by police burst into a classroom at a high school in Whangarei, stating that he wanted to tell a young teacher and her staff about love. Police were obviously concerned that the man who could have been armed and dangerous found it so easy to enter a school classroom.

In recent times there has been a number of incidents that have highlighted the need for schools to take safety and security very seriously. In March 2009 a teacher at Avondale College, Auckland, New Zealand was stabbed by one of his students while teaching a class (New Zealand Herald, 2009). News of this attack shocked the nation, everyone was aware of shooting and stabbings at schools in other countries, but few could believe that the incident happened in New Zealand. The news that the offender was not a New Zealand national but rather an international student from Korea, somehow made it more palatable for the public to accept.

Just over a year later in May 2010 a teacher was stabbed by a 13 year old student at Te Puke High School, Bay of Plenty, New Zealand. (New Zealand Herald, 2010) The attack once again shocked the nation especially as this time the protagonist was a New Zealand citizen.

These two high profile cases give credence to the widely held belief that schools in New Zealand are becoming more violent and dangerous places. New Zealand has yet to experience a mass casualty school violence incident such as those at Columbine in the United States of America in 1999 or Dunblane in Scotland in 1996. Research into these and other similar events has shown that the two most prevalent factors found amongst the instigators of these mass casualty events was that they had been subject to overt bullying and that they had access to firearms

Data from the Office of the Commissioner for Children in 2008, (Carol-Lind, 2009) shows that New Zealand schools presently have amongst the highest levels of school bullying in the world. This is supported by a 2009 report from the Ministry of Education that revealed that violence and dangerous behaviour

is on the increase in New Zealand schools. The Small Arms Survey (2007) Showed that New Zealand had a gun ownership rate of 22.4 guns per 100 people which rates New Zealand as the 19th most armed population in the world. These two factors highlight that a mass casualty school shooting occurring in New Zealand may not be as unlikely as many would like to perceive.

This highlights the need for schools to have specific protocols which are aimed at minimising harm experienced under such circumstances.

Not only would it be good practice for schools to develop such procedures but they are required to:

HSE Act (1992)

Section 6: Every employer shall take all practicable steps to ensure the safety of employees while at work and in particular shall take all practicable steps to...e) develop procedures for dealing with emergencies that may arise while employees are at work.

Section 15: Every employer shall take all practicable steps to ensure that no action or inaction of any employee while at work harms any other person.

The protocol favoured by most educational establishments is the lockdown, where all individuals on the school site take refuge in locked areas until the event is over.

Methodology

A comprehensive literature review was completed into the effects, causes and responses to mass casualty school events that have occurred throughout the world. The information ascertained was used to develop common threads around which a best practice template could be devised. The essential elements were categorised into five areas:

- Communication
- Actions within classroom
- Actions in non classroom areas
- Staff training
- Drills

A questionnaire was then developed which would present the researcher with an indication of how close the emergency lockdown response procedures presently employed by New Zealand secondary schools follow the elements of best practice developed from the information studied in the literature review.

The Principals of 266 secondary schools were invited to participate in the online survey, during the final few weeks of term two 2011.

Sixty nine schools responded positively to the request giving a response rate of 25.9% slightly over the expected response rate.

Findings

The review of literature clearly highlighted the need for schools to develop effective and comprehensive emergency procedures as a way to meet the legislative requirements placed upon them by the Health and Safety in Employment Act (1992), The Buildings Act (2004) and the Ministry of Education National Administrative Goals. The introduction of the lockdown emergency response is the most effective and widely used method of isolating students and staff from the dangers of an intruder. It was therefore troubling that 14% of respondents to the questionnaire indicated that their school did not have an emergency lockdown response procedure. If the schools that participated in the survey are deemed to be representative of all New Zealand secondary schools, it would indicate that 46 secondary schools do not have such procedures and are therefore unlikely to be meeting their legislative requirements. Perhaps more importantly the schools are putting their staff and students in an unnecessarily high risk situation.

The majority, 86% of schools that participated in the survey indicated that they possessed an emergency lockdown response procedure and in 95% of cases these procedures were developed internally by the school.

