Fire Service Risk Management for Methamphetamine and other illicit drug laboratories

Issued by:
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Addressed to:
The Chair of the Fire and Rescue Authority
The Chief Executive of the County Council
The Clerk to the Fire and Rescue Authority
The Clerk to the Combined Fire and Rescue Authority
The Commissioner of the London Fire and Emergency Planning Authority
The Chief Fire Officer

Summary
This guidance is designed to assist fire and rescue service personnel to recognise an illicit drug laboratory (IDL) and provide advice on appropriate operational response.

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1.0 Introduction
1.1 The new risk posed by illicit drug laboratories (IDLs), particularly ‘Methamphetamine’ is increasing within the UK. There are many examples from Canada, the United States, Australia and New Zealand of emergency service first responders being killed by hazards associated with IDLs.

1.2 All operational response and fire safety personnel need to be aware of these particular illicit drugs, the serious risks from their manufacture and some of the signs that may indicate their presence. This Fire and Rescue Service Circular is intended to warn emergency service personnel of the hazards and to provide guidance on the actions to be taken should illicit drug manufacture be discovered or suspected.

2.0 Methamphetamine and Amphetamines
2.1 Amphetamine, dextroamphetamine, methamphetamine, and their various salts are collectively referred to as amphetamines. Street terms for methamphetamines are ‘Meth’, ‘Poor man’s cocaine’, ‘Crystal meth’, ‘Ice’, ‘Glass’, ‘Speed’, ‘Yaba’.

2.2 Typically methamphetamine can be found in the following forms;

- White odourless powder that easily dissolves in water.
- Clear chunky crystals (crystal meth, ice)
- Small brightly coloured tablets (yaba)

3.0 Manufacture
3.1 A clandestine or illicit drug laboratory will by the very nature of its purpose present many hazards to fire and rescue service personnel. The risks from the materials used in the manufacturing process should not be underestimated.

3.2 There are three main types of laboratories; extraction, conversion and synthesis.

- Extraction: Finished drug or precursor is removed from raw material by use of chemical solvents.
- Conversion: One form of drug is changed into a more desirable form. E.g. methamphetamine hydrochloride (powder) to crystal meth (chunky crystals).
- Synthesis: Raw materials are combined through chemical process to produce the desired drug. The originals may already be controlled substances. Examples include methamphetamine from pseudoephedrine and heroin from morphine.

It is possible that each of these types of laboratory could be present at a single site. Alternatively, illicit operators may split the various processes across a number of different sites.
3.3 Each laboratory may vary in terms of the, chemicals used in manufacture, location, method of process, scale of production, equipment used, expertise/knowledge of the operator, hazardous nature of the process and the security measurers taken by the operator e.g. booby traps. The drugs are easily manufactured using every day materials and simple apparatus, with IDLs likely to be encountered in almost any type of premises, including domestic dwellings.

4.0 Common Indicators of illicit drug laboratories

4.1 There is no hard and fast description of a manufacturing facility but personnel should be alert to situations and circumstances that seem out of place. For example, one kilo of Methamphetamine produces 5 kilos of toxic waste. Often that waste is disposed of in areas like farm land or dumped on the side of roads or on waste land. The list below gives brief details of the most common indicators or the location of an IDL.

Outside the Premises;

- Chemical odours coming from the premises such as ammonia/bleach, cat urine, strong solvent and burnt rubber
- Windows blacked out or curtains drawn
- Occupants unfriendly, appear secretive about their activities
- Access denied
- Rubbish containing a large amount of common cold cure medication packaging or containers

Inside the premises;

- Laboratory glassware and equipment
- Containers with clear liquids, chalky coloured solid on bottom or similar
- Containers with two layered liquids in them, one dark and one pale yellow
- Used coffee filters containing either a white paste or reddish brown substance
- Baking dishes or similar containing a white crystalline substance
- The presence of hot plates or similar heating elements near chemicals

5.0 Hazards

5.1 The hazards found at these sites may either be chemical or physical in nature. They may be present at both active and inactive sites. When combined with a lack of quality control and unsafe working practices by illicit operators they will present a serious potential for injury to first responders and members of the public.
5.2 Chemical hazards posed by the chemicals used within the manufacturing process range from mild skin irritation to the ability to severely burn and poison. Part of the process involves heating a mixture of chemicals (known as cooking) and this can give off poisonous and flammable gases that may be inhaled, adsorbed or ingested. Contamination of the premises is usually present, however this may be difficult to ascertain at a site that is no longer active. Chemicals used in IDLs include acids, bases, solvents, poison gas, organic peroxides, radioactive substances and corrosives.

5.3 Fire and Explosion hazards exist, particularly during the cooking process. The gases produced can be ignited by the occupants or by personnel turning on lights or using non intrinsically safe electrical equipment.

5.4 Physical hazards can include, drug affected occupants and adapted premises that include unsafe use of electricity, gas and heating equipment. In order to protect sites occupants may set booby traps; these can be in any form from electrical wiring to doors and windows to hazardous liquids placed above doors. Extreme examples in mainland Europe includes grenades being placed amongst barrels of chemicals.

5.5 Dumpsites and contamination also pose a significant hazard. If methamphetamine production has been conducted within a building, chemicals from the process will have spread not only in the specific area but throughout the whole building. The contaminated waste produced by the process will need to be disposed of which usually is undertaken without care. For example waste is often poured down domestic drains and toilets, left in parks, refuse sites and left in vehicles and set on fire. This behaviour may also have serious consequences for the environment.

