

Ψυχοδραστικές Ουσίες



Γ.Α. Αλεβιζόπουλος

Κατηγορίες Ψυχοδραστικών Ουσιών

- ΨΥΧΟΔΡΑΣΤΙΚΕΣ ΟΥΣΙΕΣ
- ΚΑΤΑΣΤΑΛΤΙΚΑ-ΥΠΝΩΤΙΚΑ
 - Οινόπνευμα
 - Βενζοδιαζεπίνες
 - Βαρβιτουρικά

Κατηγορίες Ψυχοδραστικών Ουσιών

- ΨΕΥΔΑΙΣΘΗΣΙΟΓΟΝΑ

- Κάνναβη
- Διμεθυλτροπταμίνη (DMT)
- Κεταμίνη (KETALAR)
- Διαιθυλαμίδιο του Λυσεργικού Οξέος (LSD)
- Μεσκαλίνη (PEYOT)
- Φαινυλκυκλιδίνη (PCP)
- Ψιλοκυβίνη (DMT)

MARIJUANA



Marijuana comes from the leaves and flowers of *cannabis sativa*, the hemp plant. This plant grows wild, but is also cultivated over large areas of the globe. Hemp has a number of useful properties that have been known for as long as 8,000 years. The stems contain a strong fiber from which rope, paper and cloth are made. The fibers are of such good quality that they were once used to make bow strings.

The hemp plant has been used in medicine for at least 3,000 years. Derivatives of the plant have been used to treat ills such as fever, rheumatism and earache. The properties of the hemp plant that affect thought processes have also been recognized for a long time. Hemp has been used to treat hysteria, depression and anxiety. However, the effects have proved unpredictable and vary greatly from patient to patient.



These pictures show cannabis under cultivation and the plant leaves which are dried to make marijuana.

HASHISH



The principal chemical in the hemp plant that acts on the brain and produces a "high" is delta-9-tetrahydrocannabinol, known as THC. Because THC affects thought processes, it is called psychoactive.

The flowering top of the hemp plant produces a sticky resin called hashish or hash. This resin contains three times as much THC as the leaves. The resin is collected and formed into slabs. It can be smoked, made into a drink, or even eaten.

Unburned marijuana leaves and hashish contain about 400 chemicals. Sixty of these chemicals are unique to the hemp plant and 150 are known to cause cancer. Dried marijuana leaves contain 2,000 chemicals, many of which have not been studied and whose properties are not known.

The pictures above show two slabs of hashish and the flowering top of a hemp plant.

SMOKING MARIJUANA



Marijuana, pot, weed, grass, or whatever name it goes by is almost always smoked. Hashish is not as readily available as marijuana. Marijuana is smoked in a pipe or bong, rolled into a cigarette, or sometimes stuffed into a hollowed out cigar, called a blunt.

About ten years ago the THC content of marijuana leaves was two tenths of one percent. Today, due to careful cultivation, the THC content is around five percent making marijuana twenty-five times stronger than it was only a decade ago.



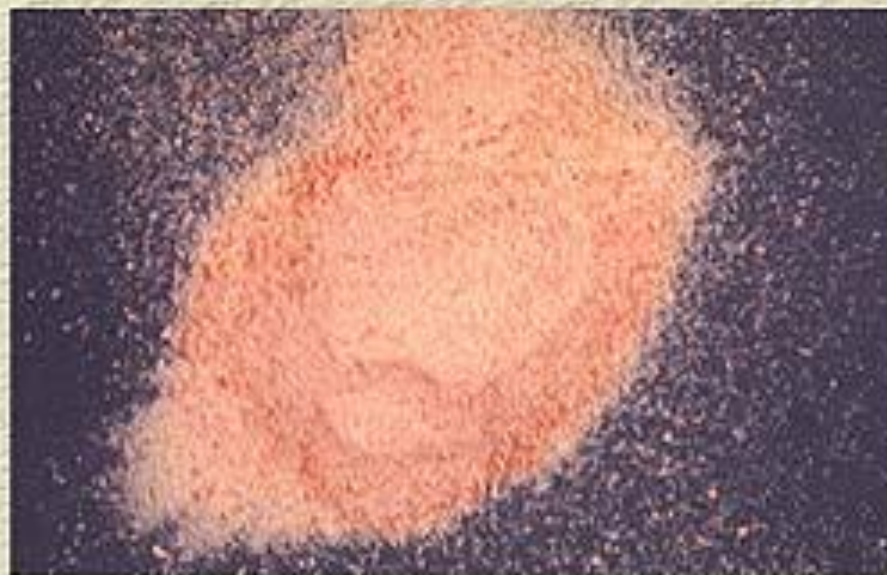
The picture above left shows some paraphernalia used by a pot smoker. The picture above right is of a collection of bongs and pipes used for smoking marijuana.



