# SCHOOLS VIRAL HEPATITIS GUIDELINES PACK 2020



Today more than ever before UK schools, whether nursery, primary, secondary and tertiary all face an epidemic of blood borne viruses in their midst.

London's child wards note more than 1 in a 100 children are chronic carriers of Hepatitis B and 1 in 200 are chronic carriers of Hepatitis C.

The key concern is the vast majority of these children are studying while undiagnosed and often unrecognised as being present by their teachers.

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- Reporting of Injuries, Diseases and Dangerous Occurrences Register Act of 1995 and 2012
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# Introduction

With the woeful lack of Hepatitis B vaccination in UK schools and the gradual change of demographics in all areas of the country to communities often from continents where 70% of people catch Hepatitis B, we have seen far more Hepatitis B chronic infections attending our schools in the last two decades.

Although we have finally begun to protect all babies with Hepatitis B vaccinations since September 2017, it still means nearly all children aged 3 to 21 are susceptible to infection. Added to this they are usually quite unaware of the risks of poor blood hygiene, unaware that 1 in 5 humans have caught Hepatitis B and C from blood.

This in turn has led to a rise in infection reports from all regions, for example we recently have had helpline calls from an infected care taker in a rural Northern Ireland school (blood spills lack of bleach), a first aider infection in Wick in Scotland (lack of latex gloves) and a school outbreak in rural Dorset (lack of clean boxing gloves and gym equipment) and a school principal first aider in Coventry (sponging wounds on sports day without gloves) to name but a tiny few.

Every locality needs education on managing Hepatitis B and C in schools and the simple **blood hygiene**, necessary to make schools safe and transmissions prevented, every inner city school needs to realise it may have high levels of infection.

Educational venues all need to balance the need to include many children usually undiagnosed with Hepatitis B and C into their communities. With the need to create a safe space for teachers and staff and for both infected and uninfected students.

The goal of this guidance to make clear the simple solutions required and the pitfalls to avoid.

Over 10 years the Hepatitis B Trust has interacted with dozens of schools dealing with everything from outbreaks to requests for more information, we have tried to share many of the lessons educational establishments have painstakingly learnt and specifically detail here the selection of legislations, agencies and guidelines in place for this issue.

Paul Desmond CEO Hepatitis B Trust 2020

# Prevalence of Hepatitis B and Hepatitis C in schools

#### Numbers infected where and who

- Sentinel Surveillance blood testing in UK child wards has noted a steady 1% of children are carrying chronic Hepatitis B since 2000. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/746267/hpr3618\_bbv-ss.pdf
- This level in child wards is suggesting every school should expect to host up to 10 Hepatitis B positive children per thousand students.
- Hepatitis B Infections are more common in Greater London and the West Midlands.
- Hepatitis B Infections are more common in Asian and African and Eastern European communities, which test plus 2% infected in Sentinel Surveillance blood testing nationwide since 2000.
- Hepatitis C is less present than Hepatitis B with Sentinel Surveillance finding a steady 0.5% of children infected https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/746267/hpr3618\_bbv-ss.pdf
- Hepatitis C is more spread across all UK child communities

## What is Viral Hepatitis

- Both Hepatitis B and C are viruses that live in the blood and can cause liver damage over a long period of infection
- Both are most commonly undiagnosed as they infect silently and usually have no symptoms
- Globally approximately 1 in 5 humans have caught viral hepatitis at some point with 1 in 25 becoming chronic carriers
- The origin of most child infections is and was blood to wounds transfusions

# How do they transmit

- Both viruses are infectiously present in blood and transmit when transfused
- Saliva, Urine, Sweat, Faeces do not transmit them
- Toilet sharing cannot transmit them
- Kitchen sharing cannot transmit them
- Kissing and hugging cannot transmit them
- In schools only wound gateways will accept the virus
- In 10% of cases Hepatitis B is in sexual fluids and 1 in 1000 sexual acts may infect

# **Guidance & Simple Solutions Strategy for Viral Hepatitis**

# Premiership Blood Hygiene

By far the most important need to stop transmission of viral hepatitis in schools is strict observance of Premiership Blood Hygiene in every class and for all staff and children.

