

**Substance Abuse
&
Hazard Recognition in the Home:**

**A Special Presentation to
Sacramento County Social Services**



**Presented By:
Jackie Long, MSET
In Conjunction With:
University of California, Davis
Northern California Training Academy**

INSTRUCTOR BIO:

CHIEF JACKIE LONG

DIRECTOR OF PUBLIC SAFETY UNIVERSITY OF THE PACIFIC SACRAMENTO CAMPUS



Chief Jackie Long became the Director of Public Safety for the University of the Pacific, Sacramento Campus in November 2015. Prior to becoming Chief, he retired in August of 2011 as a Special Agent Supervisor with the California Department of Justice, Bureau of Narcotic Enforcement, after 32 years in California Law Enforcement. Chief Long worked six years in general street patrol at a mid-sized city police department in Central California and 26 years in narcotic enforcement at the state level. Of those 26 years, 10 years were involved in being assigned to the California Department of Justice, Advanced Training Center as an instructor, program coordinator, and supervisor of the Narcotic and Clandestine Laboratory Training Units, 3 years were involved as a Commander of a county-wide Drug Task Force of a rural Northern California county, 5 years were involved as the coordinator of the Department's state-wide Clandestine Laboratory Enforcement Program, and the remaining years were involved in conducting investigations (including working undercover) involving clandestine drug laboratories, cannabis cultivation, large scale drug trafficking, and under the influence of controlled substances and alcohol.

Chief Long has conducted training throughout all 58 counties of California and across the United States, Canada, and in Mexico involving multiple topics of narcotic enforcement and drug and alcohol interventions. Through Chief Long's consulting company; Influence Recognition and Identification Systems (IRIS), he has developed a drug and alcohol influence recognition/intervention program that has been utilized in 26 school districts in California and Alaska. The IRIS program is developed from a California law enforcement tool used to identify persons who are under the influence of alcohol and drugs; the Drug Abuse Recognition program (DAR). Chief Long has conducted DAR training for law enforcement, corrections, probation, and drug rehabilitation services in California, Canada, and Hawaii. Chief Long has developed and provided methamphetamine training courses in Indian Country for several California Indian Tribes and the Federal Bureau of Indian Affairs.

Chief Long is currently an adjunct instructor at U.C. Davis, Northern California Academy of Social Services, Fresno State University Bay Area Academy, a former instructor for the Federal Law Enforcement Training Center (FLETC) Rural Policing Institute, past President of the California State Juvenile Officers Association, and the former Director of Training for the New Leaf Treatment Center (NLTC), located in Lafayette, CA. NLTC is under the medical direction of Dr. S. Alex Stalcup, a recognized addiction medicine specialist in the United States. Chief Long was the Program Director for the Criminal Justice Program at Carrington College in Citrus Heights California.

Chief Long has obtained his Associates of Science Degree in the Administration of Justice, Bachelor of Arts Degree in Criminal Justice, and Masters of Science Degree in Education Technology. Chief Long would like to recognize Dr. Stalcup, Gary Shimabukuro of Laulima Hawaii, and retired Torrance Police Narcotics Detective, Sgt James Mock for their contributions in the development of this manual.

The Biochemistry of Drugs

WHAT IS A DRUG?

A DRUG IS A PLEASURE PRODUCING CHEMICAL.

“DRUGS” ACTIVATE OR IMITATE CHEMICAL PATHWAYS IN THE BRAIN ASSOCIATED WITH FEELINGS OF WELL - BEING, PLEASURE AND EUPHORIA.

AN ADDICTING DRUG IS A PLEASURE PRODUCING CHEMICAL. ALL DRUGS THAT CAN BE OVERUSED, TO QUALIFY AS DRUGS, THEY MUST MAKE YOU FEEL GOOD IN SOME WAY.

ALL ADDICTING DRUGS MAKE YOU FEEL GOOD BECAUSE THEY GET TO THE PLEASURE CENTERS AND TURN THEM ON. THAT IS WHAT A DRUG IS, A STIMULATOR OF THE PLEASURE CENTERS.

SOME DRUGS ACTIVATE THE PLEASURE SYSTEM A LITTLE BIT, LIKE TOBACCO, AND SOME MAXIMALLY LIKE METHAMPHETAMINE AND OXYCONTIN. BUT THEY ALL DO THE SAME THING IN TERMS OF ACTIVATING THE PLEASURE SYSTEM. THAT IS WHAT MAKES THEM A DRUG.

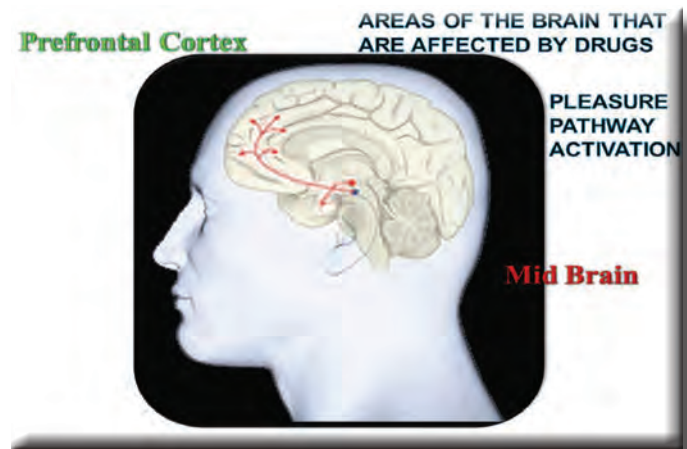
REWARD / PLEASURE CENTERS OF THE HUMAN BRAIN

SCIENCE HAS FOUND WHERE THE PLEASURE CENTERS IN THE BRAIN ARE LOCATED. DEEP IN THE MIDDLE OF THE BRAIN IS A STRUCTURE THAT CONSTANTLY MONITORS WHAT'S GOING ON IN THE BODY AND IN THE ENVIRONMENT, CALLED THE VTA.

