Substance Abuse
&
Hazard Recognition in the Home:

A Special Presentation to
Sacramento County Social Services

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Influence Recognition Identification System (IRIS)

PRELIMINARY OBSERVATIONS

PRELIMINARY OBSERVATIONS INVOLVE NOTING READILY OBSERVABLE SIGNS AND SYMPTOMS WHILE INQUIRING AS TO THE SUBJECTS MEDICAL BACKGROUND. EXAMPLES OF READILY OBSERVABLE SIGNS AND SYMPTOMS YOU SHOULD NOTE ARE:

FACE:

EXCESSIVE SWEATING
SLEEPY APPEARANCE
FLUSHED
PALE
ITCHING
TENSE APPEARANCE

BREATH:

CHEMICAL ODOR
ALCOHOLIC BEVERAGE ODOR

SPEECH:

SLOW / SLURRED SPEECH
RAPID SPEECH

EYES:

DROOPY EYELIDS
BLOODSHOT EYES
RETRACTED EYELIDS
SWOLLEN EYE LIDS
WATERY EYES
GLAZING
DILATED PUPILS (+6.5 MM)
PINPOINTED PUPILS (-3.0 MM)
RESTING NYSTAGMUS

COORDINATION:

RAPID REFLEXES
SLOW REFLEXES

GENERAL PHYSICAL OBSERVATIONS:

INCREASED / DECREASED RESPIRATORY RATE
PARANOIA
BODY TREMORS
EUPHORIA
MOOD SWINGS
ITCHING
DELUSIONS
HALLUCINATIONS
DISORIENTATION
CONFUSION
LOSS OF TIME PERCEPTION
INJECTION MARKS
DEBRIS IN NOSTRILS
BURNT THUMB/ INDEX FINGER
MUSCLE RIGIDITY

STEP 6: PUPILLARY COMPARISON

THE SECOND PHASE OF THE EYE EXAMINATION CONSISTS OF:

1. COMPARING THE PUPIL SIZE OF BOTH EYES TO A PUPILLOMETER IN:

    A. ROOM LIGHT
    B. NEAR TOTAL DARKNESS
    C. DIRECT LIGHT

2. EXAMINING THE REACTION OF THE PUPILS OF BOTH EYES TO THE LIGHT STIMULUS TO DETERMINE IF THE REACTION IS:

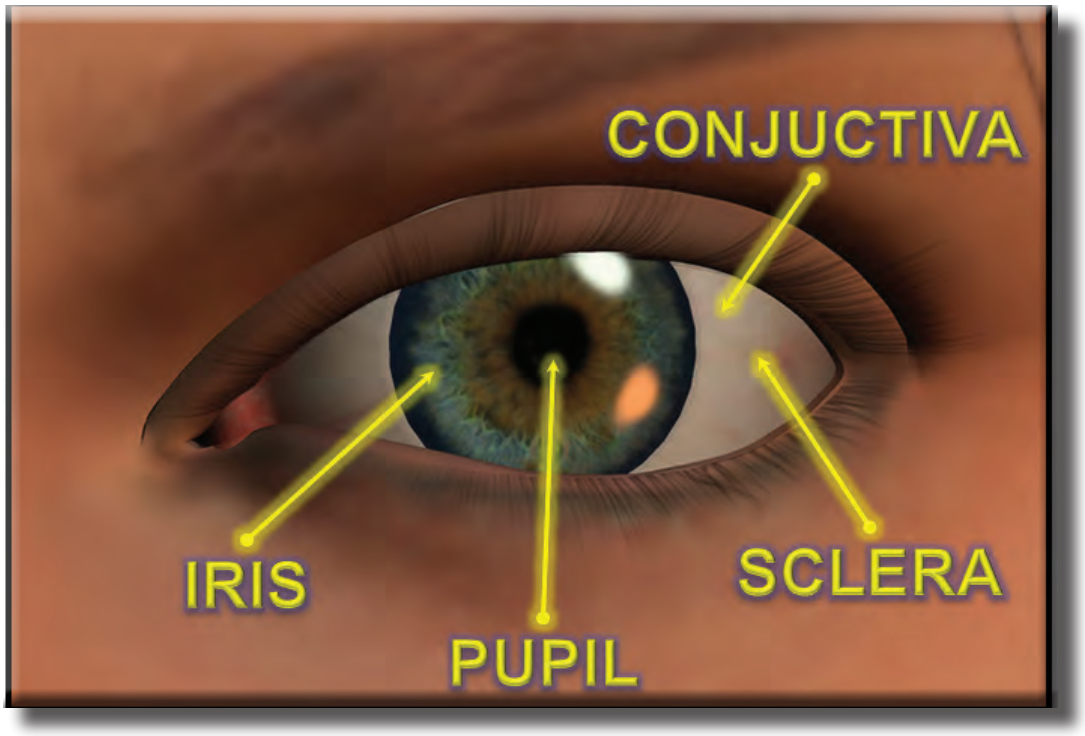
    A. NORMAL
    B. SLOW/SLUGGISH
    C. NONEXISTENT