The work by Fast and Fanelli (2003) shows that having possession of a procedure does not ensure its quality or effectiveness and indicated that there may be a tendency for such procedures to become little more than a “shelf documents”. Such documents do not ensure that a school is meeting its legislative obligations or that the procedures are effective.

In order for a procedure to meet these obligations it is desirable that the five elements of best practice that were developed from the review of literature are included:

The issue of communicating the activation of a lockdown quickly and clearly is of vital importance if the target profile is to be rapidly minimised, guidelines from overseas notably Michigan and Washington State recommend that plain language be used, in order to minimise confusion This practice is not reflected

in the results from the survey with only 18% of respondents utilising a verbal signal. The overwhelming majority of schools at 77% utilised a special ring or sound. The use of such a signal has been acceptable practice in the past, however the tendency is to move away from this and also from the use of code words, which have been found to lead to confusion and delay the securing of the building. The reliance upon a sound rather than a voice may be due to not all schools having intercom systems that can be used to communicate to all areas. The fire alarm system must be able to be clearly heard in all areas so it is the obvious if not ideal solution to signal the whole school rapidly.

Many of the respondents indicated a significant deviation in their procedures from that demonstrated by best practice, 77% of schools have only one activation point and 75% of schools have less than four staff authorised to initiate a lockdown, This conflicts with the work by: Blauvelts (1999) who stated that all staff must have access to quick and foolproof communications systems during a lockdown, and Fast and Fanelli (2003) who maintain that reliance upon a hierarchical chain of command is often ineffective in an emergency situation.

Once a lockdown has been initiated communication becomes a challenging issue, having staff and students dispersed throughout the school locked in perhaps excess of 100 locations, the findings of the survey showed that there to be a strong preference for the use of telephone, either mobile or landline to communicate during the lockdown. The “hide and hope’ principle detailed by Buerger (2010) that underlines the philosophy of the lockdown, would urge verbal communication to be kept to an absolute minimum as the sound of voices will undermine the “hide” element of the defensive action. The reliance upon mobile telephones as the recommended means of communication during a lockdown highlights a clear contradiction in procedure. Of the twenty three schools that recommended the use of mobile phone for communicating during a lockdown, nine instructed staff and students to switch off mobile phones once a lockdown had been initiated. These contradictory instructions undermine the purpose of having emergency procedures in the first place and can potentially escalate an emergency situation, by placing additional stress

on an individual already in an unfamiliar and challenging situation. This is confirmed by the work of Slaiku (1990) who believed that an untrained human in a crisis can be detrimental to survival.

The recommended actions of those individuals in a classroom during a lockdown are perhaps the simplest element of a lockdown procedure to implement. Classrooms vary little between schools and there should be no need for each school to develop their own specific protocols. Common actions such as, lock doors and windows, students to move away from windows and doors, remaining silent and switching off electrical devices, being common to all classrooms. The questionnaire requested respondents to indicate how many of the eleven identified in classroom actions were included in the lockdown response documentation, 37% of respondents claimed that their document contained eight or more of the appropriate in classroom actions. The research by Graham et al. (2005) that reviewed teachers responses to a lockdown drill noted that 50% of staff failed to lock the classroom door upon a lockdown being signalled and 67% failed to switch of the lights. In order to combat these oversights it is suggested that copies of procedures are available so that teachers can refer to a checklist and therefore be more effective in the management of the classroom under lockdown

The availability of these procedures in classrooms is not widespread across secondary schools in New Zealand, with 51% of respondents maintaining that copies of the procedure were not available in classrooms.

The areas of a school outside of a classroom present special and unique issues when implementing a lockdown as centrally developed actions cannot be directly introduced into schools, as is the case with inside a classroom response. The design and geography of schools varies greatly and a significant amount of planning is required in order to make the response effective. The research focussed upon two different occasions, the first during lesson times when students are not in a classroom, for example a bathroom visit, or a physical education lesson outside.

66% of respondents stated that the procedure contained instructions on what students should do if they are out of class and 79% responded that there were

specific instructions detailing what the response should be in physical education lessons.