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HALLUCINOGENS AND PSYCHEDELICS



Hallucinogens and psychedelics are chemical compounds which change the way we experience reality. Lysergic acid diethylamide, or LSD (shown above), is the most widely known drug of this group. It was first synthesized in the laboratory in 1938.

Other psychedelic compounds include Ecstasy (MDMA) and the naturally occurring mescaline and psilocin.

When taken in very small amounts, psychedelic drugs can produce profound effects on the mind of

the user. Under their influence, one may "hear" colors and "see" sounds. There is often distortion of forms and movement of inanimate objects. The perception of time and space are altered. If the effects of the drug are severe enough, a person may completely lose touch with reality and become temporarily or permanently psychotic.



LSD



Because LSD is taken in very small amounts, it is usually dissolved and applied as a micro-dot to pills, sugar cubes, slips of celluloid (left photo), pieces of blotting paper or decorative stickers (right photo).

LSD takes effect in twenty minutes and lasts from six to eight hours. It is not known exactly how LSD exerts its effect on the mind, but we do know that tolerance to the drug rapidly develops. Also, the higher the dose, the more likely a bad trip or "bummer" will result.

LSD produces both sensory and emotional changes as well as an increase in blood pressure, heart rate, and body temperature. When using LSD, one can experience tremors, weakness, and chills. With an overdose, there are usually convulsions and coma followed by cardiac and respiratory failure.

In addition to the perceptual changes mentioned previously, the emotional changes brought on by LSD include panic attacks, depression, and loss of control of one's mind.

INCHES

2

3

Hamilton Bell

MONTVALE, N.J.

METRIC

2

3

4

5

6

7

8

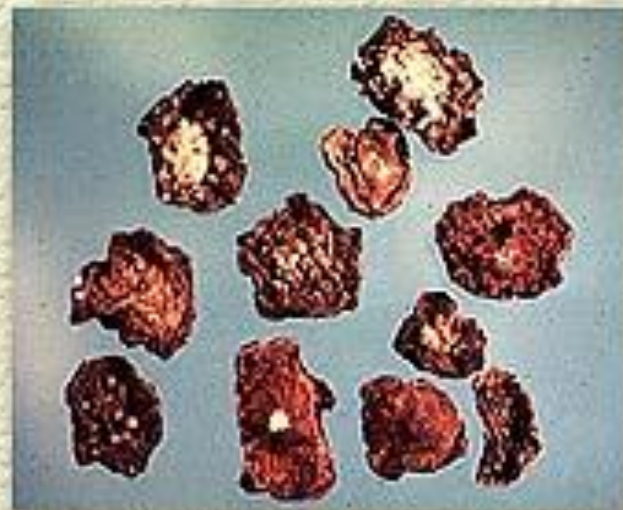


NATURALLY OCCURRING HALLUCINOGENS



There are three naturally occurring hallucinogens: mescaline, from the peyote cactus (left photo); psilocyn and psilocybin, found in about 100 varieties of mushrooms; and dimethyltryptamine (DMT) which is found in a variety of seeds and plants. These drugs have been known for centuries, and some are used in religious ceremonies by native peoples.

Mescaline is the most widely known of these natural hallucinogens. The peyote cactus is



cut up and dried into pieces called buttons (right photo). However, this cactus is scarce, and real mescaline is rare. Only a fraction of what is sold as mescaline is actually mescaline.

These substances can produce vivid color changes which appear in geometric patterns. The user's perception of time and space is altered. There are thought disorders, impaired judgment, anxiety, fear, and depression. As with LSD, it is possible to suffer a fatal overdose.

