QUICK FACTS:
Phencyclidine (PCP), a synthetic drug, is an illegal and mind altering drug. Phencyclidines are the single drug category which may produce signs and symptoms of several different drug categories including central nervous system depressants, central nervous system stimulants, hallucinogen, and narcotic analgesics. One or all of these symptoms may be present at some time. The presence and severity of these effects depends upon the person’s tolerance, dose, and physical makeup.

Phencyclidine (PCP) exerts its primary effect by activating the region of the brain that controls mind-body dissociation or sensory deprivation. It appears to distort sensory messages sent to the central nervous system. It seems to stifle inhibitions and deadens pain. The brain’s neurochemicals associated with phencyclidines control pain, endurance, mental stability, sleep control and self-esteem. The Phencyclidine (PCP) abuser may show classical signs of schizophrenia. The highest risk in using this drug is that there is an “unpredictability” to the outcome of the effects and the type of “trip” the user will experience. In the past there have been signs of an emotional addiction resulting in high levels of abuse in certain populations.

HISTORY OF DRUG
The term PCP comes from the parent compound of phencyclidines named 1-phenylcyclohexyl piperidine hydrochloride. The phencyclidines are a synthetically derived class of drugs. The only supplies of PCP sold in the United States are made in illegal laboratories.

PCP was first synthesized by researchers at Parke Davis and Company in 1956. In 1957, the first clinical trial of the drug’s effectiveness as an anesthetic agent for humans was conducted. PCP seemed to be more medically effective and safer than other anesthetics, but caused other problems. When used as a surgical anesthetic, up to thirty percent of the patients manifested agitation, excitement and disorientation during the recovery period. Because of the frequency and severity of PCP toxic effects, it was soon limited to veterinary medicine.

PCP Hydrochloride (HCl) in its pure state is a powder, usually white in color. However, due to the impurities in the illicit manufacturing process it has a slight yellow or brownish tint to it. This does not preclude a dealer from altering this standard appearance.

UNDER THE INFLUENCE

ACUTE CONFUSIONAL STATE OF LOW TO MEDIUM DOSE:

- Responsiveness-initially uncommunicative, may respond to commands with nodding or eye movement.
- Orientation - disoriented for time and place; appears confused or fearful; amnesia.
- Behavior - agitated, excited, combative, regressive, self-destructive or bizarre.
- Speech - slurred, intermittently unable to articulate.
- Eyes - open or “blank stare appearance” with drooping of eyelids, very little effect on pupil size.
- Nystagmus - horizontal and vertical.
- Motor - gait unable to tandem walk, (moon) walk, muscle tone rigidity.
- Restlessness, repetitive movements.
- Increased secretions-drooling.

History - (continued from column 1, this page)

The powder can be placed with plant material in hand rolled cigarettes and then smoked.

PCP crystal can easily be diluted into liquid. It will usually be clear to yellow in color. A substance suspected to be PCP can generally be detected by its distinctive chemical odor. Liquid containing PCP, when sprayed, sprinkled, or soaked onto a plant material, which then dries, produces “angel dust.” The substance might be:

- mint leaves
- parsley, oregano, or other spices
- marijuana

Liquid phencyclidine may also be dripped on factory cigarettes such as:

- “Sherman “Moore” “Kool”

The primary method of ingestion of phencyclidine is by smoking the drug. The crystal or powder may be injected; although the practice is less common in most geographical areas.

The effects of PCP differ markedly with dose. At low doses the most prominent effect is similar to that of alcohol intoxication; a generalized numbness. With increased doses, analgesia and then anesthesia are noted. Large doses can produce convulsions, coma or death. Most persons using PCP experience a confused state characterized by feelings
of weightlessness, unreality, depression, anxiety and hallucinations. The inability to think and concentrate are often two reported findings.

The effects of PCP will vary greatly depending upon the purity and amount of PCP used, and the individual’s metabolism, sex, age, mental state, psychological make-up, tolerance, etc. The onset after smoking is approximately 1 to 5 minutes. The drug will peak or plateau in 15 to 30 minutes and a person will remain high for 4 - 6 hours. As much as 24-48 hours will elapse until the user feels normal.

**PHARMACOLOGY OF PHENCYCLIDINE**

Since PCP is so strong, particularly for first time users, the range between a dose that produces a pleasant sensory deprivation effect and one that induces catatonia, coma, or convulsions is very small. Low dosages (2 to 5 mg) first produce mild depression, then stimulation. Moderate doses (10 to 15 mg) can produce a desirable sensory-deprived state. They can also produce extremely high blood pressure and very combative behavior. Other adverse reactions to moderate doses include an inability to talk, a rigid robotic attitude, tremors, confusion, agitation and paranoid thinking.

