

# WHAT IS CRYSTAL Meth

## WHAT IS CRYSTAL METH?

The term *crystal meth* originally referred only to methamphetamine in crystal form, but now people apply it to methamphetamine in tablets or in powdered form as well. Methamphetamine belongs to a larger family of drugs called amphetamines: a group of molecules that all have similar pharmacological effects. This family includes amphetamine, methamphetamine and MDMA (commonly known as *ecstasy*), among other substances.

Methamphetamine is a psychostimulant that has powerful effects on the central nervous system and can very easily lead to dependency within just a few weeks. It is part of a group of substances known as *club drugs*

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growing rapidly. The typical methamphetamine user has a profile similar to that of the typical person who goes to after-hours clubs or attend raves, and most methamphetamine users are between the ages of 15 and 40.

which also includes ecstasy, GHB and ketamine. Though these drugs are associated mostly with semi-legal after-hours clubs and with night-long parties known as *raves*, their use among the general public is also

A study conducted by *Gross et al.* in Quebec in 2002 showed that 73% of the people who attended raves had used amphetamines, whereas among the general public, the percentage of people who had used amphetamines at some time in their lives was only 1.5%. Some of the data from this study show that amphetamines are becoming more popular than ecstasy, which was previously considered the drug of choice at raves. Many substance abuse experts believe that in some parts of North America, use of methamphetamine is no longer limited to ravers and is gradually expanding into other segments of the population. In 2002, in New Brunswick, 10.9% of people age 12 to 18 had used amphetamines at least once during the 12 months preceding the survey. In Nova Scotia, the figure was 9.3%. In Quebec, the percentage among persons age 12 to 17 rose from 7.6% in 2002 to 10.3% in 2004.

Substance abuse experts are concerned about the growing popularity of crystal meth, especially in the gay community, where it has now become a drug of choice. It also seems to be turning into a drug of choice among teenagers from all backgrounds. Crystal meth is now present throughout the United States, in rural as well as urban areas. A similar trend is emerging in western Canada, following a major surge in crystal meth use around Vancouver.

In Quebec, the current evidence on growing use of crystal meth remains chiefly anecdotal. But even though this drug may be less familiar than ecstasy in Quebec, a recent study by Health Canada, in collaboration with the RCMP, showed that a very high proportion of the tablets and capsules sold as ecstasy on Quebec's illicit drug market actually contain methamphetamine as their main active ingredient. Thus a great many people have used or are using methamphetamine without knowing it. Many experts believe, with good reason, that Quebec will soon be witnessing the same kind of methamphetamine plague that has already struck the U.S. and western Canada. Whether as crystal meth or under other names such as tina, ice, crank and hydro, this drug seems to be spreading in Quebec and Maritime Provinces in a similar fashion.

## HOW DO PEOPLE TAKE CRYSTAL METH?

Crystal meth is a powerful central nervous system stimulant. People use it for the feelings of stimulation and euphoria that it provides. Like any psychostimulant, it makes users more wakeful and agitated while reducing their appetite. These effects are caused by the release of large amounts of a chemical called *dopamine* in the parts of the brain that are responsible for pleasurable sensations. Methamphetamine has a chemical structure similar to amphetamine's, but its effects on the central nervous system are twice as powerful. Methamphetamine use can also damage the cells that release dopamine and serotonin in the nervous system.

The most common ways that people take crystal meth are by ingesting it orally in tablet or pill form, by inhaling it nasally ("snorting" it) in powder form, by smoking it, or by injecting it intravenously. When crystal meth is taken orally, its effects begin after 15 or 20 minutes and can last 12 hours, or even 24. It is absorbed far more rapidly when snorted, and even more rapidly when smoked or when injected intravenously. Its effects are then felt almost instantaneously and may include a euphoria so intense that it feels orgasmic, commonly known as a *rush*. It is important to note that the faster a drug is absorbed, the more intense its effects will be, and the more addictive it will be. Hence methamphetamine, when smoked, snorted, or injected, is one of the most addictive drugs on the illicit market.