Κατηγορίες Ψυχοδραστικών Ουσιών

- ΔΙΕΓΕΡΤΙΚΑ

- Αμφεταμίνη- δεξτροαμφεταμίνη
- Μεθαμφεταμίνη
- Κοκαΐνη
- Chat
- Συμπαθομιμητικά



Amphetamines

COCAINE and AMPHETAMINE

Cocaine and amphetamine are similar in their chemical structures as well as in their chemical actions. The main difference is that amphetamine is not quite as powerful as cocaine, but what we say of one is usually true of the other.

Cocaine and amphetamine are powerful stimulants, and their effects are complicated. For this reason, their actions require more description than some of the other drugs of abuse.

It does not really matter whether we speak of cocaine addiction or cocaine dependence. The bottom line is that cocaine use results in a rapidly established and powerful addiction (dependence) and produces one of the most intense cravings known.

A 1908 New York Times article referred to cocaine use as "the most terrible vice ever acquired by a civilized people."





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ARTERIAL INJECTION

Injecting drugs into a vein is not a simple task. There are a number of things that can go wrong. The young man in the picture at left was attempting to inject amphetamine (speed) into a vein, but instead injected it into an artery. The artery constricted and the blood supply to the arm and hand was cut off. Dry gangrene developed in the right hand, and four of his fingers eventually had to be amputated (see lower left photo).

The picture at right shows the hand of a young girl who was mainlining barbiturate. She also hit an artery instead of a vein, and developed gangrene in the tips of her fingers.



HEART HEMORRHAGE

One may die suddenly and unexpectedly when using cocaine without ever having taken the drug before, and without taking an overdose. Sudden cardiac death may occur in two different ways. The cocaine user may suffer a sudden cardiac arrhythmia (an abnormal heart rhythm), or the cocaine may cause the blood vessels in the heart to constrict to such a degree that the blood flow to some areas of the heart is cut off. If this happens, the heart muscle is deprived of the blood it needs to continue beating. If death is immediate, there is very little damage to be seen when the heart is examined at autopsy. However, if death occurs after a period of time, then we can see visible changes in the heart muscle.

These photos show the heart of a young cocaine addict who entered the hospital complaining of difficulty breathing. He later died. Since his death occurred several days after the damage to the heart, there was enough time to produce visible changes (as shown by the arrows).



Basketball player Len Bias suffered sudden cardiac death in 1986 soon after he signed a contract to play with the Boston Celtics. It was reported that it was the first time he had ever used cocaine.



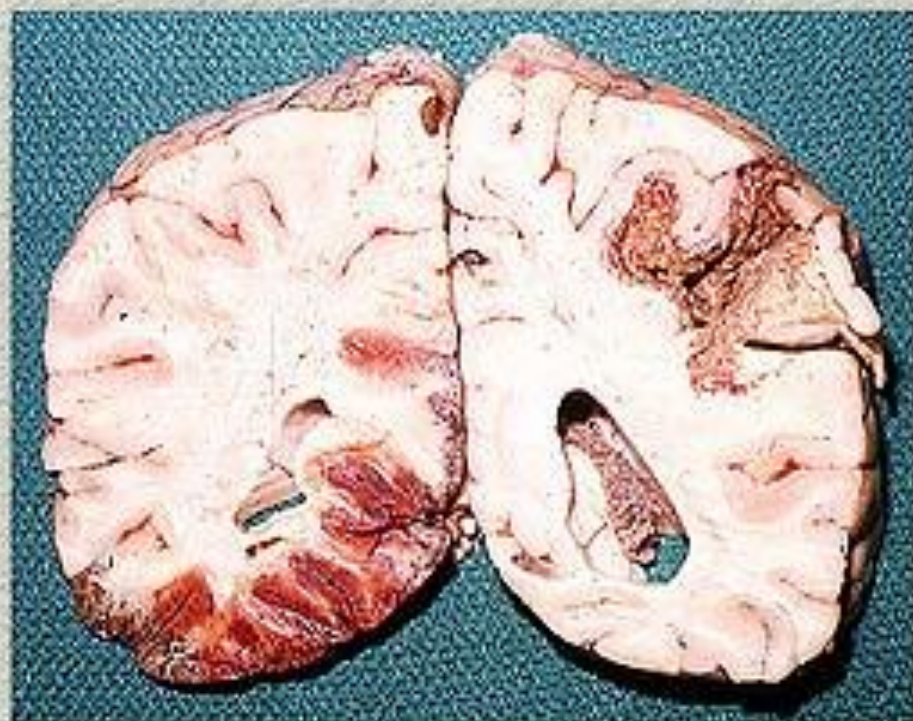
BRAIN HEMORRHAGE

The brain is another organ that may be injured as the result of the vascular constriction produced by cocaine. When blood vessels constrict, the heart or brain tissue dies from lack of blood. When the constriction eases, these damaged vessels leak blood into the surrounding tissue. We then see areas of hemorrhage (bleeding).