- Always wear latex gloves when approaching any wound or blood spill
- Always make plasters available to every gateway wound
- Always use 10% bleach and 90% water solution to kill any virus in blood spills
- Always seal bloody clothes and wipes in bags for washing or disposal

#### Education

- Teach children the most infectious and deadly bodily fluid is blood
- Make certain they understand blood to a wound has infected 1 in 5 humans
- Make certain they ask for plasters every time
- Make certain they do not splash blood around for show and attention
- Make certain all blood spills are sterilised

## Cleaners and First Aiders

- As these can expect to handle both Hepatitis B and C usually undiagnosed in the course of their duties it is critical to make sure they always use gloves when approaching bloody incidents.
- They should also have a supply of 10% bleach to kill viruses in blood every time.
- It is best to avoid hiring people in these roles who have skin conditions such as eczema.
- According to Green Book regulations both roles should be trained and vaccinated for Hepatitis B before being asked to deal with blood.

## Inclusion

- Children declaring their Hepatitis B or C status which can occur when plastering them should not be treated differently
- Do not ask them to wear different clothes or use different toilets or kitchens
- They should be greeted with a statement that our school observes a strict blood hygiene policy for all children

## Data Protection

- Premiership Blood Hygiene removes the need for disclosure
- It is important to explain to students and/or parents this fact and data protect status information by not writing it down
- However with severely impaired mental function disclosure can be made

# **STOP**

34 million people have HIV 250 million have mainly childhood HBV 140 million have mainly transfusion HCV

# **CAUTION**

HIV, HBV and HCV
Can live in spilt blood
And infect via contact
With an open wound

# **USE**

"Premiership Blood Hygiene"
Active plastering of all wound
Gateways using gloves, then
Bleach Kill the Spill & Virus



# **BECAUSE**

1 in 20 people on Earth and 1 in a 100 people in the UK Bleed a blood virus now.

# **Blood Hygiene Precautions Factsheet**

It is important to know your standard precautions when dealing with wounds and spilt blood. We have become aware of the threat from water viruses eg cholera, from air ones e.g. flu, from sex ones e.g. HIV, but we are nationally falling short with blood viruses from transfusion or wound.

**1 Firstly,** use plasters; with a blood virus it is always important to promptly plaster any flowing wound (a gateway for infection into your system). Remember one in 10 people on Earth now bleed blood viruses HBV, HCV, HIV, and use prompt plasters.

**2 Secondly,** watch where you bleed, it is necessary to think where spilt blood can live shared razors, shared DIY tools, and sharp milk teeth at school. Teach children, especially boys, that blood is in no way for display, a la Hollywood.

**3 Thirdly,** don't fight, in Australia, risk questioning found high numbers (most) of infected co-habiters have a history of domestic violence. Fighting is proven by the International Boxing Federation to transmit at a rate of every 10 rounds, so this risk needs to be taken very seriously.

**4 Fourthly,** use only hot water or bleach and always wear gloves for cleaning spills. Only heat kills blood virus's out of the body, other cleaning agents don't work.



Facts about Hepatitis disease prevalence and danger have sparked blood hygiene globally

- globally 1 in 12 humans bleed a hepatitis blood virus and
- globally 1 in 10 of the infected die, 90 million

Education is needed to get the protections enjoyed by wealthy footballers into our schools. With at least 30% of infections having no clear cause, unhygienic blood spill, is the major suspect.

**5 Fifthly,** hepatitis b vaccination protects for life and is one of the world's most used vaccines.

# **Implementation Strategy**

A3 or A2 size Poster Strategy – Traffic Light – Stop Caution Use (at back of booklet)

To generate school wide, at a glance understanding of the schools "Premiership Blood Hygiene" Policy this Poster is best displayed in every classroom initially.

Before putting it up everywhere it is best launched with a staff room briefing educating all staff members that Hepatitis B and C are present in the school population and usually undiagnosed or undeclared. The Briefing should cover

- The need for latex gloves to be used whenever approaching blood-borne
- The need for all wounds to be plastered and all students to declare such wounds
- The need for 10% bleach sterilisation to be used on all blood spills

The most sensible way to introduce this practice is to point out that we have been watching it supplied to footballers on Match of the Day for 30 years and that our children are every bit as worthy of care as our pampered footballers.