Given that users develop a tolerance<sup>1</sup> for amphetamines very quickly, many users will begin to take several doses in a row to maintain the feeling of a *high* and avoid the symptoms of withdrawal that set in when they stop taking these drugs. During these periods of heavy consumption, known as binges, users stop eating and sleeping. Intravenous users may inject as much as a gram of crystal meth every 2 or 3 hours for several days in a row. They will cease this destructive consumption pattern only when their supply of the drug is exhausted and they can no longer get any more, or when their behaviour becomes so disorganized that they cannot continue.

<sup>1</sup> Experience of diminished effects from a drug following repeated use.

## WHAT DOES CRYSTAL METH LOOK LIKE?

Crystal meth comes in either crystal or powder form. The powder form is usually ingested orally and is typically known by the street names *meth* and *speed*. This powder is white and odourless and dissolves readily in water or alcohol. The form that is smoked is commonly referred to as *ice*, *crystal* or *glass*. It consists of clear crystals that can be smoked much like crack cocaine. The smoke produced is odourless and leaves a residue which, surprisingly, can be smoked again and produces the same effects for another 12 hours or more.



## WHAT ARE THE RISKS OF CRYSTAL METH?

Crystal meth that is smoked, inhaled, or injected is one of the most powerful psychostimulants

**CRYSTAL METH that is smoked, inhaled, or injected is one of the most powerful psychostimulants available on the illicit drug market.**

available on the illicit drug market. Users therefore become physically and psychologically dependent on it rapidly, and the desire to consume more of it then becomes a constant preoccupation and eventually an obsession. The only way to satisfy this obsession is to go on another binge. Chronic users usually display various symptoms of anxiety, insomnia and depression.



They may also display a variety of psychotic symptoms, such as paranoia and auditory hallucinations, and sometimes even violent behaviour.

These psychotic symptoms can persist for months or even years after someone has stopped using the drug. Other long-term effects may include confusion and cognitive deficits. The number, intensity, duration and frequency of these episodes generally vary in proportion to the intensity and frequency with which the person has used the drug.

Methamphetamine use can also cause a variety of physical disorders, including skin problems, dental problems, and cardiovascular problems such as tachycardia, cardiac arrhythmia, hypertension, cardiomyopathy and damage to the microcapillaries of the brain. In high doses, this drug can cause hyperthermia, convulsions and death.

The growing popularity of crystal meth in the gay community seems to be coinciding with an increase in HIV and Type B and Type C hepatitis infections. This increase might be largely due to the sharing of syringes and needles to inject this drug intravenously. Dependent users' craving to take another dose of crystal meth as soon as they can makes them ignore safe injection practices. In addition, this drug modifies sexual behaviour by increasing libido and reducing inhibitions, so users also tend to ignore safe sex practices, such as using a condom.

Another significant issue is that the manufacturing of methamphetamine releases hazardous toxic substances into the environment. These substances include flammable solvents, chlorinated solvents, phosphorus, iodine, heavy metals such as lead and mercury, and various other pollutants that are highly hazardous to public health. Manufacturing one kilogram of methamphetamine produces roughly five to six kilograms of toxic waste. The operating conditions in clandestine laboratories present risks not only for the environment, but also for the illicit drug producers themselves, as well as for their neighbours and for the police, firefighters, ambulance attendants and other emergency workers who may be called to the scene of these laboratories.

## INTERACTIONS WITH OTHER SUBSTANCES

*Crystal meth* interacts mainly with other psychostimulants and with antidepressants. Its interactions with other psychostimulants are generally synergistic: the drugs' effects potentiate each other, thus increasing the risks of an overdose. When crystal meth is mixed with antidepressants, the simultaneous presence of these two substances in the body can cause dangerous fluctuations in blood pressure. Other physiological symptoms may include headaches, convulsions, cardiovascular problems, and an increased risk of serotonin syndrome. This syndrome can involve any of the following symptoms: agitation, confusion, irritability, altered consciousness, weakness, muscle rigidity, fever, sweating, shivering, trembling, hypertension, convulsions, and cardiovascular collapse.