The second occasion is those times when lessons are not taking place such as interval and lunchtimes, assemblies and the times immediately before and after school. The results showed that 60% of schools had plans for intervals and lunchtimes and 49% for assemblies. The before and after school responses were lacking in 60% and 61% of schools respectively.

The results perhaps reflect the difficulty experienced by schools in developing such procedures, due to the complexity of these occasions, the lack of assistance and expertise available.

The overwhelming importance of the use of drills to refine and improve the effectiveness of the emergency lockdown response protocol is reflected throughout the review of literature. Effective and realistic drills clearly highlight inefficient elements of procedure and increase familiarity of unusual situations and ensure that the procedure is more than just a “shelf document”. 44% of respondents stated that their school had never conducted a lockdown drill and 56% stated that they were held at least annually. This is somewhat behind the requirement in Michigan where they are required to be held at least twice a year. It also doesn't appear favourable when compared to the evacuation drill which is required to be completed in New Zealand schools at least twice per year.

The review process of the drill is a vital element of the cycle of continual improvement, and it is a recommendation that the review process should be formal in that it is written and particular steps are followed as this allows for consistency to be maintained (Graham et al. 2005). 55% of schools stated that they did not have a formal process for reviewing lockdown drills and 42% maintained they had. All of these respondents also confirmed that the process was followed.

Training is the final element outlined through the review of literature that is crucial to the development of effective emergency lockdown response procedures, the questionnaire asked the respondent if they had received any

training in how to develop emergency procedures, 61% of respondent stated that they had not received any training in this area.

Training is also important amongst the general staff, the questionnaire asked if staff had received training in five areas that would be relevant to improving the performance of a lockdown response, these areas were; crisis management, risk identification, decision making, dealing with threatening individuals and methods of communication, in each of these cases the most popular response was that some staff had received training in some areas.

It is becoming apparent from the research that New Zealand secondary schools are generally not following the elements of best practice developed from research and guidelines from overseas. However it must be noted that two of the participating schools indicated through their responses that their procedures were comprehensive, well drilled and regularly reviewed. If the schools that participated in the survey are deemed to be representative of New Zealand secondary schools, these results would indicate that 4% or 13 schools have comprehensive effective procedures and 14 % or 46 schools do not have any such procedures. The question must surely be asked if some schools have developed effective and comprehensive procedures why haven't others?

These legislative obligations are monitored by the Department of Labour and Education Review Office respectively. The Education Review Office has the responsibility for monitoring compliance issues within schools, being required to review all secondary schools at least every three years.(Education Review Office 2010) Sections 6 and 15 of the Health and Safety in Employment Act have remained unchanged since 1992 and the National Administrative Guidelines have remained unaltered since 2004. Therefore the Education Review Office cycle should ensure that all schools have been reviewed numerous times since these pieces of legislation were enacted. It would be hoped that the total omission of an emergency lockdown response would have been noted and rectified during these reviews. The potential oversight of this in up to 14% of schools suggests that the Education Review Office review

process may not be as comprehensive as it could be, or alternatively there are some accuracy issues with responses gained from this questionnaire. One of strongest themes to be drawn out through the review of literature was the importance of the use of practice drills and formal reviews to ensure that procedures are familiar and effective. The incidence of the contradictory instructions detailed previously indicates that many of these written procedures are seldom put into practice. As that contradiction in particular would become very obvious very quickly during a drill, and a formal review would ensure that the issue relating to the use of mobile phones would be clarified and the procedure amended.

The initial paragraph of this section stated that there were two schools that appeared to possess comprehensive and well considered emergency lockdown responses. These two schools were also the only schools that responded to the question about the number of activation points with the same answer; “anywhere where there is a fire alarm activation point”. This type of system is not common in New Zealand schools and has only recently been introduced, so it could be possible that both of these schools are newly built as installing such a system in an existing building would be extremely costly. If this is the case and they are both recently built new schools, then it would help to explain why their procedures are so much more comprehensive than other schools as new systems have had to be developed and solutions can be designed into the building.