3. EXAMINING THE PUPILS OF BOTH EYES FOR:

    A. HIPPUS
    B. REBOUND DILATION

NORMAL PUPIL SIZE IS CONSIDERED TO BE 3.0 MM TO 6.5 MM. IN DIRECT SUNLIGHT PUPILS WILL BE APPROXIMATELY 3.0 MM IN DARKNESS PUPILS WILL BE APPROXIMATELY 6.5 MM. CERTAIN DRUGS (I.E. OPIATES) CAN CAUSE THE PUPIL TO CONSTRICT BELOW 3.0 MM. THE DRUGS THAT CAUSE PUPIL CONSTRICTION WILL BE DISCUSSED FURTHER UNDER THE SPECIFIC DRUG CATEGORY.

THE FOLLOWING ILLUSTRATION IS OF THE EYE:



SUMMARY OF THE RAPID EYE TEST

TEST	INSTRUCTIONS
Observation	Look at eye in room light.

COMMON INTERPRETATION

REDNESS OF SCLERA:

Common with cannabis, alcohol, and PCP.

DROOPY EYE LID:

Upper lid touches pupil. Common with heroin, cannabis and PCP.

RETRACTED EYE LID:

Called “wall eye” or “bug eye”, you can see white sclera above the iris. Causes a “blank stare” appearance. Common with PCP.

GLAZING:

Has film over cornea. Common with cannabis, alcohol, PCP and heroin.

WATERING:

One or both eyes are tearing excessively.

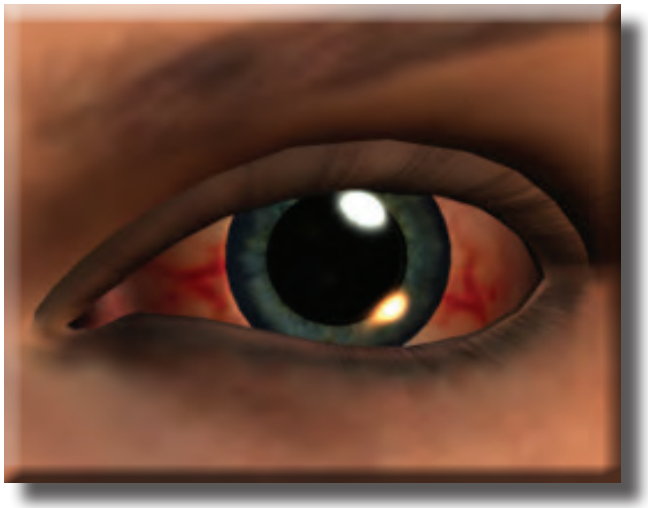
SWOLLEN EYE LIDS:

Upper and lower eye lids may swell. Common with cannabis, PCP and heroin.

TEST	INSTRUCTIONS
Pupil Size	In room light, hold pupillometer to side of eye. Determine If pupil size is wider or narrower than one side of the iris. Also, is the width less than 3.0 mm or greater than 6.5 mm?

