

KEEP YOUR SCHOOL IN BUSINESS

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UPDATES & ADDITIONAL SECTIONS:

www.wmarsontaskforce.gov.uk/kysib

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LEGAL

The information contained in this Handbook is for general guidance on matters of fire safety only. The application and impact of laws can vary widely based on the specific facts involved and you are advised to seek further specialist advice if you are at all uncertain as to their application in relation to your business. Given the changing nature of laws, rules and regulations, and the inherent hazards of electronic communication, there may be delays, omissions or inaccuracies in the information contained in this Handbook.

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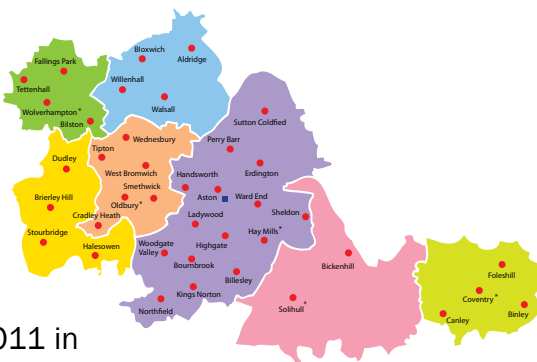
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BEST PRACTICE IN THE WEST MIDLANDS

Did you know ...?

... that the number of school fires in the West Midlands has dropped from 91 in 2001/2 to 56 in 2009/10.

Arson fires in schools has dropped dramatically over the same time period, from 53 in 2001/2 to 10 in 2008/9 and 15 in 2009/10. Please note that the early statistics indicate an increase in accidental and deliberate school fires in 2010/2011 in the West Midlands area.



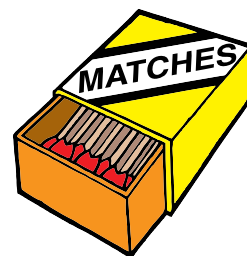
The proportion of school fires that were arson has also reduced:

In 2000/01 there were 91 school fires of which 58% were arson; whereas in 2009/10 there were 56 school fires of which 27% were arson.

In the two year period 1st April 2008 to 31st March 2010, were 92 reported fires in schools and nurseries.

25 (27%) of those fires were started deliberately – by acts of arson.

The most common sources of ignition were matches and naked lights (44%) and lighters (20%).



The number of accidental fires in schools has remained at a similar level over the last nine years, in 2001/2 there were 38 and in 2009/10 there were 41.

The proportion of school fires that were accidental has increased:

In 2000/01 there were 91 school fires of which 42% were arson; whereas in 2009/10 there were 56 school fires of which 73% were accidental.

In the two year period 1st April 2008 to 31st March 2010, fires classified as accidental accounted for 73% of school fires attended in the West Midlands Fire Service area.

The peak month for accidental fires was November, with 19% of all accidental fires.

27% of those accidental fires were on a Friday.

90% of the accidental fires occurred between 07:00 – 18:00, with a peak between 09:00 – 13:00 (52%).



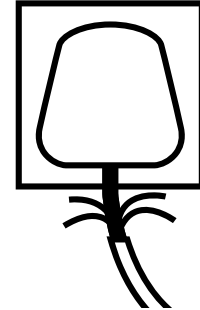
BEST PRACTICE IN THE WEST MIDLANDS

13% of the accidental school fires occur between 07:00 and 09:00.



Our data shows that the top four rooms/areas where accidental fires occur are a classroom (22%) and kitchen (15%) and a corridor (12%).

The most common source of ignition in accidental fires is 'wiring, cabling and plugs' (21%) and 'luminous discharge /fluorescent lights' (15%). These are most commonly faulty fluorescent tube light fittings.



The above information has been provided for you to consider when updating your mandatory Fire Risk Assessment and allow you to prioritise and understand your risks.

BEST PRACTICE GOOD PRACTICE

By fulfilling some or all of these categories your school will be a safe place to work. It will also be more likely to remain operating as an educational establishment.

i. Fire Routines

- ▶ Are Fire Routine notices clearly displayed throughout the school detailing what to do in the event of fire?
- ▶ Do you have an adequate emergency/evacuation plan and have you carried out a fire drill?
- ▶ Fire Wardens should monitor fire safety arrangements and prevent fires occurring.

ii. Emergency Exits and Routes

- ▶ In the event of a fire can every one turn their back on the fire and evacuate to a place of safety?
- ▶ Are door fastenings on exit routes and final exits easily openable?
- ▶ Are all fire resisting structures being maintained i.e. staircase, doors, etc?
- ▶ Are all the self closing mechanisms on fire-resisting doors working correctly?
- ▶ Are all exit routes and exits adequately signed, illuminated and unobstructed?
- ▶ Has the emergency lighting system been tested?

iii. Firefighting Equipment

- ▶ Are there sufficient extinguishers and hose reels and have they been tested/ serviced and can they be easily seen?
- ▶ Are they free from obstruction?
- ▶ Have sufficient staff been trained in the use of firefighting equipment?

iv. Fire Detection / Fire Alarm Equipment

- ▶ Does the fire alarm work and has it been tested?
- ▶ Is the fire alarm system maintained regularly by a competent person?
- ▶ Does everyone know how to operate the fire alarm and the action they should take upon hearing it?

v. Fire Evacuation

Fire warning systems in the 'workplace' range from electrically operated automatic fire alarm systems, incorporating the latest technology, to hand gongs, or even the human voice. However, even the most advanced fire warning system is useless if the occupants of the building fail to respond when it actuates.



A clear policy on fire evacuation for your premises should already be in place. Check that all of the following points have been considered. If you haven't formulated such a strategy yet, start today... before it's too late!

BEST PRACTICE STAFF TRAINING

Irrespective of whichever system is employed, there is a legal obligation placed on employers by the Management of Health and Safety at Work Regulations 1999, to ensure that their staff receive adequate training in what action is to be taken, if they discover a fire, or the fire alarm sounds indicating that fire has broken out. Special provisions may be necessary, where disabled people work or resort. For example, visual indicators may need to be incorporated into the alarm system if any employees/students have hearing impairments.