It is apparent that the quality and effectiveness of emergency lockdown procedures in New Zealand secondary schools varies greatly. The indication is that approximately 4% of schools have procedures that closely reflect best practice, whilst 96% are at various distances from this aspiration, with 14% not even possessing a procedure.

It would be unlikely that many of the 96% of schools could strongly claim that they are meeting their legislative obligations with regard to the Health and Safety in Employment Act (1992) and the National Administrative Guidelines. This is an unacceptable situation and the reasons behind this occurring need to be addressed. Numerous factors have been alluded to already:

The lack of specific mention of the requirement for schools to have an emergency lockdown response procedure, unlike the evacuation procedure which is not only clearly specified in the buildings act, but it also specifies the need to have the procedure “signed off” by a fire safety officer annually and that drills need to be held twice a year and the fire service needs to be informed of these, and ensure that these procedures are of an acceptable quality. This may help to explain why the evacuation is given much greater priority by schools.

It is also much easier to implement an evacuation than a lockdown, moving people to a common area makes communication and control much easier and the hierarchy of control that exists in a school can operate effectively. In a lockdown communication is much more challenging, people feel isolated and the danger is probably much less familiar.

The Education Review Office appear reluctant to focus upon evaluating the effectiveness or existence of legislatively compliant documents and procedures during their review process. If this is the case then the impression that such things are not mandatory could lead to a reluctance to prioritise such procedures in a busy school environment. This issue does seem peculiar and further investigation into the methodology of the Education Review Office with regard to compliance issues would be an interesting addition to this work.

It has been made clear that there is a distinct lack of expertise amongst school staff into the development of emergency procedures, with 60% of those that responded stating that they had received no training in the development of emergency procedures, yet 95% of schools stated that they had developed their own procedures. This combined with a lack of guidance in Ministry of Education documentation is a significant contributor to the low quality of procedures.

The final factor considered is the perception gap highlighted by Ropeik (2011) and the associated apparent unwillingness to accept that an event requiring a lockdown could happen at their school. These events do happen and no one ever expects them, the relatively high gun ownership rates and the worrying level of bullying in New Zealand schools are significant causal factors in mass casualty events that have occurred overseas.

Implementing and developing an effective emergency response lockdown procedure is a complicated process that requires a degree of specialist knowledge, however being prepared for such an event far outweighs the cost of an event occurring.

This research has given a clear overview that the current situation with regard to emergency response lockdown procedures in New Zealand secondary schools. It has also clearly highlighted a number of shortcomings within the research; the tendency of respondents to not specify "other" when answering questions has led to a gap in the knowledge around recommended methods of communication between various locations of the school during a lockdown. The use of a questionnaire in this instance was justified, however this has resulted in a lack of primary evidence being collected. Through ensuring anonymity of those schools completing the questionnaire, it was hoped that the respondents would answer honestly and truthfully. It is hoped that this is the case but the lack of primary evidence (copies of policies/observations etc.) do not allow this to be verified.

Considering the results and the potential shortcomings of the research it is recommended that further study is completed into this area. The collection of primary data from a number of schools and observations of these procedures in action would be an excellent way in which to verify the data collected from the questionnaire. It would also be an opportunity for schools to share elements of good practice.

Conclusions

It appears from this research that while the majority of schools possess an emergency response lockdown procedure, most do not reflect elements of best practice developed in the aftermath of mass casualty events that have occurred overseas.

The amount of guidance provided by the Ministry of Education that is available to schools in developing these systems is minimal, and the review process currently utilised by the Education Review Office does not clearly highlight inadequacies present in the area of safety management.

The occurrence of high profile school shootings in the USA has led to changes within legislation that require schools to have comprehensive emergency response plans which are to include lockdown procedure. Making schools legally obliged to have such procedures has ensured that state education boards have invested in developing guidelines to assist schools in developing these responses.

New Zealand has yet to experience a mass casualty school shooting event and there are presently no specific legislative requirements placed upon New Zealand schools to introduce lockdown procedures. These factors appear to have resulted in the development of effective emergency procedures to be a low priority within the Ministry of Education, and school management teams within New Zealand.