If the injury caused by the cocaine is not fatal, and the damaged areas of the heart or brain heal, the end result is the same as if the person had a heart attack or a stroke.

In this case, a cocaine user was found to have old and new hemorrhages in his brain. These were presumably the result of cocaine use.

The picture below is a cross section of that brain. Notice the large areas of hemorrhage at the lower left. Contrast these to the older areas of hemorrhage in the upper right of the picture. In the older areas, the dead brain tissue has turned a brown color and is being reabsorbed, leaving only an empty cavity where brain used to be.





Κατηγορίες Ψυχοδραστικών Ουσιών

- ΟΥΣΙΕΣ ΜΕ ΨΕΥΔΑΙΣΘΗΣΙΟΓΟΝΕΣ ΚΑΙ ΔΙΕΓΕΡΤΙΚΕΣ ΕΠΙΔΡΑΣΕΙΣ
 - 3,4 Μεθυλεν-Διοξυ-Μεθαμφεταμίνη (MDMA)
 - 3,4 Μεθυλεν-Διοξυ-Αμφεταμίνη (MDA)
 - N-αιθυλ-3,4 μεθυλεν-Διοξυ-Αμφεταμίνη (MDE)
 - Παρα-Μεθοξυ-Αμφεταμίνη (PMA)
 - 2,5 Διμεθοξυ-4-Μεθυλαμφεταμίνη (STP/DOM)
 - Τριμεθοξυ-Αμφεταμίνη (TMA)
 - Μοσχοκάρυδο (NUTMEG)







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Κατηγορίες Ψυχοδραστικών Ουσιών

- ΟΠΙΟΕΙΔΗ

- Όπιο

- Μορφίνη

- Κωδεΐνη

Κατηγορίες Ψυχοδραστικών Ουσιών

- ΣΥΝΘΕΤΙΚΑ-ΗΜΙΣΥΝΘΕΤΙΚΑ ΠΑΡΑΓΩΓΑ
 - Ηρωίνη
 - Υδρομορφώνη
 - Υδροκωδώνη
 - Οξυκωδώνη
 - Μεθαδόνη
 - Φαιντανύλη
 - Λεβορφανόλη
 - Μεπεριδίνη- Πεθιδίνη
 - Πενταζοκίνη
 - Προποξυφαίνη