6.0 Management of Incidents

Non-operational activity

6.1 If an IDL is encountered during non operational activities, the occupier if present must not be questioned due to the potential danger of challenging persons involved in illegal activities. Personnel should withdraw without raising attention.

6.2 Following withdrawal to a safe location the matter must be immediately reported to FRS Control. Contact details and a brief explanation of what was found should be given. The local police need to be alerted and urgent contact established between the two parties.

6.3 Unless there is immediate risk of explosion and danger to the public, reporting personnel should, following liaison with the police, return to base and make notes of observations made and actions taken.
6.4 If there is considered to be a direct and immediate danger to the public, a request should be made for urgent police assistance. It is likely that the reporting personnel will be advised to take no direct action until the police response arrives, at which time they should brief them and act in accordance with the instructions of the senior police officer.

Operational activity where the location of the incident is not directly linked to the area of manufacture

6.5 Personnel should withdraw from an incident scene if they discover the potential manufacture of drugs in areas not directly affected by operational activities.

6.6 The whole scene should be considered to be contaminated and the remainder of the incident should be treated as a Hazmat incident with appropriate actions taken to protect FRS personnel and the public. The situation should be made as safe as possible and any actions undertaken should be done so as not to raise unnecessary alarm.

6.7 A situation report should be passed to the police via FRS control and any further action should be carried out under supervision and in consultation with the senior police officer.

Operational activity that directly involves an IDL

6.8 If the presence of an IDL is identified during operations, the incident should be treated as a hazmat incident with appropriate attendance and procedures being adopted.

6.9 A situation report should be passed to the police via FRS control and firefighting and any rescues should be dealt with taking account of the potential risks associated with IDLs. Once this phase is complete close liaison with the senior police officer should determine the next steps.

General operational considerations

6.10 The first priority at incidents where no fire/explosion has occurred is to preserve the scene and let the police establish and contain the situation. FRS presence may simply be for safety reasons in case of a subsequent fire/explosion

6.11 If the police establish that an IDL is involved then they will probably call the national Illicit Lab Unit (ILU) team in to assist. This may take several hours to fully deploy.

6.12 The aim will usually be to establish a suitable cordon and stand off rather than intervene and put responders at risk. There may however be occasions when lives may be at risk and immediate intervention is appropriate. This may be due to the occupants of the premises being overcome or where the lack of intervention may lead to a critical escalation of the incident (fire and/or explosion). Joint risk assessments with the police should be undertaken and proposed actions agreed.
7.0 Training and Awareness

7.1 A key aspect of dealing successfully with these incidents is the training and awareness of relevant staff. It is important for FRS to establish arrangements/protocols with their local police force to ensure information is shared and procedures are compatible.

7.2 All staff likely to come across IDLs in their work should be made aware of the hazards and gain an understanding of what actions they should be undertaking.

7.3 Specific training is recommended for FRS decision makers. This will include hazmat advisers who need a greater degree of knowledge regarding specific risk assessments and the various options available. I.e. decontamination issues, size of hazard zones and advice to the Incident Commander.

7.4 Joint training with the police is recommended. This will assist with the effectiveness of joint arrangements and agreed procedures.

7.5 The Alerts Branch of the Serious Organised Crime Agency (SOCA) have commenced a campaign of awareness for all first responders, this is to correspond with the upgrading of methamphetamine from a Class ‘B’ to a Class ‘A’ drug from 18\textsuperscript{1} January 2007. They have produced the attached aide-memoir giving brief details of what they consider to be appropriate remedial actions. A generic alert poster has also been produced for display in police/fire/ ambulance stations and control rooms. Copies of these will be forwarded to all UK FRS shortly.

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Appendix

FIRE AND RESCUE SERVICE AIDE-MEMOIRE

ILLICIT METHAMPHETAMINE LABORATORIES

In the event of accidental discovery, action should be taken to ensure that all fire & rescue service personnel and occupants leave the site immediately and remain at a safe distance. FRS personnel should only react in the event of a fire, explosion or life at risk utilising standard operating procedures.

WARNING
TREAT AS A HAZMAT INCIDENT
PERSONNEL ENTERING THE SITE MUST BE EQUIPED WITH SUITABLE RPE AND PPE

- Do not use phones/radios until clear of the site.
- Do not turn on/off any lights or electrical appliances.
- Do not shut down any ongoing chemical process or remove power source to the premises.
- Do not touch, open or remove any bottles or containers as some chemicals involved can be fatal if inhaled.
- Do not allow persons to re enter the site.

- Do provide information regarding the illicit laboratory to FRS control
- Do where possible make notes of what you have seen and done.
- Do keep the premises under observation from a safe location.
- Do evacuate the immediate area and establish a hazard zone in consultation with the police.
- Do note reaction if water is applied to a fire.
- Do contain water run-off.

Indicators of illicit methamphetamine lab
- Smells such as ammonia/bleach, cat urine, strong solvent or burnt rubber.
- Chemicals include acids, solvents, iodine, ammonia, packs of cold cure medication, anti-freeze and drain cleaner.
- Apparatus including lithium batteries, glass jars, funnels, electric hot plates, red/brown stained coffee filters and chemical containers.

Methamphetamine users
- Users may show signs of increased agitation, hyperactivity, Irritability, confusion, anxiety, paranoia and aggression.