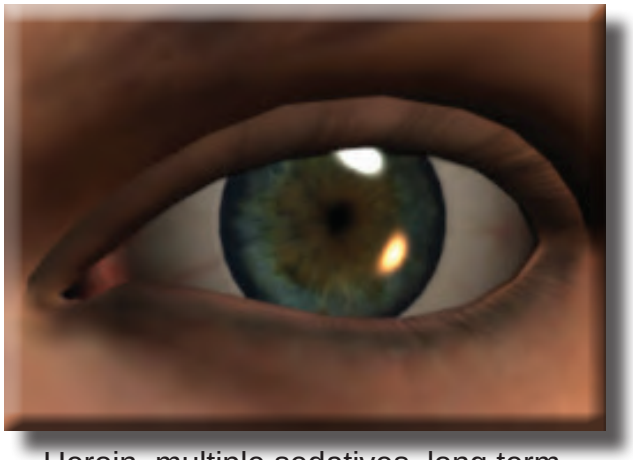
COMMON INTERPRETATION

DILATED:



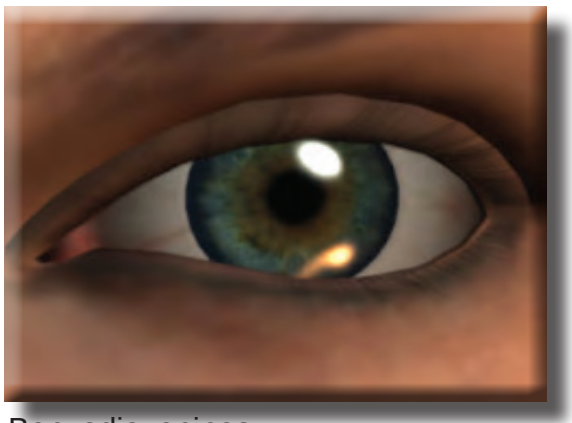
Stimulant influence, opioid withdrawal. (Mydriasis)

CONSTRICTED:



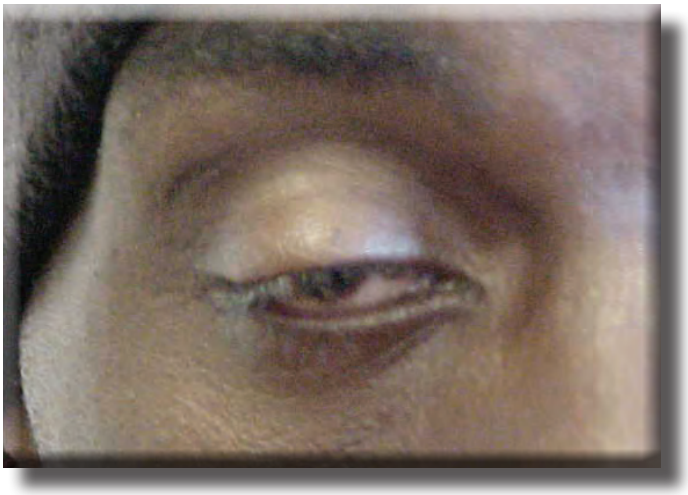
Heroin, multiple sedatives, long term stimulant abuse. (Myosis)

NORMAL:



Benzodiazepines.

DROOPY:



Opiates, depressants. (PTOSIS)

TEST	INSTRUCTIONS
Pupil Reaction	Shine light onto each pupil. Judge if normal,non-reactive, slow or sluggish. Look for hippus and rebound dilation.

COMMON INTERPRETATION

A non-reactive or slow light reflex suggests drug influence. Hippus suggests stimulant influence or opioid withdrawal. Rebound dilation suggests cannabis influence.

TEST	INSTRUCTIONS
Nystagmus	Hold your finger in a vertical position and have subject track to side, (horizontal) in a circle (rotation). Look for failure to hold horizontal or vertical gaze and fasciculation (twitching) of lower eye muscles.

COMMON INTERPRETATION

Vertical suggests DIP class drugs or high dose alcohol influence. Horizontal usually suggests ADID class drug.

TEST	INSTRUCTIONS
Non-Convergence	Hold your finger in a vertical position about a foot away from nose. Tell subject to track your finger to about 1/2 inch in to the bridge of their nose and hold this position for 5 seconds.

COMMON INTERPRETATION

Inability to track and hold the “cross eye” position for 3 to 5 seconds suggests CADID class drug influence.