This training should include pre-planned evacuation of staff/students to a place of safety in the event of fire. Members of the public who resort in your premises should also be taken into account when planning for evacuation.

A fire drill should be carried out at least once in every period of 12 months, or more frequently if you have a significant turnover of staff. All staff should receive training; don't forget night workers, early morning cleaners, security staff, etc.

If casualties are to be avoided in a fire situation, it is essential that staff/students know what to do, where to go and how to get there. All too often, when the fire alarm sounds, it is ignored by occupants who assume it is a 'false alarm' and an inconvenience.

If your alarm sounds...ACT ON IT!

When formulating your fire routine/evacuation procedure, take into account the following advice...

- i) Fire Evacuation Assembly Points should not be used for Bomb Alerts.
Fire Evacuation Assembly Points will usually be closer to the building than one would wish to be if an explosion was to occur.
- ii) Bomb Alert Evacuation Assembly Points need to consider shielding from blast and blast debris.

Identifying an Assembly Point

One or more assembly areas should be identified for use by staff/students and visitors, in the event of a fire situation.

Using Assembly Points will ensure:

- ▶ The safety of 'evacuees'.
- ▶ That a roll call or head count can be undertaken to establish whether all persons are accounted for.
- ▶ That easy access to the premises is maintained for on-coming fire engines.
- ▶ That a point of contact is maintained between the Fire Service and fire marshals, should information be required for rescue or firefighting purposes.
- ▶ Information in respect of the current situation can be relayed to all those affected.

Organisation at the Assembly Point



Regular fire drills will ensure organised evacuation procedures are carried out when necessary.



The most important aspects of any evacuation is time, safety and a well organised assembly and roll call.

Consider the location of Assembly Points carefully, for example:-

- ▶ Too near the building:- falling glass, roof tiles, or other debris may injure those evacuated, smoke may become a major hazard, 'evacuees' may obstruct firefighting operations.
- ▶ Too far from the building:- busy roads may need to be crossed, exposing 'evacuees' to dangers from traffic, dialogue between the Fire Service and building occupants will be difficult, delays may ensue in reporting 'missing persons' to the Senior Fire Officer.

Bear in mind that those evacuated may not be allowed to re-enter the premises for some time, depending on the severity of the fire. Think about the weather:- gale force winds? baking sun? torrential rain? heavy snow? (It may be prudent to explore the possibility of making reciprocal arrangements for temporary shelter or accommodation of staff with neighbouring premises, in the event of an evacuation during adverse weather conditions).

A 'Fire Marshal' (and at least one deputy), should be nominated for each assembly point. Where more than one assembly area has been designated, a 'Senior Fire Marshal' should be nominated to take overall responsibility.

The 'Fire Marshal's duties may include:-

- ▶ Ensuring a head count or roll call is undertaken of assembled staff/students
- ▶ Informing the Fire Service when all persons are accounted for, or persons are reported 'missing'.
- ▶ Feedback information from the Fire Service to those at the assembly point.
- ▶ Ensure staff and visitors evacuated from the premises remain at the assembly point until permission to re-enter the building has been given by the Senior Fire Officer present.
- ▶ Monitor the safety of those assembled, (especially with regard to traffic) and take action if necessary.

Pitfalls



Wrong Practice
Exit routes must be maintained, clear of obstructions and not used for any other purpose, like this makeshift 'store room'.



Wrong Practice
Fire doors will prevent the spread of fire but are rendered useless if wedged open or even worse, propped open with a fire extinguisher.



Wrong Practice
Poor housekeeping and lack of common sense leaves this area an 'accident waiting to happen'.

For ease of identification, 'Fire Marshals' should wear distinctive clothing, a high visibility jerkin for instance. Alternatively, 'lollipop' type marker boards may be utilised to pinpoint their location. For communication purposes, it may be necessary to provide additional equipment for 'Marshals', e.g. loudhailers, portable radios, torches, clipboards, etc. The use of whistles should be avoided, as this may cause confusion amongst firefighters, who use them to convey a warning of dangerous conditions on the 'fireground'.

Action to be Taken in the Event of a Fire

- ▶ Any person discovering a fire should raise the alarm immediately, by whatever means are employed. In many cases, this will mean operating the nearest break glass call point of an electrical fire alarm system. However, in smaller schools, the means for giving warning of fire may be by word of mouth, gong, airhorn, etc.
- ▶ Only tackle the fire with a suitable fire extinguisher or hose reel, if you consider it safe to do so, are confident in the use of firefighting equipment and have received adequate training in its use. Only tackle fires which are of a minor nature. **DO NOT TAKE RISKS!** Remember....always raise the alarm before tackling a fire! (Take into account the Fire Risk Assessment for the premises – it may identify areas or materials, which are considered to be high risk if involved in fire. In such circumstances, it may be prudent to leave the firefighting to trained professionals).
- ▶ A responsible person, e.g. receptionist, etc. should be nominated to call the Fire Service using the '999' system in the event of fire, or the fire alarm actuating. We would rather receive multiple calls to a fire than none at all. Some premises may have an automatic fire alarm system, linked to the Fire Service via a permanently staffed call centre. This will ensure the Fire Service are called automatically if the fire alarm operates in the premises. However, it will do no harm to back up this facility with a '999' call in the event of a fire.
- ▶ In the event of an electrical fire alarm system actuating, the sounders should not be silenced, (or the system re-set), until confirmation is received that all persons have left the building and permission has been given to 'clear' the system by the Senior Fire Officer present.
- ▶ The Fire Service should be called to every outbreak, or suspected outbreak of fire, no matter how small (irrespective of whether or not the fire has been extinguished). The '999' system should always be used, even if the fire appears to have self-extinguished.