A5 size Card Strategy – Concerned Doctor Picture – Stop Caution Use (2 pages above)

This smaller card should be kept next to the plasters and gloves and bleach solution bottles in every classroom or per staff member. The goal here is to equip and remind each staff member of their role and the exact method used by all healthcare professionals to keep themselves safe while caring for wounds.

Blood Hygiene Precautions A4 Factsheet (one page above)

These are to be handed out to every teacher and staff member and can also be used in Assembly and classroom student training. It is good to give a brief statement on each of the 5 key areas. Highlighting

- That plasters are as important as condoms for avoiding infections
- That blood is a deadly fluid equal to other more obvious waste products and not to be left anywhere unsterilised. Dispel the myth that it is OK to forget about it, especially on sharp high traffic objects.
- Make students aware of the risks of fighting as an infection route, adopt a zero tolerance policy to such behaviour, explain this is why boys are twice as infected as girls
- Have a procedure for cleaning spills, like Match of the Day, have fresh shirts etc for blood stained clothing

Hepatitis B Vaccinate all who are expected to come into contact with blood, both staff members and especially students doing full contact sports and martial arts. Explain that every baby has been Hepatitis B vaccinated since August 2017 due to the boom in infections and that contact sports are a high risk environment.

# **Nature of Risk**

# Outbreaks reported (brief snapshot)

- A Poole secondary wherein the boxing club failed to clean bloody gloves
- A London secondary where boys played poking each other with compasses
- A Bristol secondary where a climbing club often skinned hands on shared hand holds
- A London secondary where girls did tiny tattoos of hearts with needles
- A Coventry secondary where the Principal first aider was unvaccinated/ungloved and infected
- A London secondary where children in a gang were blood brothering
- A London Hospital nursery where they handed round sharp freshly fallen out milk teeth
- A Watford primary where plastering wounds was very rare
- A Bradford primary where blood spills were not promptly bleached
- A Belfast primary where the care taker was unvaccinated/ungloved and infected
- An Ealing primary where a first aider was unvaccinated/ungloved and infected
- An elite college where the gymnasts were swabbed with the same sponge
- An Oxford university outbreak where sharing razors in halls was common
- A Cambridge university where medical students reused syringes during practicals
- A university where freshers had too many bloody fights when drunk
- Every freshers September/October we get students infected by undiagnosed virgins
- A London university where beauty students attempted botox and fillers in halls

# Glaring common errors repeatedly noted in schools

- Pupils left unplastered
- Staff approaching wounds ungloved
- Blood not comprehended as extremely dangerous
- Fighting not discussed as a transmission route 100 times more infectious than sex
- A multi use bucket and sponge on sports venues
- Blood spills unbleached with 10% solution
- Ignorance of the extreme risk of sharps eg every 3 pricks from a HBV blooded sharp and every 30 from a HCV blooded sharp will infect
- from broken bloody glass, from razors, from tools, from cutlery and knives, from needles, from syringes, from nails protruding from floors or handrails in high traffic areas, from scissors, from sharp tiles near swimming pool stairs
- Lack of gloves and plasters in classrooms
- Ignorance of prevalence of Hepatitis B and C
- Trips to nations where 70% of people have caught Hepatitis B when unvaccinated
- Rugby, Boxing and Martial Arts classes without vaccination first
- Sharing of razors especially between sexual partners at Universities
- Teachers advised a child has Hepatitis B or C
- Then gossiping about it to other teachers of the child, often generating complete confusion by googling terms like "100 times more infectious than HIV" without awareness that is only via a bloody sharp and that the child may be low risk or non infectious. Another term is "in the saliva or sweat or urine or faeces," all of which is not infectiously true.

# **Flawed Strategies to Avoid**

Googling and asking local GP's and Nurses

Under the awful impact of a sudden outbreak among several students or the sudden disclosure of Hepatitis B or C by a student or family, many establishments have been rather catapulted into a scramble against the clock for solutions. Often only at this urgent point noting a chronic scarcity of guidance and a multitude of mixed disease information and quite vague and varied sets of guidelines from the multitude of Public Healthcare Organisations offering often different advice. Many will contact a local nurse or GP who themselves often ring our helpline for advice. This method is quite unfair on local GP's and nurses who themselves only have a few hours of training rather than thousands of hours on the subject.