DETERMINATION OF PUPILLARY DILATION OR CONSTRICTION

In normal room light, the pupil of an adult is usually between 3.0 and 6.5 mm in diameter after it has had about 5 minutes to adjust.

Teenagers and elderly persons may naturally have very small pupils under 3.0 in diameter or naturally large pupils above 6.5 in diameter. About 1 to 3% of the adult population may have a congenital dilation (Anisocoria) or constriction.

When a light about the brightness of a penlight is directly shown into the pupil of normal subjects, it constricts for a few minutes to an average of about 2.5 mm.

A rapid way to determine if dilation or constriction is present is to measure the pupil diameter against the width of one side of the iris.

If the width of the iris is smaller than the size of the pupil the pupil is larger. If the width of the iris is greater than the pupil the pupil is normal to small.

CURRENT USE SYMPTOMATOLOGY

A. NARCOTICS

1. "Flash" or "Rush". (not experienced by longtime addicts)
2. Euphoria.
3. Drowsiness - "Going on the Nod".
4. Constricted pupils and reduced vision.
5. Respiratory depression.
6. Nausea. (not usually experienced by longtime addicts)
7. Constipation.

B. BARBITURATES AND MINOR TRANQUILIZERS

1. Drunken behavior.
2. Slurred speech.
3. Disorientation.
4. Drowsiness.
5. Stupor.
6. Respiratory depression.

C. STIMULANTS

1. Possible aggression. (especially with methamphetamines)
2. Reduced fatigue and increased sense of strength.
3. Excited behavior and rapid speech.
4. Dilated pupil.
5. Elevated heart rate, blood pressure, body temperature.
6. Insomnia.
7. Loss of appetite.
8. Mood swings.

D. CANNABIS PRODUCTS

1. Relaxed inhibitions. (low doses)
2. Sleepiness.
3. Inability to concentrate.
4. Possible disorientation. (higher doses)
5. May also produce: "pink eyes"; dilated pupils; increased appetite. (sweets)
6. Psychosis and renal failure*

E. OTHER HALLUCINOGENS

1. Feelings of detachment from reality.
2. Poor perception of time and distance.
3. Illusions and hallucinations.
4. Incoherent speech.

*symptoms of abuse of synthetic cannabis products.

DRUG INFLUENCE TOXICOLOGY

When a blood or urine sample is submitted to the laboratory, only an initial screening test (or preliminary test) is performed on the sample. This screening test means it is more likely than not that the drug is in the sample. The screening test is usually used for case filing purposes. If the case is set for trial, a 'final' or confirmatory test may be required.

DRUG	BLOOD	URINE	CAN SCREEN	NOTES
Phencyclidine	Yes	Yes	Yes	Urine best
Opiates	Yes	Yes	Yes	Urine best
Amphetamine	No	Yes	Yes	Urine best
Methamphetamine	Yes	Yes	Yes	Urine best
Cocaine	Yes	Yes	Yes	Urine best
Methaqualone	Yes	Yes	Yes	Blood best
Barbiturates	Yes	Yes	Yes	
Benzodiazepines	Yes	Yes	No	Valium, Librium, Xanax
Methadone	No	Yes	Yes	
Cannabis	No	Yes	Yes	
LSD	No	No	No	No test

HOW LONG DRUGS STAY IN THE URINE

DRUG	APPROXIMATE LENGTH OF TIME IN THE URINE
AMPHETAMINES	48 TO 72 HOURS
BENZODIAZEPINES*	48 TO 96 HOURS
COCAINE	24 TO 36 HOURS
HEROIN	40 TO 72 HOURS
CANNABIS	10 TO 35 DAYS
NICOTINE	24 TO 48 HOURS
PHENCYCLIDINE (PCP)	48 TO 78 HOURS

* INCLUDES VALIUM, LIBRIUM, ATIVAN, DALMANE AND XANAX.