BEST PRACTICE EVACUATION PROCEDURE

Evacuation Procedure on Hearing the Fire Alarm

- ▶ All persons should leave the building immediately by the nearest available exit and proceed to the designated assembly area, without stopping to collect personal belongings, but closing doors* behind them**.
- ▶ Fire Marshals or Section Heads should ensure that people in their zone or area leave the building promptly. If safe to do so, each floor or level, should be 'swept' by Marshals as they leave the premises, checking the toilets on their way out. Special provisions may be necessary for any disabled members of staff/students or visitors present at the time of alarm.
- ▶ As lift shafts can become smoke logged in a fire, it is important that you do not use lifts to make your escape. Using a lift could leave you stranded in a life-threatening environment if there is an electrical power failure due to fire damage. (See also 'Evacuation of People with Disabilities').
- ▶ A roll call or head count should be carried out at the assembly area to establish whether all persons are accounted for. If any people are reported 'missing', this information should be passed to a Fire Service Officer without delay.
- ▶ Under no circumstances should search parties be organised to search the premises for missing persons. This task, if necessary, will be carried out by Fire Service personnel wearing breathing apparatus.
- ▶ The Senior Fire Officer will indicate when it is safe to re-occupy the premises. No-one should re-enter the building until this person's express permission has been given.



*Closing doors on the way out will help to;

- ▶ Keep escape routes free from smoke, to ensure safe egress for building occupants
- ▶ Limit the spread of smoke, heat and flame throughout other parts of the building, thereby keeping fire damage to a minimum
- ▶ Restrict fire growth by limiting the supply of fresh air (oxygen)
- ▶ Assist firefighters when locating the seat of fire



Close all doors

The picture shows how effective a closed door can be in preventing fire spread and severe smoke damage.

BEST PRACTICE EVACUATION PROCEDURE

Evacuation of People with Disabilities

Think carefully how you can assist disabled persons to a place of safety should the need for evacuation arise. A sufficient number of volunteer helpers should be trained in the use of specialised equipment for this purpose, e.g. 'evacuation chairs', or how to carry people down the stairs safely. Remember their safe evacuation from your premises is your responsibility, not the fire brigade's.

Purpose designed evacuation lifts are suitable for use by disabled persons in the event of fire, providing the design of such a lift meets the criteria described in BS5588: Fire Precautions in the design and construction of buildings: Part 8: Code of Practice for Means of Escape for Disabled People. However, where a lift does not meet this criteria, disabled persons should be assisted from upper floors to a place of safety outside by trained personnel, via the protected stairways. It is not acceptable to 'abandon' disabled people in protected stairways, or lobbies on upper floors, to await rescue by the Fire Service.

However, it is normal practice where disabled people work on upper floors of buildings, to provide a safe 'refuge' within a fire-protected area. Such areas should be clearly marked and allow sufficient space for wheelchair users to await assistance, whilst maintaining unhindered egress for the able-bodied. In order to avoid congestion on the staircase, disabled persons should be assisted or guided out of the premises by their helpers after the main 'body' of occupants has passed.

In the event of fire, others who may experience difficulty in evacuating the premises unaided could include; women in the late stages of pregnancy, people with temporary impairments such as legs in plaster, people with sensory impairments, or those with a hearing disability.

Without exception, disabled members of staff and students should take part in fire drills. Not only will this ensure they are familiar with the fire routine, any problems with evacuation can also be identified and addressed.



BEST PRACTICE EVACUATION PROCEDURE

Additional Information

If the alarm is actuated by a smoke detector and no visible signs of smoke are present, no attempt should be made to prevent the attendance of the Fire Service, if mobilised automatically. The Senior Fire Officer will be responsible for establishing whether or not a fire is in progress. Past experience has shown that following an actuation of the fire alarm system by automatic smoke detection, people normally assume a false alarm of fire has been given if there are no other indications of a fire in progress. In some instances however, fire may have broken out in ceiling voids or ducting. Electrical wiring or fittings have been known to overheat, producing non-visible smoke, detectable only by a smoke sensor.

It will not be necessary to evacuate the premises each time the fire alarm is tested. Staff/students should be pre-warned before testing the fire alarm, or, the alarm should be tested at the same time each week, for example, every Monday morning at 09.30 hours. However, staff should be advised that if the fire alarm sounds for longer than the normal test duration, e.g. 30 seconds, they should treat the alarm as a genuine fire.

Caution should be exercised when testing the fire alarm system, or undertaking fire evacuation drills, to ensure the Fire Service are not called out unnecessarily.

Remember to record in the appropriate log book:

- ▶ Staff training and fire drills
- ▶ **ALL** actuations of the fire alarm system, including; tests, system faults, malicious or accidental operation and genuine fires.
- ▶ Time and date when system faults rectified.

Where a fire officer has ordered the evacuation of a premises due to fire, any person refusing to leave the building is committing an offence (obstructing a Fire Officer in the course of his duty), contrary to the Fire and Rescue Services Act 2004 and may be liable to prosecution.

BEST PRACTICE ARSON PREVENTION

Arson Prevention

How serious is the problem

Statistics from insurers and fire protection organisations estimate that about 50% of school fires can be attributed to arson. However, this is not the full picture as fire brigades are not always summoned to fires, particularly where they have self-extinguished, or are put out by staff. In addition to the financial costs, many fires will result in consequential loss, such as the destruction of irreplaceable records, teaching notes, course work for examinations and in some instances, the need to find alternative, temporary accommodation.

Who are the arsonists?

Fires in schools are most likely to be started by pupils, ex-pupils or their friends, or others with knowledge of the school, perhaps living in close proximity. Of those individuals prosecuted, cautioned, or found guilty of arson, approximately 50% are aged between ten and sixteen. Don't imagine they will all be boys, girls are also capable of committing arson.

When and how do they strike?

Until recently, the majority of school fires occurred outside normal school hours. However, current trends show that fires during the school day are now far exceeding those occurring out of hours. Most fires will be started using combustibles found within the school grounds – rubbish from bins for example. It is rare for accelerants, such as petrol, to be used unless left on site.



This picture shows evidence of burning from a naked flame (probably a cigarette lighter). Such marks are conducive with opportunist vandalism, which may lead to a serious arson attempt.

Check your school buildings regularly for these warning signs.

Secure by Design

www.securedbydesign.com

Secured by Design is owned by the Association of Chief Police Officers (ACPO) and has the backing of the Home Office. The scheme is also endorsed by the **Suzy Lamplugh Trust**, the Association of British Insurers (ABI) and a host of regulatory bodies.