HEROIN



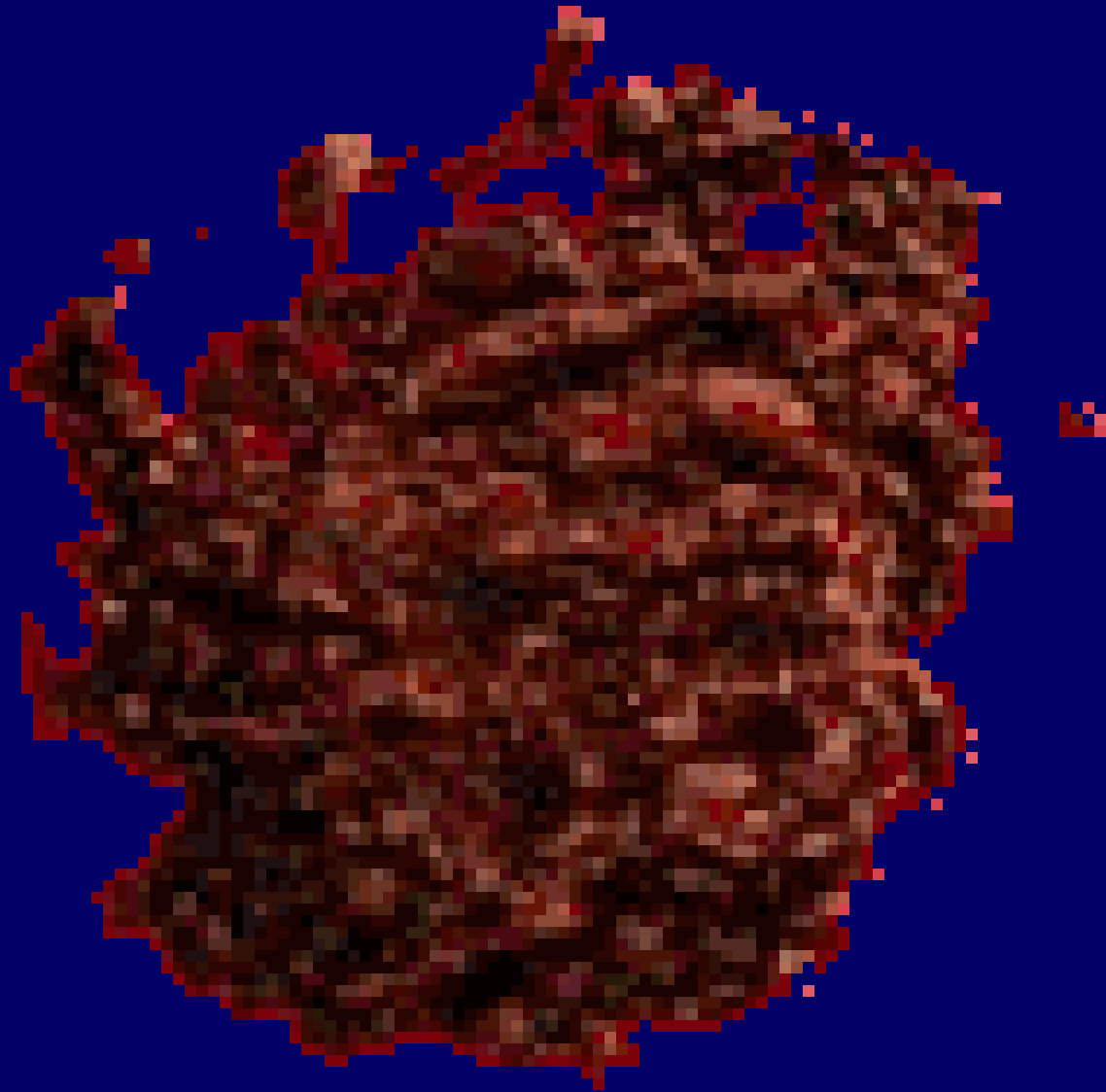
Heroin is derived from opium. The opium poppy comes in two colors, purple and white. When the petals fall, the opium is ready for harvest. The farmer cuts a groove in the poppy pod, and overnight the raw opium oozes from the poppy in small drops.

The farmer rings each poppy pod with his finger to collect the opium, and then scrapes the raw opium from his finger into a can hung about his neck. It takes nearly a thousand poppies to produce one pound of raw opium.





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SUDDEN DEATH

When an addict overdoses, death may be sudden and unexpected. Death can occur for a number of reasons. It is thought that over a period of time, an allergy to heroin may develop. At the time of injection, the addict may be sick and unable to tolerate his usual fix, or he may inject a purer form of the drug than his system is used to. Finally, the addict may be given an intentional overdose or "hotshot" if it is suspected that he has been informing to the police or that he has ripped someone off in a drug deal or drug buy.

Shown here are three cases in which death was so sudden that the needle was still sticking in the arm or leg when the body was discovered.



NEEDLE TRACKS

The heroin addict almost always injects the drug directly into a vein, which is known as "mainlining". In this way the junkie gets the desired effect of a sudden rush and high which comes when the drug enters directly into the blood stream.

The addict does not use sterile needles, and the heroin and the water used to dissolve the heroin are not sterile either. For these reasons, there is always infection at the injection site. After a period of time, scars or "needle tracks" form along the infected veins. It is not uncommon for the addict to try to hide his needle tracks by covering them with tattoos.



SKIN POPPING

In addition to injecting heroin directly into a vein, some junkies prefer to inject the drug under the skin. This practice is known as "skin popping." The injection of heroin under the skin does not produce the sudden rush or the same high as mainlining, but there is a longer effect from the drug as it is gradually absorbed into the body from underneath the skin.