## WHAT DOES THE LAW SAY?

Methamphetamine has been included in Schedule I of Canada's *Controlled Drugs and Substances Act* since August 11, 2005. Before then it was covered by Schedule III, which still includes amphetamine. Possession, trafficking, possession for the purpose of trafficking, production, importing, and exporting of methamphetamine are illegal.

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## CREDITS

### Researcher/Writer

Claude Rouillard, Senior Researcher  
Neuroscience Unit, Research Centre, Centre hospitalier de l'Université Laval

### Reviewer

Mohamed Ben Amar, Pharmacologist, Université de Montréal  
Rodrigue Paré, Maison Jean Lapointe  
Pierre Rouillard, Psychiatrist, Centre Hospitalier Robert-Giffard

### Publisher

Michel Germain, Executive Director  
Centre québécois de lutte aux dépendances

### Photographs

Royal Canadian Mounted Police



Centre québécois  
de lutte aux dépendances

105, rue Normand  
Montreal (Quebec) H2Y 2K6  
(514) 389-6336  
info@cqld.ca  
www.cqld.ca

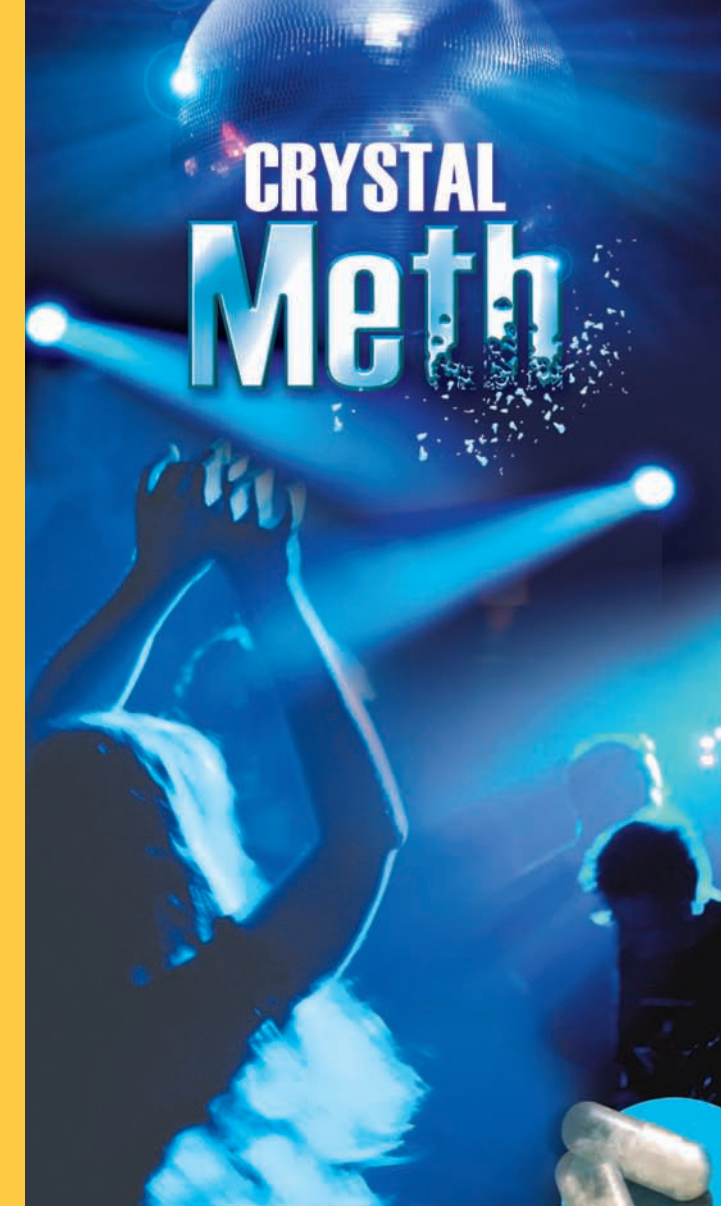
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