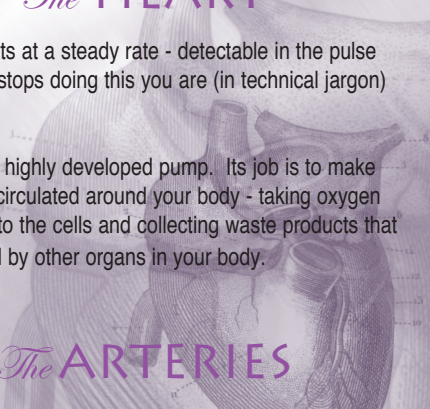


DIG

A GUIDE FOR
INJECTING
DRUG USERS



ANATOMY

An anatomical illustration of a human heart, showing the four chambers (right and left atria and ventricles) and the major blood vessels (superior and inferior vena cava, aorta, and pulmonary artery and vein). The heart is depicted in a realistic, shaded style, with the major vessels branching out. The illustration is positioned in the background, behind the text.

The HEART

The heart beats at a steady rate - detectable in the pulse - and when it stops doing this you are (in technical jargon) DEAD.

The heart is a highly developed pump. Its job is to make sure blood is circulated around your body - taking oxygen and nutrients to the cells and collecting waste products that are processed by other organs in your body.

The ARTERIES

The arteries are the tubes leading away from the heart that carry the blood with its oxygen and nutrients. The large arteries go straight to your body's organs, these have a pulse. The large arteries branch off into smaller arteries (known as arteriole) and these branch off into even smaller ones (known as capillaries). Arteriole and capillaries do not have a pulse. The blood in an artery is bright red as it contains a lot of oxygen.

NEVER *Inject into an* ARTERY

If you inject into an artery you may bleed to death or lose a limb. You will know when you inject into an artery as when you pull the plunger back the blood is bright red and you feel a burning sensation. The blood can also appear frothy and the plunger can be forced back by the pressure of the blood.

If this happens, pull out the needle and apply pressure with your thumb for at least 15 minutes. If it does not stop bleeding call for an ambulance or get help.

The VEINS

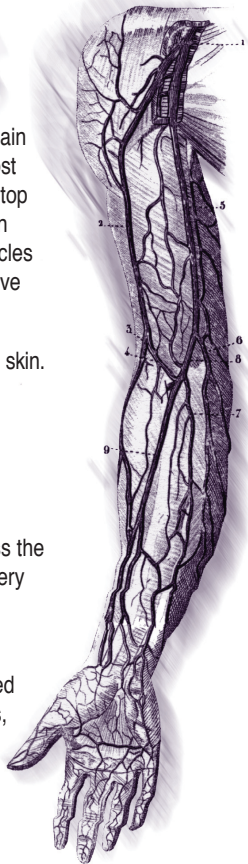
The veins take the blood back to the heart, they contain less oxygen so the blood in a vein is a dark red almost brown colour. The veins have a series of valves to stop the blood flowing in the wrong direction. The blood in the veins is pumped back to the heart using the muscles through which the veins pass, so the veins do not have a pulse.

Veins look blue and can be seen on the surface of the skin.

If the veins are damaged or removed by surgery, the body will divert blood flow through smaller veins bypassing the damage. However, these repairs are never as large or strong as the original veins.

Capillaries are the tiniest of the veins, they criss-cross the tissue of the body at individual cell level. They are very fragile and barely visible to the eye.

Don't keep injecting in the same spot, change arms and veins to try and give them time to heal. Repeated injection will cause you to run out of accessible veins, and this may cause problems should you require emergency treatment in the future.



TYPE *of* INJECTION

Injecting into the muscle:
known as Intramuscular injection or I.M injection. Steroids should only ever be injected into a muscle. Heroin users should not inject into the muscle

Skin popping:
injecting just under the surface of the skin is known as skin popping. Heroin users should not skin pop

Injecting into the veins:
known as Intravenous or I.V injection. This is by far the most common way to inject street drugs. It is popular because the drug effects start almost instantly, it is also the most damaging to the body.