To ensure quality in crime prevention please visit the official UK police flagship www.securebydesign.com which lists over 350 companies whose products have been awarded the 'Police Preferred Specification' status including:

- ▶ Access Control
- ▶ Anti-climbing
- ▶ Forensic Marking
- ▶ Locks
- ▶ Laminated Glass
- ▶ Perimeter Security

BEST PRACTICE BEWARE OF ARSON!

Secured by Design – Schools (2010)

<http://www.securedbydesign.com/pdfs/SBD-Schools-2010.pdf>

This document provides design guidance and specification requirements for reducing the risks for crime against people and property in all schools and school grounds such as burglary, theft, arson, vehicle crime and assault. The same advice is also intended to reduce the fear of crime and the incidence of anti-social behaviour. Consequently, consideration is given to both environmental design and physical security. This is best achieved through negotiation with the designers of new schools or major refurbishment at pre-planning stage. Where acts of terrorism and or extremist activity are of a concern the developer or their agent should inform the police Crime Prevention Design Adviser dealing with your application who will in turn notify the relevant security experts.

Section 1 of this document concentrates on generic environmental crime prevention issues, whilst Section 2 deals with the specific physical crime prevention requirements. Compliance with both sections is required to achieve Secured by Design certification.

Secured by Design is available throughout the United Kingdom of Great Britain and Northern Ireland and in the Isle of Man and the Channel Islands.

What can be done to deter the arsonists?

The prevention of arson falls into a logical process known as the five point action plan:

1. Deter unauthorised entry onto the site.

Consider your perimeter security fencing. It should be maintained in good order and not easily breached by trees etc. Consider the use of boundary signs to deter intruders, particularly at vulnerable areas.

If you are considering fitting/ replacing your perimeter fence ensure that the fence is fitted correctly and it appropriate to the task you want it to perform don't forget to get the entry and access control right.

Please take appropriate advice before selecting the fence type and consider the level of security you want using the following six criteria:

- ▶ Demarcation – Mark your boundary
- ▶ Deterrent – A physical deterrent to any trespasser



✓ Ensure perimeter fencing is maintained in good order to deter unauthorised access to your site.



✗ Even well maintained fencing can be considered useless if trees are allowed to grow next to it as these will assist in gaining access over the fencing.

BEST PRACTICE BEWARE OF ARSON!

- ▶ Delay – Delay determined unauthorised access
- ▶ Detection – Detection of entry
- ▶ Discretion - Aesthetically pleasing as possible
- ▶ Best Value Purchase – Fit for purpose and consider life time costs

2. Prevent unauthorised entry into the building

The easiest point to force entry into your premises will be via the doors and windows. Skylights are also weak unless fitted with internal bars and grills. Allow visitors to access only via a clear staffed reception facility; ensure visitors register in and out. Consider the use of visitor badges and escorts whilst visitors are on your premises. Encourage staff to question strangers. Ensure your burglar alarm system is maintained fully functional.

Remember!... means of escape from your premises, (in the event of fire), should never be compromised.

3. Reduce the opportunity for an intruder to start a fire.

Arsonists seldom bring combustible items with them but tend to use what is available on site. Do you have external combustible storage within your school grounds? If you do, can it be removed or stored elsewhere?

4. Reduce the scope for potential fire damage.

Closing all doors at night will help to contain any fire or smoke within the room of origin, or at the very least, slow down the rate of fire growth.

5. Reduce subsequent losses and disruption resulting from a fire by preparing disaster recovery plan (covered in 'Contingency Planning and Disaster Recovery').

The time and effort put into creating a plan will pay dividends in the event of serious fire, whether started accidentally or deliberately.

Members of staff should be adequately trained in fire procedures, including how to summon the Fire Service, building evacuation and the use of fire extinguishers.



✓ Bins are a common target for opportunist arsonists, who will usually find plenty of fuel inside to pursue their activities.



✗ Unless bins are chained to an immovable object, or secured in a bin room or compound, they may be pushed against school buildings and set alight.

BEST PRACTICE BEWARE OF ARSON!

There is much that can be done to deter the 'Arsonist,' and limit the spread of smoke and flames in the event of an accidental or deliberately set fire involving school premises. Some of the precautions may be expensive to install or provide, but are usually cost effective should the worst happen. Into this category falls; extensive perimeter fencing, fixed (and possibly monitored) cctv coverage, sprinkler systems and automatic fire detection.

However, a great deal can be achieved with little or no cost implications, particularly in relation to 'housekeeping' and staff training.

Here are a few examples:

- ▶ Any graffiti that appears on your school premises should be removed without delay. If it is left to accumulate, vandals and arsonists will begin to view the site as being a legitimate target of little or no value.
- ▶ Wheeled bins should either be kept in the bin room, or compound, with the door locked shut when not in use, or alternatively, secured to an immovable object, (eg, metal barrier), by padlock and chain well clear of any building, preferably by a distance of at least 8 metres. If possible, bin lids should be secured outside normal school hours.
- ▶ **Remember! Rubbish is an ideal fuel for the 'Arsonist'...**
Bins on wheels can be pushed against the building or, rubbish can be removed from the bins and piled against doors before being set alight. Both are very common methods of attack.
- ▶ If schools use recycling bins in connection with fundraising activities, they should be located and secured in the same manner as described above. Regular collections should be arranged to avoid an accumulation of combustible material.
- ▶ External litter bins should not be fixed to the walls of the building, or under roofs constructed of combustible materials, but secured to the ground well away from the any building. Ideally, such bins should be of metal construction.
- ▶ Try to avoid placing combustible items on window sills. A common method of attack is to break a window and set fire to combustibles within reach.
- ▶ Burning materials are sometimes introduced into school premises via the letterbox. If you have a letterbox which is seldom, or never used, consider having this opening permanently sealed. If the letterbox is essential, do you have a metal mailbox on the other side of the door? Such a box would ensure burning materials are contained and extinguished quickly due to oxygen starvation. Purpose designed fire-resistant boxes are also available which are capable of extinguishing fires involving flammable liquids, (known as 'accelerants'). Once again, these openings are a common target for arsonists. **Please think about it!**
- ▶ If you have a flat roof on your premises, ensure that regular checks are made for breaches in security, pay particular attention to skylights. On one such check, a pile of 'strategically placed' combustible materials together with flammable liquids were found.