The scars that result from skin popping look entirely different than needle tracks. The infection from skin popping first produces round abscesses (shown in upper photo). The abscesses heal to form characteristic round, shiny scars (lower two photos).



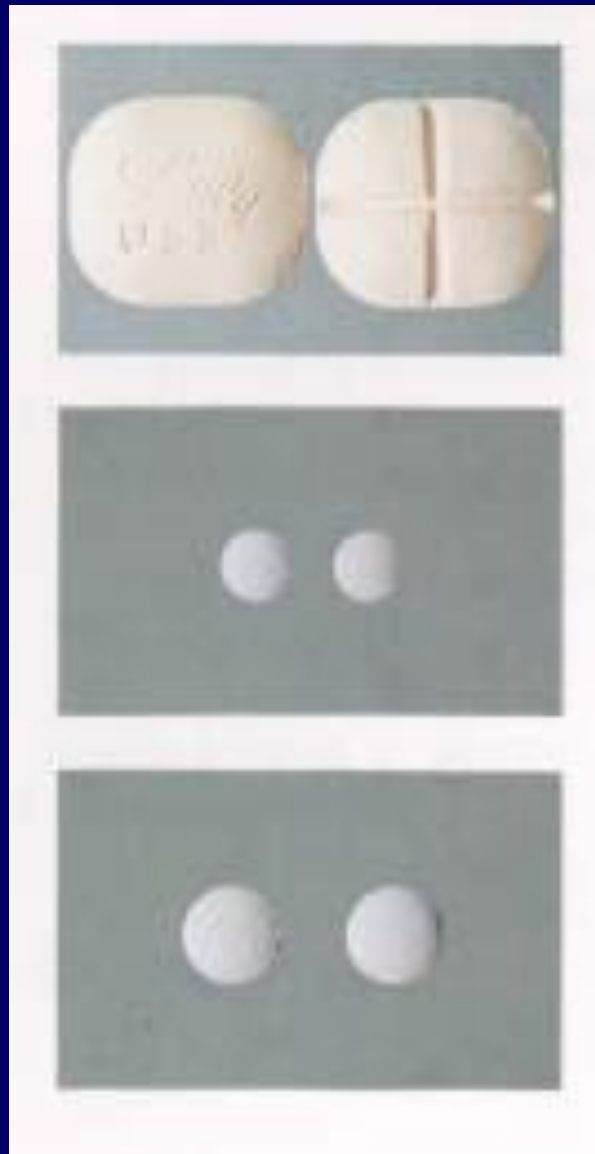
A DUMP JOB

When an addict overdoses while shooting up with friends, he may be taken to a hospital for treatment, unless he dies suddenly. Often his junkie friends are reluctant to take the body to a hospital where they will face searching questions from medical personnel or the police.

Therefore, it is not unusual to find the body of a person who has suffered a narcotics overdose dumped by the side of the road, as in this case.

You can see from the position of the body that this subject was laid out and did not collapse there. If you look closely, you can see a recent needle mark in his right arm.





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Κατηγορίες Ψυχοδραστικών Ουσιών

- ΟΡΓΑΝΙΚΟΙ ΔΙΑΛΥΤΕΣ
- ΑΝΔΡΟΓΟΝΑ-ΑΝΑΒΟΛΙΚΑ
ΣΤΕΡΟΕΙΔΗ

GLUE SNIFFING



Inhalant abuse by teenagers began in the early 1960's when it was found that inhaling the fumes from model airplane glue produced a "high." Word spread rapidly and within two years there was a glue-sniffing epidemic.

Multiple deaths were reported, and laws were passed outlawing glue sniffing and prohibiting the sale of model airplane glue to minors. Many people still refer to the practice as "glue sniffing," although today it is mostly solvents and propellants in aerosol spray cans that are abused.

One of these cases dates from the 1960's and involves a 19-year old man who suffocated in his bathroom while sniffing glue. He had a history of glue sniffing and had been treated for a liver problem brought on by the sniffing when he was 12-years old.

In the early cases, like the one shown here, the glue sniffer had smeared glue in a plastic bag and placed the bag over his head. He died as much from a lack of oxygen as from the fumes given off by the glue.