Injecting into the muscle

Skin popping

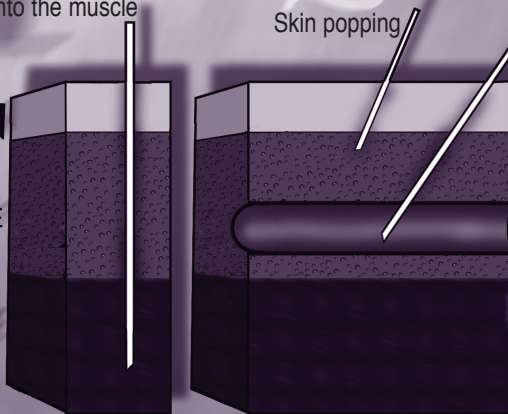
Injecting into the veins

SKIN

FATTY TISSUE

MUSCLE

VEIN



CHOOSING A NEEDLE

Needles come in various lengths, the colours show the thickness of the needle:

GREY	0.4mm
ORANGE	0.5mm
BLUE	0.6mm
GREEN	0.8mm
YELLOW	0.9mm

The 1/2ml and 1ml all in one insulin syringe have a fine point.

Barrels are available in various sizes. If you are injecting a large amount it is even more important that you inject SLOWLY.

Use the smallest needle and barrel possible, bearing in mind what you are trying to inject and where you are injecting. An orange needle will cope with surface veins, you don't need to use blue needles in the veins of your arm, there are no benefits, it just causes more damage. For skin popping and injecting into a small vein in your hands, fingers or feet, you should use an insulin syringe. For deep veins like the groin, some people can do it with a long orange needle, while others need a blue. For injecting into a muscle you should use a long blue or green needle.



CHOOSING A SITE

Most new drug injectors use the **CROOK** of the **ARM**. This is because it is the easiest place to find a vein and inject.

UPPER and **LOWER ARMS** have plenty of visible veins. Regularly rotate sites (change the place where you inject) to give the veins a chance to heal.

Those who can no longer use veins in the arms may use the small veins on the back of their **HANDS**. Use a small barrel with an orange needle or 1/2 or 1ml insulin.

Veins in **FINGERS** are even finer. Using them can be painful and they are easy to damage. There are also tiny arteries near

the surface, so take care.

Remove any rings before injecting, in case of swelling, which could result in the loss of your finger.

There is a big vein in your **NECK** (the jugular). **NEVER** inject into this as it is likely you will bleed to death.

Women should avoid the **BREASTS**.

There are lots of veins in the back of your **LEGS**. The blood flows slowly in these, so inject slowly.

There are lots of small veins in your **FEET**. Inject slowly as it can be painful.

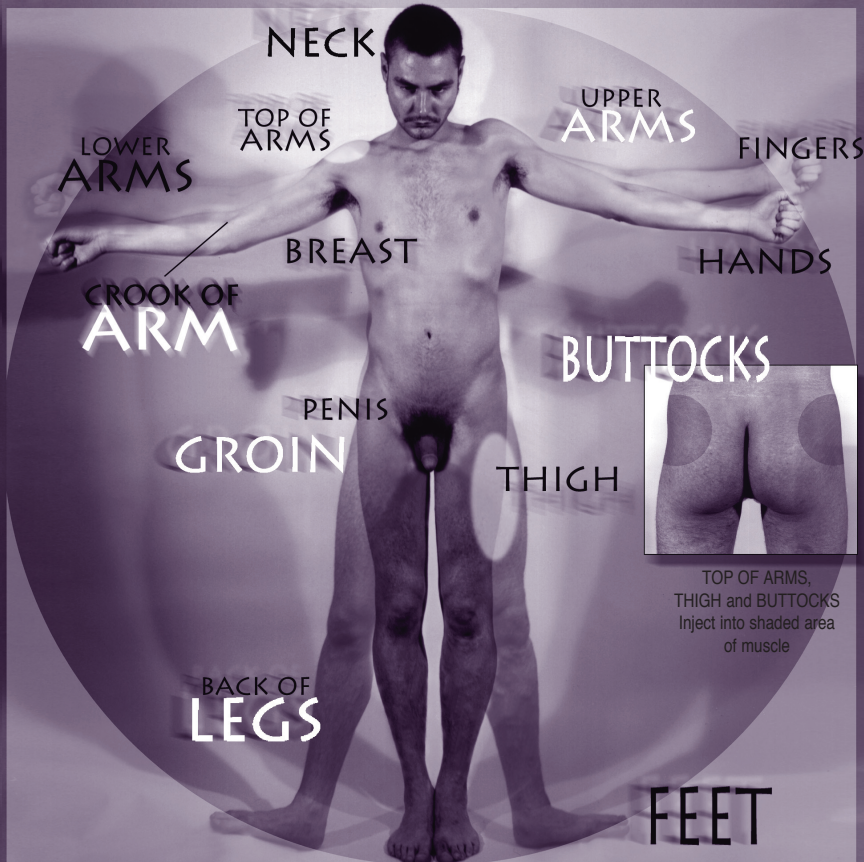
Never inject into your **PENIS**. The veins won't take a needle, they'll burst

and your penis will turn black and swollen before you can even get a shot in. If you are injecting into muscle, **BUTTOCKS** and **THIGHS** or the **TOP OF ARMS** are best. Inject into the shaded area. Use alternate sites each time you inject.

If you have been injecting for a while your veins will become damaged or may collapse. When this happens you may have trouble finding veins to use.

The temptation is to use the big, deep vein in your **GROIN** (the femoral). This is very dangerous, but despite this many drug users do end up using it.

(See section on the groin.)



NECK

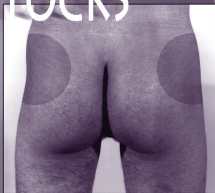
UPPER
ARMS

FINGERS

HANDS

BUTTOCKS

THIGH



TOP OF ARMS,
THIGH and BUTTOCKS
Inject into shaded area
of muscle

FEET

BACK OF
LEGS

GROIN

PENIS

BREAST

CROOK OF
ARM

LOWER
ARMS

TOP OF
ARMS

THE SUBSTANCE

KNOW WHAT IT IS?

Don't inject any old shit. Drugs like amphetamine sulphate are rarely more than 5% pure, the rest could be anything.

Injecting cocaine will numb the warning signs of pain from a bad hit.

Temazepam in capsule form (jellies, eggs), has been changed to make it difficult to inject. If you do manage to inject them, they can cause serious damage. Temazepam capsules are no longer prescribed but they are still about along with illicitly produced clear capsules.

KNOW ITS PURITY

Use a small amount or inject half and wait, if you're unsure of purity. Whilst impure drugs cause problems, drugs with a high level of purity can easily lead to overdose and death.

AMOUNT

Remember, if you have stopped using for a while, you should use a lot less; you quickly build up and lose tolerance. What was your normal dose when you were using regularly could lead to an overdose after a period of not using.

DON'T MIX DRUGS.

Mixing drugs, including drinking alcohol on top of your hit, can lead to overdose.

POWDERS

Grind down any lumpy powder as fine as possible.

TABLETS

Are not meant to be injected, so there is no safe way of injecting them. The chalk content in tablets is a major cause of vein collapse and blockage. If you use tablets, crush them as fine as you can between spoons or with a bottle.

PREPARING *Street* HEROIN

Use your own clean spoon, HIV (the AIDS virus),
HEP B and HEP C, can all be caught from sharing spoons.

Estimate the amount of heroin you are going to use.

Remember to use less if you are unsure of purity
or you have had a break from regular use. Make sure the powder
is finely ground with no lumps, if it is not, grind it down.

Add as little as possible citric acid or vitamin C powder.

Lemon juice and vinegar will do the job,
but these can cause fungal infections.

Mix with sterile water (available from needle exchanges).

If you haven't got sterile water, use cold water (previously boiled for 5 minutes).

Make sure you put it into a clean cup or water pot.

HIV, HEP B and HEP C can all be caught from sharing cups.

Draw up the water with a clean needle.

Do not draw up water from the same cup or pot
as someone else. Do not share water at any time
or squirt water into someone else's syringe.

HIV, HEP B and HEP C can all be caught from water.

Mix with the cap from a newly opened needle.

Heat as little as possible for the mixture to
dissolve. Don't forget to blow out the candle.

Use a clean filter (available from needle exchanges) or an unused cigarette filter. Do not use cotton wool or toilet roll as they clog the needle. Do not share other peoples filters, or let them use yours. HIV/HEP B and HEP C can all be caught from filters.

Using a new needle and syringe draw up the liquid through the filter. Do not squirt this into other people's syringe or share (back load/ front load) in any way. HIV, HEP B and HEP C can all be caught in this way.

Make sure there are no bubbles in the syringe. Tap the barrel and push the plunger up until a tiny drop of the liquid appears at the end.

No matter how eager you are to inject, let the mixture cool. Injecting a hot mixture can cause all sorts of problems.

Do not share anything with anybody or let anybody share anything of yours...

...EVER.

NEVER



PREPARING *the* SITE

Select the vein to be used. New users can often find surface veins. Heat or more commonly waving your arm around like a windmill will bring up veins.

Use a tourniquet to bring up the vein. A tourniquet will hold the vein in place to stop it rolling. Don't tie it too tight as this makes it harder to find a vein.



Clean the site. Use soap and water and then dry it with a clean towel.

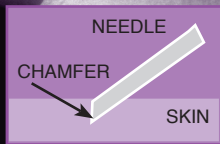
Alternatively wipe once with a swab. These are available from needle exchanges and chemists.

Let it evaporate.



INJECTING

Insert the needle at an angle in the direction of the blood flow.
Blood in the veins flows towards the heart.



Insert needle with the chamfer facing upwards.

Draw back the plunger until you see blood. If the blood is bright red or the plunger is forced back by the pressure of the blood, you have probably hit an artery (see page 2). Blood in veins is a dark red, it is very important to learn the difference.

Take the tourniquet off. If you inject with it on you could burst a vein and lose your hit. If you pass out with it on, you could lose your limb.

Depress the plunger slowly at a steady pace. Do not flush as it damages veins and doesn't get any more out of the syringe. Slide the needle out slowly.

APPLY PRESSURE

Keep pressure on the site with a clean swab for 2/3 minutes or until the bleeding stops. If the bleeding doesn't stop hold the limb up, keep pressure on it and get help.

After you have finished with your needle resheath it, do not resheath other peoples needles as you may accidentally prick yourself.



DISPOSE OF WORKS

Dispose of; needles, syringes, swabs, filters, used phials and anything else your blood and needle has come into contact with in a sharps container.

Sharps containers are available from needle exchanges. If you haven't got a sharps container, burn your works.

Don't overfill your sharps container. When it is filled up to the line, take it back to the needle exchange.

Clean your spoon and wash out any cups before you use them again.



INJECTING *in the* GROIN

If you get to the stage where your groin is the only thing left, think about giving your veins a chance to repair themselves. Try smoking heroin, or a methadone script for a while. Some people use this as an opportunity to sack heroin for good.

Going into the groin is very dangerous. There is a deep vein in the groin (the femoral vein). The femoral vein is also right next to the main artery that supplies blood to the leg (the femoral artery). It is all too easy to miss the vein and hit this artery. This is a major artery and you could bleed to death or lose a leg by hitting it.

If you do hit it try and stem the flow of blood by any means you can. Keep pressure on it until it stops bleeding, if it doesn't stop bleeding within 15 minutes call an ambulance.

As well as being next to a major artery the femoral vein is also next to a major nerve (the femoral nerve). Hitting this will be extremely painful and could also result in serious damage to your leg.

