

Reducing Harm for People who Take Cocaine



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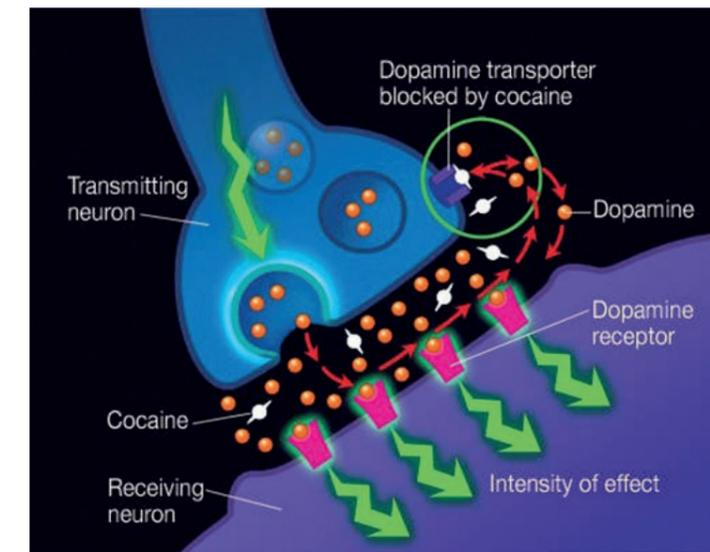
Overview of cocaine

Cocaine hydrochloride is the most common form of cocaine to be used as a psychoactive drug in the UK. It is isolated from the leaves of the Andean coca shrub using a range of chemicals. This plant can only be found in very specific regions of South America meaning all the cocaine found in the UK has been trafficked here. Of course, this also means there are multiple opportunities for it to be cut, adulterated or “bashed” throughout its journey. Common agents used to cut cocaine include glucose, creatine, caffeine and Benzocaine. Analysis has also shown that on occasion cocaine has also been cut with painkillers such as Phenacetin. Cocaine powder may be snorted or injected. It’s form can also be changed to facilitate smoking.

Regardless how cocaine is administered, it works by releasing a powerful surge of dopamine in the brain (one of our feel good hormones). This produces feelings of **euphoria, well-being, state of alertness and a desire for social bonding** in addition to the classic stimulant effects such as **increased energy, reduced appetite and reduced need for sleep**.

Normally, this dopamine would be recycled back to cells for later use. However, cocaine also attaches to the dopamine transporter which blocks this return process, resulting in a build-up of active dopamine.

This mechanism creates 2 clear stages - a high, caused by large amounts of dopamine release followed by a state of dopamine depletion after use. Many of the negative psychological effects people experience relate to this state.



Common cocaine street terms

- **Gear, coke, charlie, chico, ching, snow** – all refer to power cocaine.
- **Gram, “eggs and ham”, a ‘G’** – all refer to the most commonly sold weight of powder cocaine 1 gram.
- **Line, patsy, patsy cline** – all refer to a line of cocaine which is commonly snorted.
- **Bump or key** – refer to a small mound of powder cocaine which will be snorted without a straw.
- **Rock, base, freebase, nugget** – all refer to crack or freebase cocaine.
- **Pipe, crack pipe** – refer to the utensil used for smoking.
- **Snowball** – refers to mixing heroin and cocaine together for injecting.



Forms of cocaine and associated cost

There are 3 main forms of cocaine used in the UK; powder, crack and freebase. Each form lend themselves to different methods of administration.

Powder (cocaine hydrochloride) is the most common form of cocaine to be sold. It is often snorted in lines through a straw or banknote. However, it is also water soluble so easy to prepare for injecting. This type of cocaine does not lend itself well to smoking due to the high melting point.

Crack Cocaine is a base form of cocaine that can be easily produced using water and sodium bicarbonate (baking soda) and then heated to form a solid rock like state for smoking. Although produced for smoking, these rocks can also be injected, if an acidifier is added to return it to a water soluble state. It is not uncommon for suppliers to add bulking agents during preparation to increase profit which will result in a poor quality product – **not all crack cocaine is high purity.**

Cost – £10 - £20 per rock depending on weight and purity.

Freebase Cocaine is a base form of cocaine. The process of freeing the cocaine base comes from the addition of ammonia. The result is a form of cocaine that is almost 100 percent pure. In this form, it has a low melting point, which makes it easy to smoke. Freebase cocaine is not soluble in water, so an acidifier needs to be added to return it to a water soluble state – **all freebase cocaine is high purity.**

Cost – not commonly sold at street level. When it is cost will always be related to weight.

The local cocaine market

Over the years the powder cocaine market has developed in to a tiered model with wide ranges of purities linked to price. In Glasgow this is particularly well established with all purity levels indicated by name.

1. Small bags which are aimed at those injecting £10-£15.
2. Poor quality – this is often called “council” approximately £30 per gram.
3. Medium quality/purity – this is often called 50-50 approximately £50 per gram.
4. High quality/purity – this is often called “proper” or “prop” approximately £80 per gram.

This business model is reflective of a well-established, flexible and resilient cocaine market.

Cocaine and alcohol

The interaction between cocaine and alcohol is complex. One of the reported benefits of taking cocaine and alcohol together is the ability to consume far more alcohol without passing out or appearing very drunk. Of course the damage caused by consuming large amounts of alcohol in a binge fashion don't disappear. This level of alcohol consumption will make peoples “come down” far worse than using cocaine on its own. When both drugs are consumed together the body produces a third chemical called cocaethylene. This is known to enhance the euphoric effect of the cocaine and increase the duration of effect. This may explain why so many people have such strong urges to use both together. As well as the risks associated with increased alcohol consumption, cocaethylene creates other risks, in particular, it is toxic to the cardiovascular system, elevates heart rate and blood pressure more than cocaine alone would.

Cocaine compulsions and psychological dependence

The compulsive nature of cocaine is related to its powerful effect it has on the dopamine reward system. People can feel an overwhelming and sometime unexpected urge to use, even after a significant period of abstinence. Cravings are often triggered by sights, sounds, smells or using other drugs/alcohol.

For others, daily use can become an integral part of their life and find functioning (physically, psychologically and socially) without it very difficult. Although no physical dependence occurs, even with repeated use, the psychological grip is very real and should not be underestimated. It should be noted that the symptoms of anxiety which are often present after a binge or on cession will very much feel to the person like physical withdrawals.

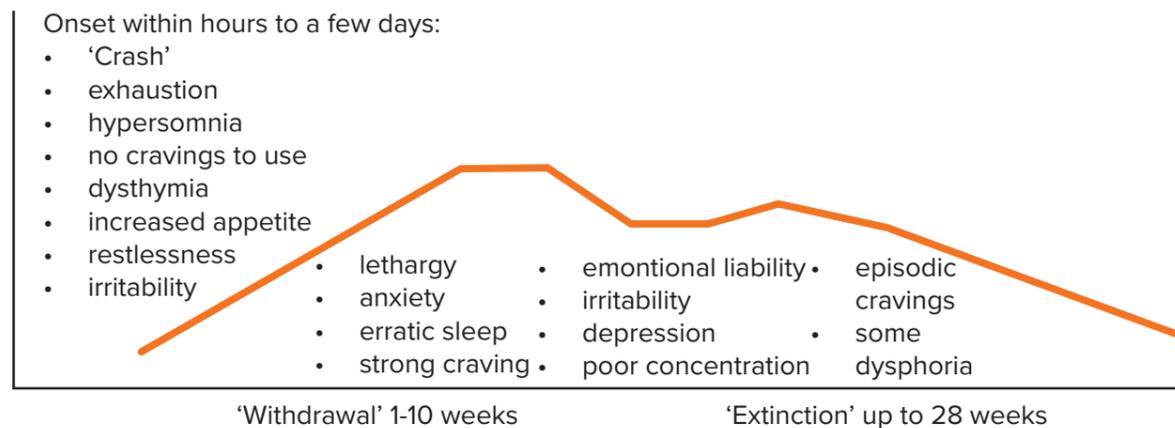
Cocaine withdrawals (sometimes called a come down) from heavy cocaine use can be very uncomfortable. However, it is rarely life threatening.

The most commonly cited study into cocaine withdrawal was undertaken by Gawin and Kleber in 1986 and is still relevant today. Using data collected from 30 cocaine-dependent outpatients, the researchers reported three distinct phases of the withdrawal process; 'crash', 'withdrawal' and 'extinction':

Phase one, 'the crash', developed rapidly following abrupt cessation of heavy cocaine use and was characterised by acute dysphoria, irritability and anxiety, increased desire for sleep, exhaustion, increased appetite, decreased craving to use.

Phase two, 'withdrawal' was characterised by increasing craving to use, poor concentration, some irritability and some lethargy, which persisted for up to 10 weeks.

Phase three, 'extinction', comprises intermittent



Some people choose to take other drugs, such as alcohol, sleeping tablets, opiates or benzodiazepines, to help ease the first 2 phases. Of course this can contribute to further problems, including overdose and dependence to additional drugs.

It may be the case that a person will continue to use cocaine even though negative consequences are evident. This is a good indicator of drug dependence, albeit psychological. Binging of cocaine is common and can quickly lead to a host of physical and mental health problems. However, social and

financial problems may appear first and often easiest to identify. Psychotic episodes are often triggered though lack of sleep, particularly if a binge progresses to days of continued use.

Cocaine harms general

Regardless how cocaine is administered, there are a number of significant and serious harms people may experience.

Cocaine overdose and stroke

It is easy to consume a life threatening amount of cocaine without realising. A large number of cocaine overdoses happen during binges. As a person doses frequently, their body cannot metabolize the drug fast enough. This causes the cocaine to build up to toxic and deadly levels within their body.

A cocaine overdose causes a person's central nervous system to become far too stimulated. As the CNS goes into overdrive, critical life support systems speed up to the point where the body can no longer keep up. When this happens, blood pressure, breathing, heart and temperature rates all climb. This can lead to a heart attack or stroke.

Signs and symptoms of a cocaine overdose include:

- Chest pains, pain in the jaw or arm (heart attack signs)
- Rapid heart rate
- Pounding heart
- Overheating
- Dehydration Headache
- Delirium
- Stroke signs – drooping of the face or loss of movement in the limbs.

If an overdose or stroke is suspected the person should call emergency services as soon as possible and follow the call handler's instructions.

The risk of overdose heart attack or stroke can be reduced by:

Taking less cocaine by controlling the amount taken (dose) the time between doses and the duration of sitting.

Not consuming other drugs, alcohol or tobacco within the same sitting.

Accessing heart health checks as a means of identifying cardiovascular/heart problems at the earliest possible stage.

Cocaine and sexual risks

Cocaine like many other drugs can lower inhibitions and make the person more likely to engage in sexual activity. This, often impulsive sex, may reduce the likelihood of condom use or other safe sex practices.

Rougher sex such as anal may seem more appealing whilst prolonged sex is common due to the inability to climax. This may lead to the tearing of membranes causing the introduction of blood and therefore the potential to transmit blood borne viruses. Men can find it difficult to get and maintain an erection, leading to a frustrated state.

Overall, there are considerable risk factors associated with cocaine use and sex. Unwanted pregnancies, STIs, BBV's, sexual assault are just some of the potential negative consequences of sex and cocaine.

Longer term cocaine use can change a woman's menstrual cycle and stop ovulation whilst damage to the fallopian tubes can result in infertility.

Cocaine use during pregnancy can cause seizures, migraines, premature birth and in some cases, the placenta can detach from the uterine wall, called placental abruption. Stillbirths and miscarriages occur at higher rates in women who use cocaine during pregnancy.

Risks associated with methods of administration

Snort risks

Septum Damage is one of the most significant long-term effects of cocaine snorting. A septal perforation, or a “hole in the septum” is a condition that is commonly caused from this method of administration.

The nose has a fragile blood supply which is reduced by cocaine snorting. This process is called vasoconstriction (closing off of blood vessels). When the blood vessels constrict, the blood supply is compromised, delivering less oxygen to the tissues of the septum. With low oxygen, the septum lining begins to die. Once the lining dies, it can no longer support the cartilage underneath it and the cartilage dies. This is called a septal perforation (hole in the septum). Once the septum is perforated, the nose can collapse because the septum is the structural support of the nose. **Once a septal perforation is present it will never heal on its own.**

It's much easier to deal with septum damage the earlier it is identified. Therefore medical advice should be sought at the earliest opportunity if any of the following symptoms occur – constant runny nose, discharge from the nose or frequent bleeding.

Typical lines of cocaine ready for snorting.



Transmission of infections including blood borne viruses

Straws, tubes or banknotes that are inserted in the nose could come into contact with hepatitis C or hepatitis b infected blood, this may then be transmitted to someone else sharing it. The risk is probably lower than previously thought, however, it does remain a risk and as such people should take it seriously. Sharing snorting items will also have a risk of transmitting other infections or viruses, including Covid.

Snort harm reduction

Not all white powder is cocaine so a smaller line should be taken as a test dose.

Dosage should be timed, leaving at least 30-45 min between lines.

Lines should be alternated between both nostrils unless one is damaged or bleeding.

The surface, where the line be snorted from, should be clean and sterile as possible. A wipe or spray with an antibacterial agent before wiping dry will help this.

As cocaine varies in purity so to should the line size (dose). The purer the cocaine the smaller the line/dose should be.

The powder is crushed or chopped as fine as possible to save blocking the nose.

A straw, tube or plastic type banknote that is long enough to reach high up the nose should be chosen. This should be unused and not be shared with others.

Old type paper bank notes are grubby by nature and difficult to clean so these should be avoided.

If snorting with others the tube should be taken and kept on the person (in pocket, bag etc.) until next use as this will reduce accidental mix ups.

Blowing the nose when a build-up of mucus is felt will help clear residue.

Dousing (sniffing up water from the palm of the hand, then blowing the nose and repeating) after the session is complete will help clear any residue.

Smoke risks

Prolonged crack/freebase smoking is likely to result in some form of lung problem. Repeated inhalations can cause or exacerbate a number of lung or respiratory conditions such as asthma, shortness of breath or COPD. Smoking crack cocaine may also cause various forms of pneumonia. All these conditions are often simplified using the term “crack lung”. Some people may experience such severe damage to the lungs that they spit up blood whilst serious cases may result in lung failure. Left untreated crack induced lung damage could cause further complications in the body, including organ damage, or even death.

The chemicals used during the preparation process can be inhaled directly into the lungs causing harm. This is particularly relevant to freebase rocks where the ammonia has not been properly rinsed before smoking.

Symptoms such as chest pain, extreme coughing fits, difficulty breathing are all indications that significant harm is occurring.



Pipe risks

Ideally people would smoke their crack/freebase from a purpose made pipe or glass/Pyrex tube with suitable gauze. However, if these are not easily accessible people will make their own from easy to find household items. Drinks cans, plastic bottles, glass miniature bottles and inhalers are all commonly used. A bed of cigarette ash can be used to allow the rock to melt better without clogging the holes, however the inhalation of this burning ash can create its further risks. The risk with each form of pipe varies greatly. If any of these pipes are shared then there is a potential for a wide range of viruses and infections to be transmitted including blood borne viruses, tuberculosis, Covid etc.

Drinks cans – Holes are made and the rock is often placed on a bed of cigarette ash. Toxic fumes from the burning paint or plastic coating inside the can may be inhaled along the drug itself. There is a risk of virus transmission and infections if shared with others.

Plastic bottles, inhalers and other plastic items – Fumes from the burning plastic can be inhaled along with the drug. Some of these pipes place the rock and flame very close to the face meaning burns are a real possibility. There is a risk of virus transmission and infections if shared with others.

Glass miniature bottles – The bottom is often taken off this small bottles leaving sharp edges which may cause cuts. Risk of virus infection if shared with others.

Gauze – It is common for loose filters to be made from stainless steel scouring pads. These are chosen as a bed for the rock to sit on allowing better melting and inhalation. However, these can disintegrate and break off during heating, meaning small particles can be inhaled causing significant damage the mouth, throat or lungs.



A makeshift crack pipe made from a salbutamol inhaler

Recycling cocaine from pipes

Once a pipe has been used numerous times, cocaine residue will gather inside. In order to free this for further use a chemical such as acetone or nail varnish would be used to dissolve the cocaine. The liquid would then be poured on to a mirror and left to dry. This would then leave cocaine that could be scrapped off the mirror and re-used. Inhaling these chemicals before they have fully evaporated can cause further lung damage.