FIRST TIME USE



The risk of sudden death during the first time use of inhalants is greater than with any other drug of abuse. About three of every ten sniffing deaths occur in first time users. It is thought that when the chemicals are inhaled into the body, they sensitize the heart and result in fatal arrhythmias (irregular heart beats).



This young man was found dead on his bedroom floor. An aerosol can of cooking spray was on his bed. A cardboard tube from a toilet paper roll, stuffed with paper, was beside the body. The subject was apparently seated on the bed while inhaling the propellant from the spray can after it had been "filtered" through the paper in the cardboard tube. He had no known history of previous inhalant abuse.

TELLTALE RASH



Paint and organic solvents irritate the skin. After repeated contact, they may produce a visible irritation, rash or redness, usually around the nose and mouth. A rash is an indication of long term use. In the picture above, we can see gold paint residue and a skin rash on the chin of this inhalant abuser.



This young man was dead on arrival at the hospital. He and friends were sniffing paint at a residence when a fight broke out. The man was stabbed in the back and died of his wound. The stab wound is shown above. Gold paint was found on his hands as well as a defense wound on his left middle finger.



Χρήση Οινοπνεύματος- ψυχοδραστικών Ουσιών Στην Ελλάδα



Chronic Alcohol Abuse



Heroin Abuse

Χρήση Οινοπνεύματος-ψυχοδραστικών Ουσιών Στην Ελλάδα

- **Χρήση οινοπνευματωδών.**
 - Αθήνα: 12-64 ετών.
 - 86% των ανδρών και 62% των γυναικών συστηματικά.
 - 23,7% των ανδρών και το 4,7% των γυναικών καθημερινά.

Χρήση Οινοπνεύματος-ψυχοδραστικών Ουσιών Στην Ελλάδα

- **Χρήση ψυχοδραστικών ουσιών**
 - Αθήνα 12-64 ετών
 - 25% έχει κάνει χρήση χωρίς ιατρική συνταγή
 - 14% έχει χρησιμοποιήσει χωρίς ιατρική σύσταση μόνο «χάπια»
 - 9,5% «ναρκωτικά» με ή χωρίς παράλληλη χρήση «χαπιών»
 - 1984-1993 χρήση ψ/δ από 5.9%- 9.5%

Επιπτώσεις Από Τη Χρήση

- ΤΟΞΙΚΩΣΗ
 - Οξεία τοξίκωση
 - Παθολογική τοξίκωση
- ΕΠΙΒΛΑΒΗΣ ΧΡΗΣΗ
- ΨΥΧΩΤΙΚΗ ΔΙΑΤΑΡΑΧΗ ΣΧΕΤΙΖΟΜΕΝΗ με
Ψ/Δ ΟΥΣΙΕΣ
- ΥΠΟΛΕΙΜΜΑΤΙΚΗ ΨΥΧΩΤΙΚΗ ΔΙΑΤΑΡΑΧΗ

Επιπτώσεις Από Τη Χρήση

- ΣΥΝΔΡΟΜΟ ΕΞΑΡΤΗΣΗΣ
- ΣΥΝΔΡΟΜΟ ΣΤΕΡΗΣΗΣ
 - Κατάσταση στέρησης
 - Κατάσταση στέρησης με παραλήρημα
- ΑΜΝΗΣΙΑΚΟ ΣΥΝΔΡΟΜΟ
 - Παροδική αμνησιακή διαταραχή
 - Σύνδρομο Wernicke-Korsakoff

**Κατάχρηση Και Στερητική
Συμπτωματολογία Ψυχοδραστικών
Ουσιών Και Οι Συνεπαγόμενες
Ψυχιατρικές Καταστάσεις Που
Περιλαμβάνουν Ευερεθιστότητα Ή
Θυμό (Αλεβιζόπουλος 1998)**