INTERPRETATIONS OF URINALYSIS RESULTS FOR DRUGS

POSITIVE RESULT:	**INDICATES:**
STIMULANTS	COMMON RESULTS:
AMPHETAMINE	AMPHETAMINE USE COULD BE PHARMACEUTICAL OR STREET METH BY USE OF PHENYLPROPANOLAMINE
COCAINE AND/OR COCAINE METABOLITE	COCAINE USE TOPICAL ANESTHETICS SUCH AS PROCAINE AND LIDOCAINE WILL NOT RESULT IN A POSITIVE COCAINE RESULT
(PSEUDO)EPHEDRINE	EPHEDRINE USE USED IN MANY OVER THE COUNTER DIET AND NASAL DECONGESTANTS USED TO MAKE METHAMPHETAMINE AND CAN BE A BY-PRODUCT IN THE STREET DRUG
METHAMPHETAMINE	METHAMPHETAMINE USE COMMONLY FOUND WITH STREET DRUG USE. VERY SELDOM USED AS PHARMACEUTICAL
PHENYLPROPANOLAMINE	PHENYLPROPANOLAMINE USE USED IN MANY OVER THE COUNTER DIET AND NASAL DECONGESTANTS. USED TO MAKE AMPHETAMINE AND CAN BE A BY-PRODUCT IN THE STREET DRUG
PROCAINE	PROCAINE (NOVACAINE) USE OFTEN USED TO ADULTERATE COCAINE

INTERPRETATIONS OF URINALYSIS RESULTS FOR DRUGS

OPIATES	COMMON RESULTS:
CODEINE	CODEINE USE ALONE
HYDROMORPHONE (DILAUDID)	HYDROMORPHONE USE ONLY
METHADONE	IN PATIENTS WITH NORMAL LIVER FUNCTION, THIS INDICATES THAT METHADONE WAS ADDED DIRECTLY TO THE URINE SAMPLE AND NOT INGESTED PREGNANCY MAY ALTER METABOLISM SO THAT METHADONE CONSUMPTION MAY SHOW THIS RESULT METHADONE IS GENERALLY GIVEN IN NARCOTIC TREATMENT PROGRAM ONLY (24 HOUR DOSE), BUT IS NOW PRESCRIBED FOR PALATIVE PAIN CARE (4 - 6 HOUR DOSE).
METHADONE METABOLITE	METHADONE USE
METHADONE & METABOLITE	METHADONE USE
MEPERIDINE (DEMEROL)	MEPERIDINE USE
MORPHINE	HEROIN, MORPHINE OR CODEINE USE POPPY SEEDS OFTEN CONTAIN MORPHINE METABOLITE AND CAN CAUSE A POSITIVE TEST (BUT POPPY SEEDS WILL NOT PRODUCE THE METOBLOITE OF OPIATES ON CONFIRMATION TESTS).
PHARMACEUTICAL MORPHINE & CODEINE	STREET HEROIN USE POSSIBLE CODEINE USE, THE BODY WILL PRODUCE MORPHINE FROM CODEINE INGESTION COMBINATIONS OF MORPHINE, CODEINE OR HEROIN
PENTAZOCINE (TALWIN)	PENTAZOCINE USE
PROPOXYPHENE (DARVON)	PROPOXYPHENE USE

INTERPRETATIONS OF URINALYSIS RESULTS FOR DRUGS

CANNABIS	**COMMON RESULTS:**
CANNABIS	CANNABIS OR OTHER CANNABIS PRODUCTS NO OTHER SUBSTANCES ARE KNOWN TO GIVE A POSITIVE FOR CANNABIS (THC AND OTHER METABOLITES)
SYNTHETIC CANNABINOIDS	ONLY A SMALL NUMBER OF THE OVER 400+ COMPOUNDS AND ANALOGS CAN BE IDENTIFIED AT THIS TIME.
ALCOHOL	**COMMON RESULTS:**
ALCOHOL	ALCOHOL USE
DEPRESSANTS	**COMMON RESULTS:**
BARBITURATES AMOBARBITAL BUTABARBITAL BUTALBITAL PENTOBARBITAL PHENOBARBITAL SECOBARBITAL	BARBITURATE USE MANY PRESCRIPTION DRUGS CONTAIN BARBITURATES
BENZODIAZEPINES	BENZODIAZEPINE USE BY PRESCRIPTION EXCEPT FOR ROHYPNOL
METHAQUALONE (QUAALUDE)	METHAQUALONE USE ONLY NO LONGER PRESCRIBED, STREET MANUFACTURED
PCP	**COMMON RESULTS:**
PCP	PCP USE