Smoke harm reduction

Personally made freebase cocaine is less likely to have impurities, when compared to street bought crack. However freebase rocks should be rinsed properly to wash off any ammonia residue. Sitting the rocks on a damp tea bag and carefully rinsing with cold water, then allowing to dry properly before smoking will help do this.

Purpose made glass or steel pipes are likely to be the safest choice. This pipe should be long enough that it's far enough away from the face to stop any burns from the flame or debris.

Pipes should not be shared with any other person to reduce the risk of virus transmission and infection.

Proper pipe gauze should be used in place of metal scouring pad type material. This should be carefully inserted in to the pipe or tube and changed frequently.

A lighter which has enough reach to melt the rock without burning the fingers should be used.

If a chef style burner is used, this won't shut off if the person collapses causing a real fire risk. If using this type, ensure someone is with you.

Holding the crack or freebase smoke in the

lungs for long periods can damage the lung tissue without increasing effects of cocaine

Smoking tobacco along with cocaine increases strain on the heart and cardiovascular system.

Any burns, blisters, sores or chaps on the lips should be treated properly with appropriate ointment or cream.

Good hydration through drinking lots of fresh water may stop the lips becoming dry and chapped.

Some countries provide glass type tubes as pipes as a harm reduction measure.



Injection related harm

Injecting cocaine is likely to be the most harmful method of administration.

Blood borne virus risks

The direct sharing of needles and syringes carry the biggest risk for the transmission of blood borne viruses' (hepatitis B, hepatitis C and HIV). Other injecting paraphernalia such as spoons, filters and water also carry a risk if shared, albeit it lesser. The indirect sharing of injecting paraphernalia is common, particularly if batches of drugs are prepared, using previously used equipment. Drawing the drug solution from a contaminated spoon, filter or water has both bacterial and BBV risks. It is also common for all the drugs to be drawn in to the one syringe, then divided equally between other people syringes by back-loading or frontloading in to the people's syringes which again creates transmission risks.

Injecting related complications and injury

With the effect of cocaine so short lived, the compulsion to inject again frequently will occur. This can lead to a "binge injecting session". This frequent injecting can cause rapid deterioration of the veins, leading to vein collapse and circulatory problems. The anaesthetic effects of cocaine can make it difficult to 'feel' the injection properly, leading to missed hits and site damage.

Injecting in to the muscle of under the skin (sometimes called skin or muscle popping) can cause significant damage to the skin, tissue and muscle. The muscle breakdown can cause toxins in the blood to cause damage to the kidneys. This is a rare condition called rhabdomyolysis.

It may be difficult for people to estimate how many times they are likely to inject in any given sitting meaning the person does not collect enough injecting equipment and needs to reuse. Even the reuse of someone's own (not shared) injecting equipment can cause bacterial infection, vein and site damage.

It is possible that the frequency of injection, often across multiple geographic locations, is a driving factor in poor general hygiene and unsterile injection practices. This has been shown to cause a number of bacterial infections such as Staphylococcus aureus and Group A streptococci. Infections can result in serious life threatening conditions such as sepsis or necrotizing fasciitis.

A public injecting site close to Glasgow City Centre.



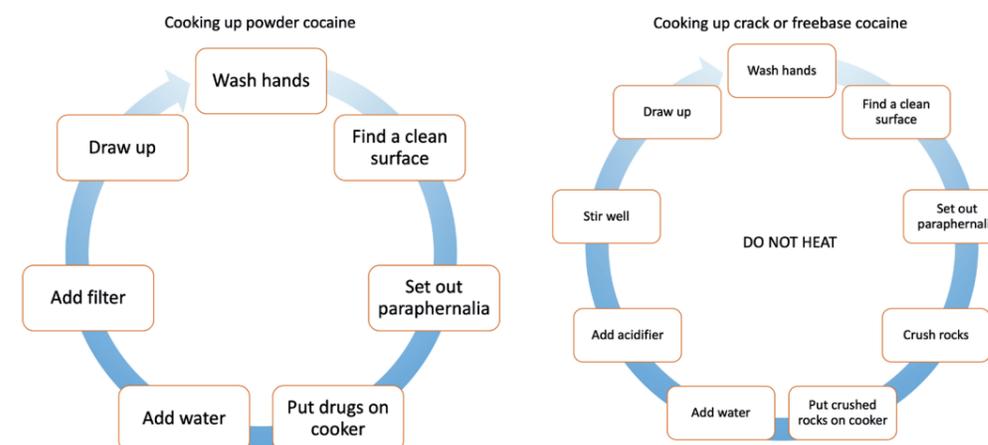
Preparing cocaine for injection

Each form of cocaine is prepared for injecting in a slightly different way.

Powder cocaine is easily water soluble without the need for an acidifier or heat. Freebase and crack do need an acidifier added to facilitate the breakdown in to a soluble state. **Crack and freebase should not be heated**, as this will form in to an oil which may block the needle or cause damage if injected.

Snowballing (heroin and powder cocaine together in the one syringe). This would be prepared on the spoon by cooking up the heroin as normal (using an acidifier and heat). When the solution is cooling powder cocaine is added.

Snowballing with heroin and crack or freebase is a little trickier. The crack or freebase should be crushed as fine as possible before adding cold water and acidifier. When dissolved heroin should be added and the solution heated. More acidifier can be added in very small amounts if needed.



Cocaine injecting harm reduction

Injecting equipment (needles, syringes, filters and spoons) should not be shared with others.

All injecting equipment needles, syringes, spoons, filters and water should be new and unused.

All injecting equipment should be considered single use and disposed of in a suitable sharps bin immediately after use.

The drugs should be prepared and injected in as sterile an environment as possible. Ideally this environment should also be warm and well-lit with other trusted people there to help if an emergency occurs.

Hands and target injecting sites should be washed well with warm water and soap. If this is not possible the best available method of cleaning should be used.

Techniques for raising veins (tourniquet, gentle exercise, warm water) should be used to keep lower risk sites accessible for longer.

A selection of One Hit Kits.



The size of needle should be carefully chosen in relation to the intended injection site. The smallest possible needle should be selected where possible. Deep vein injecting however, will require a longer more robust needle.

If batches must be prepared with others then ensure all equipment that every person uses is new and unused.

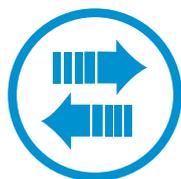
If preparing powder cocaine for injecting the no acidifier or heat is needed. Acidifiers cause vein damage so should only be used if essential.

Properly rotate injecting sites, ideally 5 or 6 low risk veins on the arm should be identified and kept clean in between use.

Avoid injecting intramuscularly or subcutaneously as this carries a significant risk of skin, tissue and muscle damage.

A quick guide to needle length, gauge and use:

Colour	Gauge Size	Length	Suitability for	Drugs usually injected by needle	Available in One Hit Kit Format
Green	21g (0.8mm)	1½" (38mm)	Drawing oil based steroids Intramuscular (IM) injection of steroids (buttocks).	Oil Based Steroids	In Steriod Glasses Case
Blue	23g (0.6mm)	1¼" (32mm)	Intramuscular (IM) injection (buttocks) of steroids. Femoral (groin) injection (IV).	Steroids, Heroin, Cocaine and Amphetamine (if femoral vein accessed).	In Blue One Hit Kit (2ml) In Steriod Glasses Case
Blue	23g (0.6mm)	1" (25mm)	Intramuscular (IM) injection (buttock, thighs and shoulders) of steroids. Femoral (groin) injection (IV).	Steroids, Heroin, Cocaine and Amphetamine (if femoral vein accessed).	No – Assess fixed site for Pick & Mix
Orange	25g (0.5mm)	1" (25mm)	Femoral (groin) injection (IV) Slightly deeper veins when the needle is prone to blocking.	Steroids, Heroin, Cocaine and Amphetamine (if femoral vein accessed).	In Orange One Hit Kit (3ml)
Orange	25g (0.5mm)	5/8" (16mm)	Slightly deeper veins when the needle is prone to blocking.	Steroids, Heroin, Cocaine and Amphetamine (if femoral vein accessed).	No – Assess fixed site for Pick & Mix
1ml Fixed (LOW DEAD SPACE)	27g - 29g	½" (13mm)	Superficial veins, such as arms, hands, feet and legs (IV) Subcutaneous injection of some hormones.	Heroin, Cocaine, Amphetamine and NPS. IPEDS such as growth hormone, tanning agents and peptides.	In Black One Hit Kit (1ml)



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