Ψυχιατρική κατάσταση	Ευερεθ/τα	Οξύς Παραν/ής ιδεασμός	Επιδείνωση παρανοϊκών εκδηλώσεων	Αδυναμία ελέγχου θυμού
Τοξίκωση από οινόπνευμα-κατασταλτικά	2-3	1	0-2	3
Στ/κο σ/μο οινόπνεύμα-κατασταλτικά	3-4	1-2	1-2	0
Τοξίκωση από διεγερτικά	3-4	3-4	3-4	0
Στ/κο σ/μο από διεγερτικά	0	0	0	0
Τοξίκωση από οπιοειδή	0	0	0	0
Στερητικό σ/μο από οπιοειδή	3	0	0-1	0
Τοξίκωση από Ψευδ/γωνα	0-1	0-1	1-3	1
	2-4	Γ.Α. Αλεβιζόπουλος	4	0

Ψυχιατρική κατάσταση	Ευερεθ/τα	Οξύς Παρ/δής ιδεασμός	Επιδείνωση παρανοϊκών εκδηλώσεων	Αδυναμία ελέγχου θυμού
Τοξίκωση από κανναβινοειδή	0-1	1-3	2-4	1
Τοξίκωση από PCP	2-4	4	4	0

Διάγνωση της Εξάρτησης

Διάγνωση της Εξάρτησης

- Αντικειμενική εξέταση και τοξικολογικές εξετάσεις:
 - Συνοδά στοιχεία (βελονονυγμοί, μύση κ.τ.λ.)
 - Τοξικολογικές εξετάσεις βιολογικών υλικών (ούρα, αίμα κ.τ.λ.)

Διάγνωση της εξάρτησης

- Καταναλώνει ουσίες σε μεγαλύτερες ποσότητες ή για μεγαλύτερη χρονική περίοδο από αυτή που είχε την πρόθεση:
- Έχει την επίμονη επιθυμία ή έχει κάνει μία ή περισσότερες ανεπιτυχείς προσπάθειες να μειώσει ή να ελέγξει τη χρήση της ουσίας:

Διάγνωση της εξάρτησης

- Καταναλώνει μεγάλο μέρος του χρόνου του σε δραστηριότητες αναγκαίες για την προμήθεια της ουσίας (π.χ κλοπές) για τη χρήση της ουσίας (επανειλημμένη χρήση της ουσίας κατα τη διάρκεια της ημέρας) ή για την αποκατάσταση από την επίδρασή της:

Διάγνωση της Εξάρτησης

- Εμφανίζει καταστάσεις τοξίκωσης ή στερητικά συμπτώματα ενώ:
 - α) Αναμενόταν να εκπληρώσει σημαντικές υποχρεώσεις στη δουλειά του, στο σχολείο ή στο σπίτι (π.χ δεν πηγαίνει στη δουλειά γιατί βρίσκεται σε κατάσταση κακουχίας από στέρηση, δεν πηγαίνει στο σχολείο ή δεν εργάζεται γιατί βρίσκεται κάτω από την άμεση επίδραση της ουσίας, είναι σε κατάσταση μέθη ενώ φροντίζει παιδιά:
 - Αναλαμβάνει δραστηριότητες επικίνδυνες για τη σωματική του ακεραιότητα (π.χ οδήγηση μεταφορικού οχήματος):

Διάγνωση της Εξάρτησης

- Εγκαταλείπει σημαντικές κοινωνικές, επαγγελματικές ή ψυχαγωγικές ασχολίες εξ αιτίας της χρήσης της ουσίας:
- Συνεχίζει τη χρήση της ουσίας παρά την επίγνωση ύπαρξης ενός διαρκούς ή περιοδικού κοινωνικού, ψυχολογικού ή σωματικού προβλήματος υγείας που το προκαλεί ή το επιδεινώνει η χρήση της:

Διάγνωση της Εξάρτησης

- Έχει ανάγκη για σημαντικά μεγαλύτερες ποσότητες της ουσίας (ανάπτυξη ανοχής - αύξηση της κατανάλωσης της ουσίας κατά 50% προκειμένου να φθάσει την μέθη ή το επιθυμητό αποτέλεσμα) ή εμφανίζει σημαντικά μειωμένη επίδραση με τη συνεχιζόμενη χρήση της ίδιας ποσότητας ναρκωτικής ουσίας:

Διάγνωση της Εξάρτησης

- Εμφανίζει χαρακτηριστικά στερητικά συμπτώματα.:
- Χρησιμοποιεί την ουσία συχνά για να ανακουφιστούν ή να αποφευχθούν τα στερητικά συμπτώματα: