CONDITION

# Phencyclidine overdose

Phencyclidine overdose is a dangerous reaction to PCP that can severely affect awareness, movement, breathing, and body temperature.

**WHAT IT IS**
Toxic effects from excessive phencyclidine exposure

**BODY SYSTEM**
Brain, nervous system, heart and circulation

**MAIN SYMPTOMS**
Agitation, confusion, abnormal eye movements, high blood pressure

**WHAT CAUSES IT**
Too much PCP, sometimes from an unknown dose

**HOW IT IS DIAGNOSED**
Clinical assessment and confirmatory toxicology testing

**MAIN TREATMENT**
Supportive emergency care and symptom-controlling medicines

**CAN IT BE CURED?**
Yes - most recover with supportive care

**IS IT AN EMERGENCY?**
Yes - any suspected overdose needs emergency assessment

**LONG-TERM OUTLOOK**
Most recover, but severe complications may cause lasting harm

## Overview

Phencyclidine, usually called PCP, is a drug that changes awareness, sensation, mood, and movement. It is sometimes known as "angel dust." It can be swallowed, smoked, snorted, or injected. It may also be added to cannabis or other substances without the person knowing exactly how much is present.

PCP is a dissociative drug. This means it can make someone feel detached from their body, surroundings, or sense of reality. At higher amounts, it can disrupt normal brain activity and affect breathing, blood pressure, temperature control, and muscle function.

A PCP overdose means the drug is causing dangerous toxic effects. There is no reliable amount that separates an expected effect from an overdose. Illicit products can have unpredictable strength, and people may react very differently to similar amounts.

An overdose is a medical emergency. Someone may appear highly agitated and difficult to calm, but they may also become unusually still, unresponsive, or unable to breathe properly. Injuries can happen because PCP reduces pain awareness and affects judgment and coordination.

## Symptoms

PCP overdose can cause a mixture of physical and mental symptoms. These may begin quickly, especially after smoking or injecting the drug. Effects can continue for many hours and may last longer after a large exposure.

Possible symptoms include:

A person's appearance does not always show how serious the poisoning is. Someone who becomes quiet after being agitated may be getting worse rather than improving.

- Severe confusion, panic, aggression, or unpredictable behaviour
- Hallucinations, paranoia, or feeling detached from reality
- Rapid side-to-side or up-and-down eye movements
- Poor balance, rigid muscles, numbness, or reduced response to pain
- Very high blood pressure, a fast heart rate, or an irregular heartbeat
- Heavy sweating, flushed skin, or a high body temperature
- Repeated movements, unusual postures, or uncontrolled muscle activity
- Vomiting, drooling, or loss of bladder control
- Seizures
- Slow, shallow, or stopped breathing
- Extreme sleepiness, unconsciousness, or coma

## Causes and risk factors

PCP overdose is caused by exposure to more PCP than the body can safely handle. Because illicit PCP is not produced under controlled conditions, its strength and contents may be unknown.

Risk may be higher when PCP is:

PCP can reduce pain awareness and create a false sense of strength or invulnerability. This

increases the risk of falls, traffic injuries, drowning, burns, and other trauma. A noisy or crowded setting may also worsen agitation and confusion.

- Taken repeatedly because the first effects seem delayed or incomplete
- Mixed with alcohol, opioids like oxycodone or morphine , sedatives, stimulants like methylphenidate or lisdexamfetamine , or other drugs
- Present unexpectedly in cannabis, pills, powders, or liquids
- Used in a concentrated or unusually strong product
- Injected or smoked, which can deliver the drug quickly
- Taken by someone with an existing heart, kidney, mental health, or seizure condition

## Diagnosis

Emergency clinicians diagnose PCP overdose mainly from the person's symptoms, vital signs, recent events, and any information about possible drug exposure. If it is safe to do so, packaging or a sample of the substance may help identify what was taken.

A urine toxicology screen may detect PCP. However, a screening result does not show how much was taken or how severe the overdose is. Some medicines can cause a false-positive screening result. A more specific laboratory test can be used when confirmation matters.

PCP may remain detectable after the immediate effects have passed. For that reason, a positive urine result does not by itself prove that current symptoms are caused by PCP.

Other tests look for complications rather than confirming PCP exposure. These may include:

Clinicians also consider other possible causes, including low blood sugar, infection, stroke, head injury, seizures, or poisoning by another substance.

- Blood sugar, salt levels, kidney function, and liver tests
- Creatine kinase, a blood test for muscle damage
- An electrocardiogram, or ECG, to check heart rhythm
- Temperature and repeated blood pressure measurements
- Urine testing for muscle proteins that may harm the kidneys
- Brain or body imaging if there may be a head injury or other trauma

## Treatment and management

There is no specific antidote that reverses PCP. Treatment supports breathing and circulation while controlling dangerous symptoms until the drug's effects wear off.

The immediate priorities are keeping the airway open, providing oxygen when needed, and monitoring breathing, heart rhythm, temperature, and blood pressure. A person who cannot protect their airway may need a breathing tube and mechanical ventilation.

A calm, low-stimulation room may reduce agitation. Medicines called benzodiazepines are commonly used in hospital to control severe agitation, muscle activity, or seizures. Further treatment may be needed if very high blood pressure continues after agitation has been controlled.

Other care may include:

Activated charcoal may be considered in selected cases soon after PCP was swallowed, but only when clinicians decide it can be given safely. It should not be used at home. Do not make the person vomit, because this can cause choking or lung injury.