BEST PRACTICE BEWARE OF ARSON!

- ▶ Ensure that matches or lighters are not left in the staff room overnight. Opportunist vandals have found these items very useful in the past!
- ▶ Schools should foster good relationships with neighbours, who are able to observe unlawful activity at the premises when closed. Neighbours should be asked to contact the Police if they witness such activity. *Alternatively, they may contact **Crimestoppers** on **0800 555 111**, calls are free (except for some mobiles) and the caller will remain anonymous.*
- ▶ Where possible, schools should become involved in local neighbourhood watch schemes. Vandals are less likely to attack a school if there are strong ties with the local community.
- ▶ Where sustained vandalism or deliberate firesetting occurs at a school premises, the installation of 'mobile' CCTV cameras, linked to a video recorder, should be considered. Specialist advice should be sought on such matters. Advice, or equipment, may be available from the LEA security officer and your local Police Crime reduction Officer.
- ▶ If schools are open to the public outside normal hours (usually for evening classes), it is essential that visitors are restricted to authorised areas of the building, without compromising their means of escape. The gates to the school grounds should be secured promptly when all visitors have vacated the site.
- ▶ Arson attacks during school hours are on the increase. Areas targetted include toilets, cloak rooms and any other areas where young people may congregate unobserved. Extra vigilance is therefore required. A check on these areas after each lunch and break time by a nominated person would mitigate the chances of fires being started or developing.
- ▶ It is common practice for car thieves to deposit stolen vehicles on school playing fields before setting fire to them.
- ▶ A routine should be adopted, where by a nominated individual is responsible for ensuring that all doors and windows have been secured, once the building is vacated at the end of the day.
- ▶ Shrubs and undergrowth should not be allowed to encroach against buildings. In the Summer, vegetation often becomes tinder dry and will burn vigorously.
- ▶ Sheds and other storage facilities should be sited at least 8 metres from buildings to prevent fire spread from one to the other.
- ▶ 'Skirts' should be fitted at the base of mobile classrooms, to prevent combustible materials being placed underneath and ignited, but remember, these should allow the free movement of air to prevent possible water condensation damage.



X Keep bins well clear of school buildings. A distance of at least 8 metres where possible. A severe fire in this bin would quickly involve the fascia board above.

BEST PRACTICE BEWARE OF ARSON • CCTV

- ▶ Identify your property particularly computers and electrical equipment, if the police can't identify stolen property you won't get it back and the offender may continue to offend.
- ▶ Consider the use of physical security devices including cages and secure desking to stop the movement and removal of computers and audio visual equipment.
- ▶ If you have completed a crime prevention survey and can not carry out the work immediately consider a three year plan with your highest risk first i.e. ground floor windows and doors.
- ▶ Make clear policy decisions for dealing with arson incidents involving school pupils, prompt and decisive action for minor events will prevent life threatening major events. Don't forget to seek help and advice from your local Fire Service regarding fire setter intervention schemes.
- ▶ Keep record of any fire/ crime incidents (appendix1,11,111). This will allow you to analyse the past to risk assess for the future. To ensure accuracy please complete any details of suspects on the Suspect Description Form and details of any vehicle used on the Vehicle Identification Form which will aid any investigation.

UK Police Requirements for Digital CCTV Systems

This document offers guidance to potential users of digital CCTV systems, where the pictures are intended to be used by the police or are likely to be used in an investigation. For CCTV recordings to be effective in detecting and investigating crime they must be fit for purpose and easily accessible by police investigators.

For digital CCTV there are four main areas that must be considered:

Quality	are the pictures good enough?
Storage	are the pictures stored appropriately?
Export	can the pictures be easily exported from the system?
Playback	can the pictures be easily viewed by authorised third parties?

Quality:

- ▶ What resolution?
- ▶ What compression?
- ▶ How many pictures per second?

BEST PRACTICE CCTV

Before installing a CCTV system you should have a clear idea of what you want the system to do and how it should perform. This should include exactly what you want to see and where, e.g. recognise the face of someone walking through a doorway, read a vehicle registration number or record a particular type of activity, such as walking across a room. More detailed guidance on how to do this can be found in PSDB publication 17/94 CCTV Operational Requirements Manual. This is available free from the Home Office website: www.homeoffice.gov.uk/docs/or_manual.pdf

There are no definitive performance criteria for video to be legally admissible. It is for the court to decide whether the pictures are accepted, and this is done on the grounds of relevance to the case, reliability of the evidence, etc. The appropriate resolution, level of compression and number of pictures per second will be determined by what you wish to see in the recording. If you can't see it then it's not fit for purpose. It should not be expected that enhancement features, such as zoom controls, will provide extra detail.

A good way to ensure that the systems is capable of achieving the requirement is to do a subjective test. Set-up a camera and get a volunteer to walk through the door or park a car in the place of interest and record the pictures. This should be done under the conditions that the system is intended to be used – performance of the system may be different when there are a number of cameras being recorded. The quality of the recorded or printed pictures may differ from the live display. Time and date information is often critical to an investigation. If it is incorrect this can drain police time and resources.

The quality of the pictures should not be compromised to allow more to be squeezed onto the system. There is some scope however for using a sliding scale of image quality based on time since recording. For example, high quality high frame rate video for the first 24 hours with gradually increasing compression or decreasing frame rate after this, but retaining useful images up to 31 days. This would be dependent on the nature of the installation and the type of recordings being made. Guidance should be sought from your local police force.

To ensure continued quality of recording it is essential that regular maintenance of all aspects of the system be conducted – especially camera focus, cleaning of lenses, housings, etc.

- ▶ Specify your requirement – decide what you want to see and where, and select a system that will do it.
- ▶ View the recorded pictures or print out, not the live screen, to assess the system performance.
- ▶ The system clock should be set correctly and maintained (taking account of GMT and BST).

BEST PRACTICE CCTV

- ▶ Picture quality should not be reduced to fit the available storage capacity of the system.
- ▶ Regular maintenance should be conducted on all aspects of the system.

Storage:

- ▶ What should I keep?
- ▶ How should I keep it?

Access to the system and recorded images should be controlled to prevent tampering or unauthorised viewing. A record should be kept of who has accessed the system and when. Further information on this can be found in the BSI document 'Code of Practice for Legal Admissibility of Information Stored Electronically' (BIP0008) or from your local Crime Prevention Officer.

Electronic protection methods that require proprietary software or hardware will hinder an investigation if they prevent the pictures from being provided to authorised third parties, e.g. police and CPS. Physical methods of access control, e.g. system in a locked room, are just as effective if documented appropriately.

It is important that recordings cover a sufficiently long period to assist in investigations. Retention beyond 31 days may be useful in some circumstances, but should not affect the quality of the more recent recordings.

It should be possible to protect specific pictures or sequences, identified as relevant to an investigation, to prevent overwriting before an investigator can view or extract them.

- ▶ The system should be operated and recorded pictures retained in a secure environment.
- ▶ Electronic access controls, such as passwords or encryption, should not prevent authorised access to the system or recordings.
- ▶ The system should have sufficient storage capacity for 31 days good quality pictures.
- ▶ The system should be capable of securing relevant pictures for review or export at a later date.

Export:

- ▶ It is unlikely that the investigator will be familiar with operation of your system. To facilitate replay and export a training operator and simple user guide should be available locally.
- ▶ Export of medium and large volumes of data can take a substantial period of time. The operator should know the retention period of the system and approximate times to export short (e.g. 15 minutes), medium (e.g. 24 hours), and large (up to all of the system) amounts of data.

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- ▶ If the software needed to replay the pictures is not included at export, viewing by authorised third-parties can be hindered. Export of a system event log or audit trail, and any system settings with the pictures will assist with establishing the integrity of the pictures and system.
- ▶ The amount of video that an investigator will need to export will be dependent on the nature of the investigation. For example a shop robbery may only require a few stills or a short sequence, however a more serious incident such as a murder or terrorist related enquiry may require anything up to all the video contained on the system to be exported. It is essential that the system is capable of doing this quickly and to an appropriate medium. An ideal solution for medium-to-large downloads, would be for the system to have the facility to export to a 'plug-and-play' hard drive. Export and recording should be possible at the same time without affecting the performance of the system.

The system should not apply any compression to the picture when it is exported from the system as this can reduce the usefulness of the content. Also, the picture should not undergo any format conversion that affects the content or picture quality.

How much video should the system export and in what format?

- ▶ A system operator should be available who is able to replay and export recordings.
- ▶ A simple system operator's manual should be available locally to assist with replay and export.
- ▶ The operator should know the retention period of the system and export time for various amounts of data.
- ▶ The system should be able to quickly export video and stills to a removable storage-medium, with time and date integral to the relevant picture.
- ▶ Export should include any software needed to view or replay the pictures.
- ▶ The system should have an export method proportionate to the storage capacity.
- ▶ Pictures should be exported in the native file format at the same quality that they were stored on the system.

Playback

- ▶ Can the pictures be easily viewed?
- ▶ The replay software must allow the investigator to search the pictures effectively and see all the information contained in the picture and associated with it.
- ▶ It should be possible to replay exported files immediately e.g. no re-indexing of files or verification checks.

The playback software should:

- ▶ Have variable speed control including frame by frame, forward and reverse viewing;
- ▶ Display single and multiple cameras and maintain aspect ratio i.e. the same relative height and width;
- ▶ Display a single camera at full resolution;
- ▶ Permit the recording from each camera to be searched by time and date;
- ▶ Allow printing and/or saving (e.g. bitmap) of pictures with time and date.
- ▶ The time and date associated with each picture should be legible.
- ▶ Once exported to removable media it should be possible to replay the files immediately.

Using Prickly Plants as a Defence

The range of plants listed below are an attractive means of protecting your property, and are readily available from garden centres and nurseries.

Consider planting a selection of these specially chosen plants as an alternative or addition to fencing.

Prickly planting is a visual deterrent and a physical barrier intended to complement and not replace traditional crime prevention measures such as locks, alarms and lighting.

Home grown security can be adopted to protect all perimeters of your property and form a barrier around drainpipes and ground floor windows, making forced entry more difficult.

Good hedging plants:

- ▶ *Berberis x ottawensis* *Medium-sized deciduous shrub.*
Up to 6ft high. Red berries in autumn.
- ▶ *Berberis x stenophylla* *Medium-sized evergreen shrub.*
Up to 6ft high. Golden-yellow flowers in spring; black berries in autumn.
- ▶ *Crataegus monogyna* (Common Hawthorn)
Used extensively throughout UK as hedging. White flowers in spring; red 'haws' in autumn. Plant as an impenetrable hedge.
- ▶ *Ilex x aquifolium* (Common Holly)
Excellent hedging plant; usually grown as tree or bush. Up to 50ft high.
- ▶ *Prunus spinosa* (Blackthorn or Sloe)
Large dense shrub, good for hedging. White flowers in spring; blue-black fruits in autumn.

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- ▶ *Rosa rugosa* (Rubra)
Dense shrub, good for hedging. Up to 6ft high. Perpetual flowering wine crimson flowers; red 'heps' or berries.

Plants to be trained up a wall:

- ▶ *Chaenomeles x superba* (Pink Lady)
Small to medium sized deciduous shrub. Up to 6ft high. Grow trained against a wall. Rose-pink flowers in spring; yellow quinces in autumn.
- ▶ *Pyracantha* (Orange Glow – Firethorn)
Evergreen Shrub. Up to 16ft high when trained up wall. White flowers in spring; orange – red berries in autumn/winter.
- ▶ *Pyracantha* (Golden Charmer – Firethorn)
Evergreen Shrub. Up to 16ft high when trained up wall. White flowers in spring; orange – yellow berries in autumn.

Shrubs:

- ▶ *Mahonia x media* (Winter Sun)
Tall evergreen shrub. Up to 10ft high. Yellow flowers in autumn; blue-black berries in winter.
- ▶ *Hippophae rhamnoides* (Sea Buckthorn)
Tall deciduous shrub. Up to 10ft high. Grows on any soil, providing a good windbreak. Silver, willow-like leaves in summer; orange berries in autumn.
- ▶ *Ulex europaeus* (Common Gorse)
Dense, evergreen, spiny shrub, Up to 5ft high. Golden yellow flowers. Good on poor soil.