There are three entirely different kinds of usage patterns noted with phencyclidine abusers. Each carries its own respective dangers.

One type of user smokes PCP occasionally at parties, dance concerts and other occasions. This person is least likely to know what he or she is getting because a joint passed at a party contains an unknown dosage. Depending upon the amount used and the purity of the dose, the effect may be anything from a pleasant numbness to a violent freak out.

Another kind of user is the “regular user.” This person smokes PCP from twice a month up to three times a week. Most of the regular users are hesitant to accept the fact that they are “addicted’. Often they maintain regular employment and appear to be functioning more or less normally.

**RECOGNITION OF PCP INTOXICATION**

<table>
<thead>
<tr>
<th>General Indicators:</th>
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<tr>
<td>Perspiring heavily</td>
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<td>Blank stare</td>
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<td>Agitation, excitement</td>
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<td>Memory loss</td>
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<td>Chemical odor</td>
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<tr>
<td>Incomplete and slurred verbal responses</td>
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<tr>
<td>Increased pain threshold</td>
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<tr>
<td>Non-communicative</td>
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<tr>
<td>Disorientation</td>
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<td>Cyclic mood swings</td>
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<td>Depersonalization</td>
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<td>Muscle rigidity</td>
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<td>Hallucinations/delusions</td>
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**PHENCYCLIDINE METABOLISM AND ELIMINATION**

Metabolism is defined as the body’s mechanism for processing, using and eventually eliminating foreign substances, like drugs, from the body. Once a drug has come into contact with enzymes and / or chemicals in the bloodstream, a part or all of the drug may take on a new chemical composition known as a metabolite. So, as the drug exerts its influence upon the body it is gradually neutralized, usually by the liver or kidney, maybe both. Metabolic processes generally decrease, but occasionally increase the effects of psychoactive drugs such as PCP.

There are other factors that can affect the metabolism of drugs:

**Age** - After the age of 30, the body produces fewer and fewer liver enzymes capable of metabolizing certain drugs.

**Heredity** - Individuals pass certain traits to their offspring that affect the metabolism of drugs. They might have more body fat, which will store fat-seeking type drugs like PCP.

PCP is highly soluble in lipid (fat) tissues. This process can allow for the re-release of the drug without taking in more. If the body is allowed to break down the fat into energy, PCP may re-enter the bloodstream. This is often called a “PCP flashback.”

**Emotional State** - The emotional state of the drug user also has a major effect on the drug action. PCP in someone with paranoia can be very dangerous because it can further disrupt the chemical balance within the brain.

**Other Drugs** - The presence of another drug can keep the body so busy that metabolism of a new drug is delayed. Poly-drug usage is not only common, but develops a whole new set of medical criteria.
The third type of user is someone who uses PCP every day, or as often as it can be found. This person is much more likely to know what is being smoked because he or she is probably dealing PCP in order to support the expense of its use... or is buying it in quantity and “doing his own thing.” So, the problems usually arise not from knowing what one is getting, but rather from the fact that when someone uses it regularly, memory, reasoning ability, judgment, and common sense disappear.

Usually the “first time” user is likely to end up with a medical crisis. The second and third types are more likely to be arrested. All three types are just as likely to be involved in

NEUROPHYSIOLOGY

Phencyclidine (PCP) interrupts the function of the neocortex, the section of the brain that controls the intellect and keeps instincts in check. Because the drug blocks pain receptors, violent PCP episodes may result in self-inflicted injuries. The effects vary, but users frequently report a sense of distance and estrangement. Time and body movements are slowed down. Muscular coordination worsens and senses are dulled. Speech is blocked and incoherent.

SOME OF THE RELATED DANGERS ASSOCIATED WITH PCP

One of the really scary things about PCP is the wide range of potency in the two commonly used forms. The people (mostly teenagers and in their early twenties) involved with this drug, from the manufacturers to the users, don’t know how strong it is and have no way of finding out except in a general way by trial and error. This may well be the reason we are faced with so many drug induced automobile accidents, health impairments, and untimely deaths.

THE “SHERMAN” OR “MOORE” BROWN CIGARETTES ARE USED TO DIP

Frequently, it is reported that people high on PCP have superhuman strength. However, the truth is that since the person has such a low threshold to pain that the person may sustain longer periods of time of no (adrenaline)

ANGEL (DEATH) DUST?

“Lay off that stuff. It’s like a rattle snake - it’ll kill you,” a father pleaded with his son, Richard, whose friend had died from using “that stuff.” Richard replied, “I guess he just didn’t know how to use it.” No one else knows how to use such an unpredictable drug. Richard was later found at the bottom of a swimming pool at his apartment complex. The newspaper reported “... curled up on his side, his hands pillowed his head. He was slumbering under water with the aid of “that stuff” called Angel Dust.