Physical restraint can sometimes increase struggling, overheating, and muscle damage. Emergency teams use the least restrictive safe approach while protecting the person and those nearby.

- Intravenous fluids for dehydration or muscle breakdown
- External cooling for a dangerously high temperature
- Treatment for abnormal heart rhythms or severe blood pressure changes
- Care for injuries, aspiration, or kidney problems
- Close observation until awareness, movement, and vital signs are stable

## Complications

Most people recover with timely supportive care, but a severe overdose can cause serious complications.

Intense muscle activity and overheating can damage muscle tissue. This is called rhabdomyolysis. Damaged muscle releases substances into the blood that may injure the kidneys.

Other possible complications include:

Complications are more likely after a large exposure, delayed treatment, severe overheating, prolonged agitation, or use with other substances.

- Choking on vomit or inhaling it into the lungs
- Breathing failure
- Seizures or coma
- Dangerous overheating
- Severe high blood pressure, abnormal heart rhythm, or cardiac arrest
- Kidney injury
- Injuries caused by falls, collisions, violence, or reduced pain awareness
- Prolonged paranoia, hallucinations, depression, or psychosis
- Death

## Prevention

PCP overdose can be prevented by not using PCP. There is no way to make illicit PCP use completely safe because the strength, dose, and added substances may be unknown.

If someone may use drugs despite the risks, practical harm-reduction steps include not using alone, avoiding mixtures with alcohol or other drugs, and using local drug-checking services where available. Drug checking can reduce uncertainty, but it cannot guarantee safety.

Avoid taking more because an effect seems slow to appear. Keep naloxone available if opioids could be present. Naloxone does not reverse PCP, but it can temporarily reverse an opioid overdose occurring at the same time.

Store prescribed medicines securely, and keep unidentified powders, liquids, or treated cigarettes away from children and other people. If accidental exposure may have occurred, contact a poison centre promptly rather than waiting for symptoms.

## Living with it and what to expect

PCP overdose is usually an acute event rather than a lifelong condition. Many people become more alert as the drug clears and can leave hospital after a period of observation. Others need admission, and severe poisoning may require intensive care.

Recovery time is not the same for everyone. It is affected by the amount and form of PCP, other substances taken, injuries, and complications such as overheating or kidney damage. Confusion, tiredness, poor sleep, anxiety, low mood, or difficulty concentrating may continue after the most obvious physical effects have ended.

Persistent hallucinations, paranoia, major mood changes, or unusual behaviour need follow-up. Kidney injury, muscle damage, or trauma may also require repeat blood tests or specialist care. These are routine follow-up needs when the person is otherwise stable, not necessarily signs of a new emergency.

If PCP use is continuing or difficult to control, substance-use treatment can help. Care may include counselling, treatment for related mental health concerns, peer support, and planning to reduce future overdose risk. Seeking support after an overdose does not require waiting for another crisis.

## When to get medical help

Call emergency services now if PCP overdose is suspected. Do not drive the affected person yourself if they are severely confused, violent, having a seizure, unconscious, or breathing abnormally.

Emergency signs include:

Move away from weapons, traffic, water, heights, and other hazards. Keep the area as quiet as possible, and do not argue about hallucinations. Do not try to physically overpower the person unless immediate safety requires it.

If the person is unconscious but breathing, place them on their side if this can be done safely. If they are not breathing normally, begin CPR if you know how and follow emergency-dispatch instructions.

For an exposure without severe symptoms, contact your local poison centre immediately for case-specific advice. In the United States, Poison Help is available at 1-800-222-1222. Do not wait for symptoms before calling.

After discharge, arrange routine follow-up for continuing confusion, sleep problems, low mood, hallucinations, muscle pain, dark urine, reduced urination, or concerns about drug use. New breathing difficulty, seizures, collapse, severe agitation, or rapidly worsening symptoms remain emergencies.

- Trouble breathing, slow breathing, or blue or grey lips
- A seizure
- Collapse, unconsciousness, or inability to wake
- Severe agitation that cannot be safely managed
- Very hot skin, heavy sweating, or marked muscle rigidity

- Chest pain or a very fast or irregular heartbeat
- Sudden weakness, severe headache, or other possible stroke symptoms
- A serious injury, especially to the head

## Common questions

Can you die from a PCP overdose?

Yes. Severe poisoning can interfere with breathing, heart function, temperature control, or brain activity. Fatal injuries may also occur because PCP affects judgment, coordination, and pain awareness. Prompt emergency care improves the chance of recovery.

How long does a PCP overdose last?

The most intense effects often last for hours, but there is no fixed timeline. A large exposure, repeated use, or use with other drugs can prolong symptoms. Mental effects may sometimes continue after blood pressure, breathing, and movement have stabilised.

Is there an antidote for PCP?

No. Hospital treatment supports breathing and circulation, controls agitation or seizures, lowers dangerous temperature, and treats complications while the body clears the drug.

Can PCP overdose look like psychosis?

Yes. PCP may cause hallucinations, paranoia, severe confusion, or behaviour that appears disconnected from reality. Clinicians still check for other causes because mental health conditions, head injuries, infections, and other drugs can produce similar symptoms.

Can a urine test tell how much PCP someone took?

No. A urine test may show exposure, but it cannot reliably show the dose, timing, or severity of poisoning. Screening tests can also produce false-positive results, so confirmatory testing may sometimes be needed.

Will naloxone reverse PCP overdose?

Naloxone does not reverse PCP. However, it should be used when opioid exposure is possible because substances may be mixed or mislabelled. Giving naloxone should not delay calling emergency services or providing CPR when needed.

## Sources



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