#### Discrimination

It is important to make no special arrangements specific to HBV and HCV students but to have school wide policies and precautions that deal with wounds and blood. It is crucial to remember all the reports to date of onward transmission have featured an undiagnosed carrier and poor blood hygiene precautions and education. A diagnosed HBV or HCV carrier will have been trained to ask for plasters and bleach solution to sterilise blood spill areas, a diagnosed person will generally have this skill set even when in the special needs categories. Sadly we have had reports of several misplaced discriminatory practices

- A child made to use a separate toilet (which might make sense with Hepatitis A which is faecal oral in transmission, but not Hepatitis B or C which transmit from blood to a wound)
- A child marched out of a kitchen and dining area (which again makes no sense as Hepatitis B and C cannot transmit in saliva)
- A child made to wear long sleeve clothing (simply incomprehensible?)
- A child banned from swimming
- Even a girl banned from school when menstruating
- Even a child denied place at a boarding school
- Even a child denied medical care when wounded, left bleeding profusely until an ambulance arrived

Such practices have caused tremendous psychological harm to students and ended several academic careers, they are of course also illegal and leave the educational venue open to legal prosecution for discrimination under the Disability and Discrimination Act of 2001.

## Disclosure

About 1 in 100 child Hepatitis B or Hepatitis C cases are diagnosed and also disclosed by parents and/or children in our schools, we have received many reports of parents writing anonymous letters to staff also. In direct declaration messages and meetings it is advisable to simply state that the school has rigorous blood hygiene precautions in every classroom and all venues and well trained staff to practise it. Further advise the family that no record of the infection will kept at the school and that no especial or discriminatory care is needed and that there is no need for them to mention the infection again unless the child plans a contact sport or exposure prone medical study path.

# **Case Histories – Fomites, Ignorance and Student Experience**

Over the last 16 years of schools, parents and students calling our helpline with viral hepatitis related incidents three experiences explain a great deal.

#### **Fomites**

Most children are not advised of their Hepatitis B status until the age of 14 to 16 on average by their parents and doctors. One call featured a 14 year old Afghani boy who was quite traumatised by his infection. He related that he had had a serious nose bleed in class the previous term and had left a large blood stain on his geography class well scored wooden desk top. Point being the stain had been just wiped clean with dried blood in the grain and he had added up that, at 8 students a day and a possible 40 days of infectivity, up to 320 fellow students would have had his HBV virus on their hands for at least 30 to 60 minutes. Nothing perhaps can bring home just how critical it is that every teacher and pupil is trained to take responsibility to 10% bleach sterilise immediately every blood spill in the school. A fomite is a blood particle or stain outside the body. Constant school heating greatly increase viral fomite survivability.

# Ignorance

One meeting in a staff room at a Primary revealed some astonishing attitudes to blood hygiene. Teachers boldly proclaimed plasters were bad and fresh air is best for wounds. Others doubted blood viruses could exist in schools assuming the 2000 million child Hepatitis B infections that occurred globally could not occur in the UK. Others stressed the need to never touch children or apply plasters as this was against the school guidelines and could result in legal actions due to touching children or allergic reactions. All were amazed that a rare post 2000 study of a migrant community in Liverpool revealed 8.7% of their under 5's were catching Hepatitis B.

# **Student Experience**

One Hepatitis B Positive 15 year old school girl had talked to a teacher and they googled and decided erroneously that her saliva was "100 times more infectious than HIV". She subsequently went by the email of untouchable@ for the following 7 years, never touching or kissing anyone. Only in her third year of University did she contact us and learn that she was infectious only in her blood to a wound. It is crucial that students do not declare their infections to people with little or no understanding of them but are steered towards expert care such as our helpline. We had one student who subsequently did a thesis in Healthcare communications who pointed out that you are told you have Hepatitis B or C in front of your parents by a doctor, you are in such shock you can barely hear and left to wonder around online to get confused. It is enormously reassuring to such students when schools have sensible blood hygiene policies in place on time, every time.

# Legislation

The guidance within this booklet has drawn from all the following legislation below, with the in depth study of some 30 educational venues reporting their experiences and infections. Always seeking to balance to maximum level of safety for all staff and students while offering inclusion and opportunity to all infected with Hepatitis B and C.

# The Health Protection Agency/Public Health England

Hepatitis B in Boarding Schools 2010 Report https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/343547/HPA\_Hepatitis\_B\_Boarding\_School\_Guidance.pdf "Chapter 8. Conclusion

The HPA already has clear guidelines and standards in place for the monitoring and surveillance of hepatitis B. Currently hepatitis B is managed in a day school setting by rigorous and thorough infection control, i.e. any incident involving bodily fluid/secretion is handled with the utmost care. No special arrangements are made to deal with students or teachers that are infected with hepatitis B."

# Special Educational Needs and Disability Act 2001

(Part 2: Disability Discrimination in Education, Chapter 1 Schools) and the Disability Discrimination Act 1995 (from October 2010, the Equality Act replaced most of the Disability Discrimination Act (DDA):

"It is unlawful for the body responsible for a school to discriminate against a Viral Hepatitis Infected or disabled person

In the arrangements it makes for determining admission to the school as a pupil;

- In the terms on which it offers to admit him/her to the school as a pupil; or
- By refusing or deliberately omitting to accept and application for his/her admission to the school as a pupil.

It is unlawful for the body responsible for a school to discriminate against a Viral Hepatitis Infected or disabled pupil in the education or associated services provided for, or offered to, pupils at the school by that body.

It is unlawful for the body responsible for a school to discriminate against a Viral Hepatitis Infected or disabled pupil by excluding him/her from the school, whether permanently or temporarily."

## **Data Protection Act 1998**

Boarding Schools National Minimum Standards, published by the Secretary of State for Health under section 23(1) of the Care Standards Act 2000 (DH, 2002).

"The Acts also clearly state that Viral Hepatitis Infected or disabled pupils are not to be substantially disadvantaged and they make specific reference to confidentiality. A 'confidentiality request' is one that asks for the nature or the existence of a disabled person's disability to be treated as confidential."

#### **Green Book for Immunisation 2019 Edition**

http://media.dh.gov.uk/network/211/files/2012/09/Green-Book-updated-140313.pdf

Green Book Page 171

"Individuals at occupational risk

Hepatitis B vaccination is recommended for the following groups who are considered at increased risk:

Healthcare workers in the UK (including students and trainees):

All healthcare workers who may have direct contact with patients' blood, blood-stained body fluids or tissues, require

This includes any staff who are at risk of injury from blood contaminated sharp instruments, or of being deliberately injured or bitten by patients."

Basically every school teacher and care taker may be a blood stained first aider at any time and all should therefore be vaccinated, all can sue for compensation if infected in the course of their duties when left unprotected. To date Teachers, Care Takers and Principals have reported HBV infections.

#### **COSHH Control of Substances Hazardous to Health Act 1996 and 2012**

https://www.hse.gov.uk/pubns/indg342.pdf

"Blood Borne Viruses in the Workplace Guidance

What do I have to do as an employer?

Under the Health and Safety at Work etc Act 1974 and the Management of Health and Safety at Work Regulations 1999, you have a legal duty to protect the health of your employees and anyone else, for example the public, who may be affected by your work, or who may be on your premises at any time. You must have a safety policy and you should consult your employees and safety representatives on the risks identified and the measures needed to prevent or control these risks. You must also ensure employees are familiar with the safety policy.

Specific legislation on hazards that arise from working with biological agents such as BBVs is contained in the Control of Substances Hazardous to Health Regulations 2002 (as amended) (COSHH). Under COSHH you have a legal duty to assess the risk of infection for employees and others affected by your work. When the risk is known, you need to take suitable precautions to protect their health. You must also give employees adequate information, instruction and training on any risks to their health which they may face at work."

The Hepatitis B Trust suggest in essence every school must have a complete Premiership Blood Hygiene Education and Procedure in place, preferably using the big 3 posters above and yellow bins for bloodied sharps.

# Health and Safety Sharp Instruments in Healthcare Act 2013 / Waste Regulations Act 1996 https://www.hse.gov.uk/pubns/hsis7.htm

With most school outbreaks featuring blood on objects with no known source subsequently found eg blood on boxing gloves, blood on protruding nails on handrails, blood on compasses used in play games, blood on broken glass. It is crucial to adopt Yellow bin approaches, stronger gardening type gloves and plentiful bleach solutions to such blooded sharps. Yellow bin hygiene for all blooded sharps is the best way forward. Clothes washed can be regarded as sterilised.

# RIDDOR Reporting of Injuries, Diseases and Dangerous Occurrences Regulation 1995 and 2012 https://www.hse.gov.uk/pubns/hsis1.htm

"Reporting injuries, diseases and dangerous occurrences in health and social care Guidance for employers Page 4 Sharps Injuries

A sharps injury is when a needle or other sharp instrument accidentally penetrates the skin. It is sometimes called a needlestick injury. Sharps injuries must be reported:

- when an employee is injured by a sharp known to be contaminated with a blood-borne virus (BBV), eg
  hepatitis B or C or HIV. This is reportable as a dangerous occurrence;
- when the employee receives a sharps injury and a BBV acquired by this route sero-converts. This is reportable as a disease see 'Diseases, infections and ill health';
- if the injury itself is so severe that it must be reported.

If the sharp is not contaminated with a BBV, or the source of the sharps injury cannot be traced, it is not reportable, unless the injury itself causes an over seven-day injury. If the employee develops a disease attributable to the injury, then it must be reported. Reportable

• A cleaner suffers a needlestick injury from a needle and syringe known to contain hepatitis B positive blood (reportable as a dangerous occurrence)."

The Hepatitis B Trust suggest, school sharps are many and varied and sterilising them is the way forward. Finally, the issue of playground fights and knife fights needs addressing, if a Viral Hepatitis Student is assaulted or fights and bleeds then the incident needs to be reported. If a student reports a Hepatitis B infection post fight/exposure it also needs reporting.

# **Mental Capacity and Consent Act**

Working within the 5 Principles of the Act. The Hepatitis B Trust have repeatedly found students and especially special needs students can be educated in the fact that blood is every bit as infectious/dangerous as faeces, sexual fluids, vomit, mucus etc. And be trained to request and follow correct hygiene, which in turn minimises the need for disclosure to schools at all.

"The Five Principles of the Mental Capacity Act http://www.umccoventry.co.uk/the-five-principles-of-the-mental-capacity-act/

The MCA has five key principles which emphasise its fundamental concepts and core values. These must be borne in mind when working with, or providing care or treatment for, people who lack capacity. The five principles are:

- 1. Every adult has the right to make his or her own decisions and must be assumed to have capacity to do so unless it is proved otherwise. This means that it must not be assumed someone cannot make a decision for themselves just because they have a particular medical condition or disability, or because they lack capacity in other areas.
- 2. People must be supported as much as possible to make their own decisions before anyone concludes that they cannot do so. This means that every effort should be made to encourage and support the person to make the decision for himself/herself. If a lack of capacity is established, it is still important that the person is involved as far as possible in making decisions.
- 3. People have the right to make what others might regard as unwise or eccentric decisions. Everyone has their own values, beliefs and preferences which may not be the same as those of other people. People cannot be treated as lacking capacity for that reason.
- 4. Anything done for or on behalf of a person who lacks mental capacity must be done in their best interests.
- 5. Anything done for, or on behalf of, people without capacity should be the least restrictive of their basic rights and freedoms. This means that when anything is done to, or for, a person who lacks capacity the option that is in their best interests and which interferes the least with their rights and freedom of action must be chosen.

# **Sources**















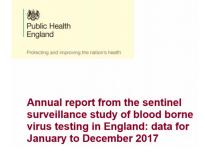
# Health and Safety (Sharp Instruments in Healthcare) Regulations 2013

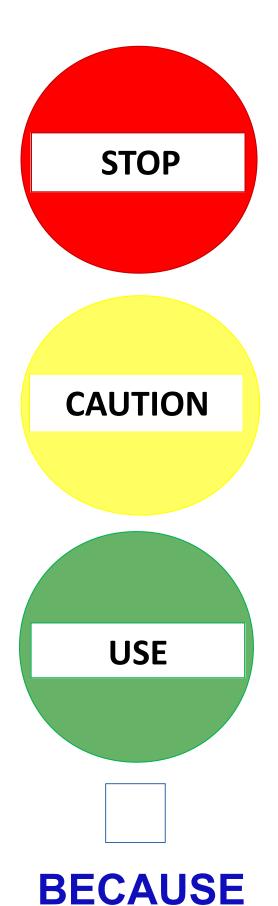
Guidance for employers and employees



# EH40/2005 Workplace exposure limits

Containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations 2002 (as amended)





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And wash hands

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