- ♦ Clean the site.
- ♦ Use a long needle. Most people use a blue 1" needle. Some people can reach it with an orange 5/8". The wider the gauge of the needle the more damage caused.
- ♦ Put your finger on your groin until you find a pulse. The pulse belongs to the artery. **DO NOT INJECT HERE.** Leave your finger on your artery and measure about the width of two fingers away from the artery (DOWN if you were lying on your back) to find the vein. This is only a rough guide as the position will vary from person to person.
- ♦ Go in straight, not at an angle. Insert the needle 3/4 of the way so it can be removed easier if it snaps.
- ♦ Draw back until you see dark red blood.
- ♦ Depress plunger slowly.
- ♦ Remove needle.
- ♦ Keep pressure on the site until bleeding stops.

Rotate your injection site. If you notice a hot, red, sore or swollen area, see a doctor. Deep vein thrombosis is a very serious but fairly common result of injecting in the groin.

An anatomical illustration of the right shoulder joint, viewed from the side. The humerus is shown in the foreground, with the scapula visible behind it. The acromioclavicular joint is highlighted with a white arrow. The coracoclavicular ligament is indicated by another white arrow. The coracoacromial ligament is pointed to by a third white arrow. The diagram is set against a dark purple background.

FEMORAL ARTERY

INJECTING *into* MUSCLE

Don't inject more than 2mls into one muscle area at a time. Always use clean equipment. Green capped needles are best for the buttock, blue ones for the thigh or top of arm. Don't use orange needles in a muscle as they can snap.

◇ Select a good piece of muscle: top of the arm, thigh or buttock (see choosing a site).

◇ Clean Site.

◇ Stretch the skin with your finger and thumb. Hold the syringe like a dart and quickly jab the needle into the skin at a right angle. Release the skin.

◇ Insert the needle 3/4 of the way into the muscle so it can be removed easier if it snaps. If you don't insert the needle far enough you can cause an abscess.

◇ If you feel a hard lump in a muscle where you inject- use another site.

◇ Pull back the plunger, if there is no blood, slowly press in the plunger.

◇ If blood is drawn into the syringe - STOP - remove the needle and quickly press hard on the site until the bleeding stops. Use another site for the injection.

◇ After injecting, remove the needle and press hard on the site with a swab for five to ten seconds and massage slowly to disperse the drug.

◇ Dispose of all equipment in a SHARPS BIN.



INFECTED HEROIN

ANTHRAX & BACTERIA:

A number of people have died over the last few years after injecting heroin infected with a bacteria called **Clostridium** (sometimes called 'Botulism' or 'Wound Botulism') and more recently through heroin infected with the bug **Anthrax**. **Clostridium** was only spread by injecting infected heroin, however **Anthrax**, can be spread by both injecting and smoking infected heroin. Unfortunately there is no way of telling if your heroin is infected as it looks and acts the same as any other batch of heroin.

THE SYMPTOMS:

Clostridium. Infection symptoms begin with blurred vision and difficulties with speaking and swallowing. It can be successfully treated in most cases but it can kill. If you experience symptoms get medical help straight away.

Anthrax. If you inject heroin infected with anthrax you may notice swelling and redness at the injection site, which may lead to an abscess or ulcer. You may have other symptoms such as fever or headache. If you smoke heroin, you may find it hard to breathe and may have a fever or flu like symptoms.

WHAT TO DO

If you notice any of the symptoms go along to your nearest hospital A & E.

If you are worried go along to your local drug service and discuss either help with quitting or getting a script of methadone or buprenorphine.

HEALTH PROBLEMS

Get regular medical check-ups, as Injecting drug users often lead lifestyles that make excessive demands on their bodies. If you have trouble finding a doctor, contact your local drug service.

OCCUPATIONAL HAZARDS

WEIGHT LOSS: is often a sign of other illness, however, in injecting drug users it is usually explained by quite simply not eating enough.

CONSTIPATION: as above - what's not put in, can't come out. Constipation is also a side effect (and occupational hazard) of using opiates.

DIARRHOEA: is often caused by eating spicy foods, or by an infection. It can also (strangely) be caused by severe constipation.

VOMITING: is a feature for new opiate users, it is also a symptom of withdrawal.

SKIN RASHES: often a major cause is poor diet. Skin Rashes are difficult to treat, you should ask to see a specialist if it is severe.

BRONCHITIS: this is an infection of the smaller airways that branch off the windpipe. It is caused by damp and cold. Opiate users are more at risk because of the affects of opiates on the respiratory system.

WARNING SIGNS: There are many different problems that can be caused by injecting. Most can be treated by your doctor. However, the longer you leave it untreated the more severe the problem can become and in some cases they can become life threatening. Watch out for any signs around the injection site. If the area becomes painful, tender, red, hot or swollen or generally if you are feeling ill or weak with a temperature, go to your doctor.

Watch out for any infection. If the skin becomes sore, weeps or turns black, go to your doctor as it won't heal by itself. If infection is spreading, it is often noticed in the hands and fingers, they become; red, swollen, hot, tight, shiny and painful (the fingers look like sausages). Another sign is a red track mark that may be visible under the skin and as the infection spreads the track mark spreads. If you are feeling weak or ill and notice the appearance of bruises in the mouth or eyes, go to your doctor.

INFECTED HEROIN: See page on infected heroin. If you experience any of the symptoms mentioned get medical help straight away.

SEXUALLY TRANSMITTED

DISEASES: if you have any kind of infection, pain or discharge, you should go straight to the Genital Urinary Medicine Clinic (GUM Clinic). You should of course use condoms to protect yourself and your partner.

SHARING: you are at risk from HIV, Hep B and Hep C by sharing needles, syringes, barrels, water or anything else that has come into contact with somebody else's blood, body fluids or works.

HIV: if you have contracted HIV (the virus that leads to AIDS) the only way of knowing is to go for a test, as it could be years before any symptoms appear.

HEP C: Hepatitis C, is a recently discovered virus. It is thought that over half of the drug injectors in Britain have it. You may have no symptoms at all when you first pick it up and it can be years before signs of the illness show. Or you can become ill, feel tired, have flu like symptoms and jaundice (your skin and whites of your eyes appear yellow). Contact your local drug service for more advice.

HEP B: Hepatitis B is an old enemy of drug users. You may not notice signs straight away, many of the symptoms are masked by the use of drugs like heroin. Sure signs are jaundice, your pee is dark or your shit is very pale/white. A vaccination for Hep B is available. See your local drug service or your doctor.

OVERDOSE: as a drug user you will probably be more aware than anybody when something is wrong with a friend. If you think they have overdosed, try and keep them awake, although this may prove impossible. Do not give them anything to eat or drink, do not inject them with anything. If they are unconscious and can't be roused call an ambulance. Ambulance services in many parts of the country only call the police if: there is a death, they are threatened or there is a child at risk. Put them on their side (the recovery position) so they don't choke on their vomit (a common cause of death).



Tell the ambulance crew what they have taken. This could save their life as there are antidotes to overdoses. An injection of naloxone (Narcan) will rapidly reverse an overdose from an opioid drug like heroin. Obviously, if you inject on your own there is nobody who can help you. If you regularly inject with a friend, talk over beforehand what you will do in an emergency.

FOR HELP AND ADVICE CONTACT

 lifeline | publication guidelines

 aims
To provide information for current injectors that reduces the risk of problems associated with injecting drugs. It includes information on anatomy and injection sites, the preparation and injection of heroin, and highlights the dangers associated with blood borne viruses, femoral injection and overdose.

 audience
Injecting drug users. Use with under 16's with support (see catalogue or web site).

 content
No swearing, photographic images of drug use.

 funding
Self-financed.

Design and text Michael Linnell, inside photography Peter Jenkins.