BEST PRACTICE

WHAT IF THE WORST SHOULD HAPPEN?

What if the Worst Should Happen?

The impact of fire in schools is both devastating and a potentially life threatening matter. Arson in school can occur at any time but as more and more attacks take place during school hours, the threat of injuries and death from fire are significantly increased. The most effective way to ensuring your school does not become another statistic of fire, is to have a sprinkler system installed.

Sprinkler systems will mitigate the effects of fire by containing it until the arrival of the Fire Service.

There still remains some general misconception regarding sprinklers – these are explained below:-

MYTH Water damage from sprinklers can be as great as fire damage.

TRUTH A sprinkler head discharges only 60 litres per minute, a firefighting hose discharges at least 600 litres per minute

MYTH Sprinklers regularly go off by accident.

TRUTH In reality the chances of a sprinkler discharging accidentally are around 16 million to 1.

MYTH If there is a fire, all sprinkler heads go off at the same time.

TRUTH Sprinkler heads are triggered individually and only the heads in the vicinity of the fire will operate.

MYTH Sprinkler systems are expensive.

TRUTH Systems may be as little as 2% of the overall building costs but may save millions in terms of damage to a property and lost education.



BEST PRACTICE CRIME SCENE PRESERVATION

Crime Scene Preservation

A Police Forensic Scene Investigator (FSI) is likely to attend to examine the scene for fingerprint and forensic evidence and will work closely with Fire Investigation Officers.

Following any arson attack on a school premises, there is a great possibility that evidence may be left at the scene, which could lead to the apprehension and prosecution of the perpetrator(s). To afford the best possible chance of detection by investigators, it is absolutely essential that any such crime scene is 'secured' to preserve evidence.

It goes without saying that the safety of staff/student should be considered to be the main priority in these circumstances.

**Your actions on finding a fire that may be arson are of vital importance.
Think "Scenes of Crime."**

The following guidance should be adhered to where practicable...

Scene Preservation

- ▶ Protect the Point Of Entry (P.O.E.) to keep staff/students away so that they don't damage evidence - consider a cordon.
- ▶ If you have to tidy up, retain any pieces of broken glass from the P.O.E., especially any found outside. Handle the glass carefully by picking it up by the edges and if wet stand it up indoors.
- ▶ Find the access point to the grounds and protect it.
- ▶ Preserve any item foreign to the scene - in situ if possible.
- ▶ Consider inclement weather and cover items that can't be taken inside. A dustbin lid, waste paper bin, or bucket may be ideal.
- ▶ Avoid disturbance of the fire debris, or at least keep it to a minimum.

Evidence Types

- ▶ Fingerprints - on broken glass, window frames, bottles, torn paper, matchboxes, etc.
- ▶ DNA - blood, cigarette ends, chewing gum, drinking vessels.
- ▶ Footwear impressions - outside the P.O.E., or at the access point to the grounds.
- ▶ Instrument marks - where a screwdriver or jemmy has been used to force a door or window.
- ▶ Accelerants - used to speed up the fire (i.e. traces of petrol etc).

Fire and smoke might damage some evidence but may not destroy it all.

Please think scene preservation - help to maximise available evidence.

BEST PRACTICE INSURANCE

Insurance

Keep in regular contact with your insurance brokers/insurance company. Ask if they want a copy of your fire risk assessment. It is better to give them too much information than too little.

Your insurers will expect you to be aware and comply with current legislation and often place warranties under your policy such as:

- ▶ 5 lever mortise locks on all external doors
- ▶ All windows to be secured with a key operated security lock
- ▶ Your external waste bins to be locked and secured away from the building
- ▶ Undergrowth grass and weed to be removed from all perimeter fence lines and buildings, not to be removed by burning or weed killer which will aid combustion

(If you have not disclosed something to them, the worst case is that you may end up with a refund on your premium instead of a settlement of your claim. You cannot afford to wait until the event to find out).

Do not seek fire safety advice from sales persons, they are often selling first and advising second. With some persons what you do not pay in fees you may pay in their commission.

Firefighting Equipment

- ▶ Are there sufficient extinguishers? A rule of thumb is one per exit from the building or floor plus one for each or any special risk. If you want further information contact your local fire brigade business liaison officer. In addition you should consult your insurers who will have very definite opinions on equipment.
- ▶ If you decide to purchase equipment make sure that the supplier belongs to either IFEDA or BAFE. Get prices from at least three suppliers. Some of the smaller companies are more competitive and supply as good a product as the larger ones.
- ▶ Ensure that sufficient staff have been trained in the use of firefighting equipment. Get a competent trainer to maintain sufficient numbers of staff trained in the use of firefighting equipment.

Fire Detection / Fire Alarm Equipment

- ▶ Do you have a fire alarm? Does it work and has it been tested? An electrical system should be tested weekly.
- ▶ The fire alarm system should be maintained regularly by a competent person. Electrical systems should be tested by a competent engineer, preferably from an approved company, or be an approved individual.
- ▶ If you decide to install fire detection equipment check with your fire brigade and insurers first. It is pointless spending money on systems that do not achieve the level of cover that you wish for or that you have to have by law.

Signage

A great deal of money is wasted in unnecessary signage, usually on the advice of the vendor.

- ▶ If fire extinguishers can be easily seen then why indicate them if they indicate themselves? If they are not easily seen then indicate them by an appropriate sign at an appropriate height – not one that details the same instructions that are on the label just above the handle.
- ▶ The same applies for fire alarm call points.
- ▶ All fire exits, except the normal way into the premises, should be indicated so that they are obvious for anyone trying to leave in an emergency. If the final exit door way is not obvious then directional signs are necessary.

BEST PRACTICE COLOUR CODING OF FIRE EXTINGUISHERS





As a result of merging European Standards, the system for colour coding fire extinguishers has changed.

All **NEW** fire extinguishers are coloured **RED**.

The contents are indicated by the colour of the label or a band around the body of the fire extinguisher. This label or band usually correspond with the old colour code. Thus a new Carbon Dioxide extinguisher will be Red with a Black band.

It is not necessary to discard existing extinguishers until they reach the end of their useful life, so the changeover period will last for several years.