The United States Health Department reports, “People on PCP (angel dust) have drowned in shallow water because they are so disoriented they cannot tell which way is up. Others have had auto accidents, fallen off roofs, and out of windows, because of the drug’s intoxicating effects. Some have died in fires because PCP made them insensitive to the pain of burning, and so confused and disoriented that they could not escape from the flames.”

A thirteen-year-old Chicago girl was quoted as saying, “The first time I tried PCP I blacked out. My friend tried to help me, but I kept falling and hitting my head. I could not even talk to ask them what happened. I was confused. That’s what the ‘dust’ does to you. It was really bad. I got scared.”

Unlike many drugs, PCP use can cause an amnesic reaction. A user forgets they are “high” from the drug and believes their fantasies are real. Users often hallucinate that they are dead or dying. Even users admit the dangers.

“SUPERHUMAN” STRENGTH

Frequently, it is reported that people high on PCP have superhuman strength. However, the truth is that since the person has such a low threshold to pain that the person may sustain longer periods of time of no (adrenaline)
DISSOCIATIVE ANESTHETIC
Includes drugs that inhibit pain by cutting off or "disassociating" the brain's perception of pain. PCP, Ketamine and DXM are considered dissociative anesthetics.

Dextromethorphan / DXM
Dextromethorphan is a white powder. Available primarily in tablet, capsule and liquid form.

**Synonyms:** 3-methoxy-17-methyl-9(13,14)-morphinan hydrobromide monohydrate; dextromethorphan hydrobromide, DXM, "robbro tripping"; Anaplex-DM, Diabe-Tuss DM, Benylin, Pertussin, Delsym, Sucrerts, Bromfed-DM, Robitussin, Vicks Formula 44, etc.

**Source:** Synthetic analog of codeine and d-isomer of 3-methoxy-N-methylmorphinan. Available as lozenges, capsules, tablets, and cough syrups, in a variety of prescription medications and over-the-counter cough and cold remedies. Products contain dextromethorphan alone or in combination with guaifenesin, brompheniramine, pseudoephedrine, phenylephrine, promethazine, codeine, acetaminophen, and/or chlorpheniramine. For example, Diabe-Tuss DM syrup contains 15 mg dextromethorphan; Benylin® Adult and Pediatric contain 15 mg and 7.5 mg dextromethorphan, respectively; and Anaplex-DM contains 30 mg dextromethorphan, 4mg brompheniramine and 60 mg pseudoephedrine.

**Drug Class:** Non-opioid antitussive, cough suppressant, CNS depressant (in high doses).

**Medical and Recreational Uses:** Used as an antitussive for temporary relief of coughs caused by minor throat and bronchial irritation. Recreationally used for effects ranging from mild stimulation and intoxication, to dissociation.

**Effects:** At recommended doses, dextromethorphan produces little or no CNS depression. At recreational doses, positive effects may include acute euphoria, elevated mood, dissociation of mind from body, creative dream-like experiences, and increased perceptual awareness. Other effects include disorientation, confusion, pupillary dilation, and altered time perception, visual and auditory hallucinations, and decreased sexual functioning. Recreational doses of approximately 100-200 mg have a mild, stimulant effect (likened to MDA); doses of 200-500 mg produce a more intoxicating effect (likened to being 'drunk and stoned'); 500-1000 mg may result in mild hallucinations and a mild dissociate effect (likened to a low dose of ketamine) and an overall disturbance in thinking, senses and memory; while doses over 1000 mg may produce a fully dissociative effect (likened to a high dose of ketamine). Recreationally abused doses are capable of impairing judgment, memory, language, and other mental performances.

**Duration of Effects:** Dextromethorphan exerts its antitussive effects within 15-30 minutes of oral administration. The duration of action is approximately 3-6 hours with conventional dosage forms.

**Side Effects:** Adverse effects with recommended antitussive doses are rare. However, nausea, other gastrointestinal disturbances, slight drowsiness and dizziness can occur. Following acute doses of between 250-1500 mg, the following clinical and overdose symptoms have been reported: excitation, nausea, vomiting, drowsiness, dizziness, blurred vision, nystagmus, dilated pupils, body itching, rash, ataxia, sweating, hot/cold flashes, fever, hypertension, shallow respiration, urinary retention, diarrhea, opisthotonos (spasm where head and heels are bent back, and torso is bent forward), toxic psychosis (hyperactivity, marked visual and auditory hallucinations), coma, and an increase in heart rate, blood pressure and body temperature. Side effects can be serious if very large doses of the combined preparations are ingested; for example, uaiifenesin and dextromethorphan can cause severe nausea and vomiting; chlorpheniramine and dextromethorphan can cause seizure, loss of consciousness and bleeding.