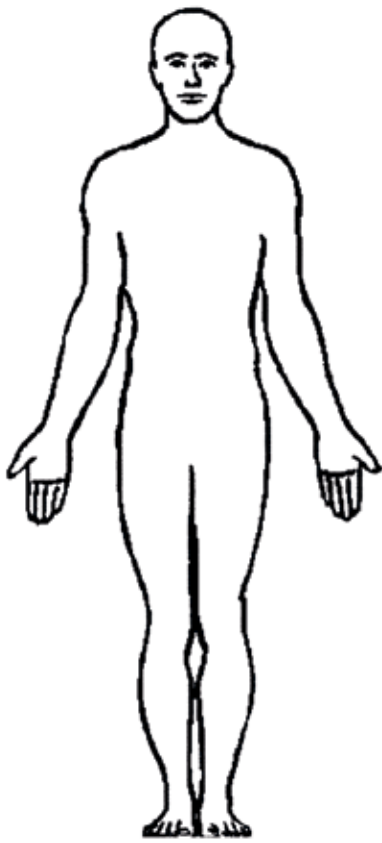
It is inevitable there will be some confusion and, therefore, it is recommended that you look closely at the extinguishers in your school area to identify what type they are. The table below should assist you to identify your extinguishers and their uses :-

Old Colours	New Colours	Contents	Use
Silver or Red	Red with White 	Water or water with special additive	Paper, Wood, Fabrics
Black	Red with Black 	Carbon Dioxide	Electrical Fires, Flammable Liquids, Flammable Gases
Blue	Red with Blue 	Powder	General use
Cream	Red with Cream 	Foam	Flammable Liquids, Paper, Wood, Fabrics

BEST PRACTICE APPENDIX I

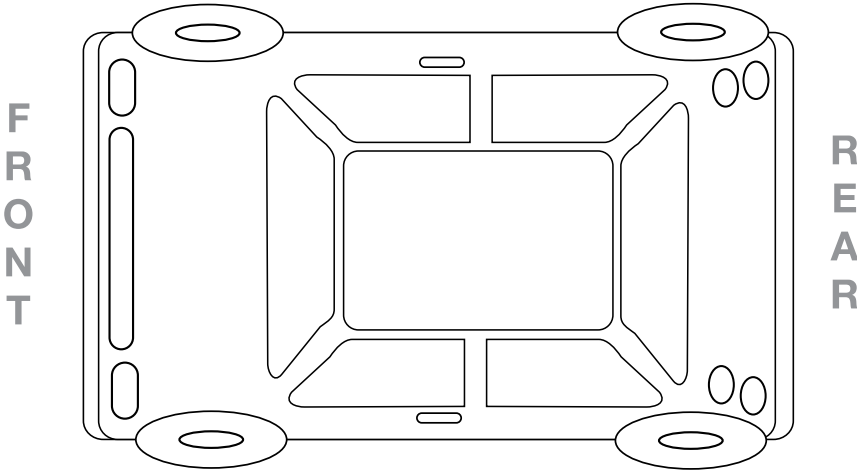
INCIDENT REPORT		
SCHOOL NAME:		
DATE OF INCIDENT:	DATE:	TIME:
DEPART. & ADDRESS PREMISES	DEPART:	
	NO:	STREET:
	TOWN/CITY:	
	COUNTY:	
	POSTCODE:	
MAIN COMPANY CONTACT:		
REPORTED TO:		DATE:
NAME OF POLICE OFFICER:		TIME:
		COLLAR NO:
		TEL:
CRIME REF. NO: / POLICE LOG NO:		
F.S. LOG NO:		
TITLE OF INCIDENT:		
BRIEF DETAILS OF INCIDENT: COMPLETE ALL DOCUMENTATION FULLY AND HONESTLY		
SECURITY RISK IDENTIFIED:		
RECOMMENDATIONS:		
DECISION TO REDUCE RISK:		
Person Reporting: Signature:		Date:

BEST PRACTICE APPENDIX II

SUSPECT DESCRIPTION FORM		
OFFENDER NO: _____ of _____ (i.e. 1 of 3)		POLICE CRIME REF:
Sex	Age	Ethnicity
Height	Build	Weight
Cleanliness	Odour	Accent
Head		
Shape	Hat	Forehead
Hair	Facial Hair	Eye Shape
Eye colour	Eye brows	Nose shape
Ears	Lips	Teeth
Chin	Scars	Tattoos
Piercings	Make up	Complexion
Pock marks	Spots	Bad breath
Freckles	Jewellery	
Neck		
Size	Jewellery	Tattoos
Hands		
Size	Cleanliness	Fingers
Fingernails	Nail varnish	Tattoos
Gloves	Jewellery	
Clothing (include colour, style, any brand names known and how it was worn)		
Clothing – Top		
Clothing – Bottom		
Footwear		
Outerwear		
Accessories		
Weapons		
Additional remarks – note any peculiarities - smoker/mannerisms/habits Add any additional comments on a separate sheet of paper.		
Signature _____		
Time _____		
Witnessed by _____ (if under 18)		
Date _____		

Note: One Suspect Description Form per suspect.

BEST PRACTICE APPENDIX III

MOTOR VEHICLE IDENTIFICATION REPORT		
OFFENDER NO: _____ of _____ (i.e. 1 of 3)		
DATE OF INCIDENT:	DATE:	TIME:
CAR	REGISTRATION NUMBER:	
	COLOUR:	
	MAKE:	
	MODEL:	
	TYPE:	
NAME OF POLICE OFFICER: _____ COLLAR NO: _____ TEL: _____		
CRIME REF. NO. / POLICE LOG NO: _____		
F.S. LOG NO: _____		
TITLE OF INCIDENT: _____		
BRIEF DETAILS OF INCIDENT: COMPLETE ALL DOCUMENTATION FULLY AND HONESTLY		
<p>Please mark vehicle with circles to show distinctive marks and write a clear description.</p> <div style="text-align: center; margin: 20px 0;">  </div>		
Signature _____	Witnessed by (if under 18) _____	Add any additional comments on a separate sheet of paper.
Time _____	Date _____	

Note: One Motor Vehicle Identification Report per vehicle.