WHEN THERE IS SOMETHING THAT IS PLEASURABLE (OR COULD BECOME PLEASURABLE), THE MIDDLE SECTION OF THE BRAIN PICKS IT UP AND SENDS A SIGNAL TO THE PLEASURE CENTERS. THERE ARE TWO PLEASURE CENTERS WITHIN THE BRAIN:

ONE IS IN THE MIDDLE OF THE BRAIN AND IF THIS BECOMES ACTIVE THE SENSATIONS OF PLEASURE ARE EXPERIENCED.

THE OTHER PLEASURE CENTER IS IN THE MOST FORWARD PORTION OF THE BRAIN, **THE PREFRONTAL CORTEX.**



THE PREFRONTAL CORTEX IS THE PART OF THE BRAIN THAT MAKES DECISIONS ABOUT WHETHER YOU WILL OR WILL NOT DO SOMETHING. WHEN THAT PART OF THE PLEASURE SYSTEM BECOMES ACTIVATED, YOU PAY ATTENTION AND INCREASE YOUR INTEREST. THE PLEASURE SYSTEM IN THE FOREBRAIN IS LIKE THE LIGHT BULB THAT GOES OFF IN THE BRAIN.



Functions of the Reward/Pleasure System of the Brain

- **Reward pursuit of instinctive drives (food, sex, nurture)**
- **Attention**
- **Enjoyment**
- **Rewards for social contact**
- **Gives pleasure to sensations, emotions, thoughts (rewarding)**
- **Assigns value (interest) to sensations, emotions, and thoughts**
- **Sets level of alertness/awareness/interest in the forebrain, regulating executive functions**

DRIVE STATES

HIGHER ORGANISMS HAVE INHERENT "INSTINCTS" THAT DRIVE THEM TO:

SEEK / OBTAIN FOOD
SEEK / OBTAIN WATER
SEEK / HAVE SEX
SEEK / MAKE SHELTER
PROTECT YOUNG

EACH DRIVE / INSTINCT HAS TWO ASPECTS:

1. IF THE DRIVE IS FRUSTRATED OR CANNOT BE MET, THE ORGANISM EXPERIENCES DYSPHORIA, ANXIETY, IRRITABILITY AND ANGER.
2. IF THE DRIVE IS ACHIEVED, THE ORGANISM EXPERIENCES "REWARD," WHICH HUMANS RECOGNIZE AS PLEASURE, SATISFACTION AND A SENSE OF WELL-BEING.

EACH DRIVE STATE IS LOCATED IN A SPECIFIC PART OF THE BRAIN; ATTACHED TO EACH PART IS A CONNECTION TO THE REWARD / PLEASURE CENTERS OF THE BRAIN.

WHEN THE DRIVE IS ACHIEVED, THERE IS A COMPLEX INTERACTION OF NEUROTRANSMITTERS THAT LEADS TO THE RELEASE OF DOPAMINE AND ENDORPHIN IN THE REWARD / PLEASURE CENTERS EXPERIENCED AS PLEASURE, SATISFACTION AND A SENSE OF WELL-BEING.

HOW DRUGS WORK

DRUGS MODIFY THE NEUROCHEMISTRY OF PLEASURE.

PLEASURE SERVES TO REWARD COMPLETION OF THE INSTINCTIVE DRIVES AND TO DIRECT BEHAVIOR TOWARD POSITIVE GOALS.

"DRUGS" ACTIVATE OR IMITATE THE CHEMICAL MESSENGERS (NEUROTRANSMITTERS) IN THE BRAIN ASSOCIATED WITH FEELINGS OF WELL-BEING, PLEASURE AND EUPHORIA.

DRUGS BYPASS INSTINCTUAL DRIVES, BUT STIMULATE THE RELEASE OF SPECIFIC NEUROTRANSMITTERS, **DOPAMINE** AND **ENDORPHIN** IN THE REWARD-PLEASURE CENTERS OF THE BRAIN.

THE RELEASE OF NEUROTRANSMITTERS IS MUCH GREATER IN DRUG STIMULATED STATES THAN IN RESPONSE TO INSTINCT.

RELEASE OF **DOPAMINE** IS EXPERIENCED AS:

EXCITED EUPHORIA.

RELEASE OF **ENDORPHIN** IS EXPERIENCED AS:

CALM EUPHORIA.

THERE ARE THREE TERMS THAT ARE VERY IMPORTANT IN UNDERSTANDING ADDICTION AND DRUGS. THE FIRST TERM IS NEUROADAPTATION, THE SECOND TERM IS TOLERANCE AND THE THIRD TERM IS WITHDRAWAL. THOSE THREE WORDS DEFINE THE PROBLEM WITH DRUGS. IF SOMEONE COMES UP TO YOU AND ASKS "WHY ARE DRUGS BAD FOR YOU", THE ANSWERS ARE NEUROADAPTATION, TOLERANCE AND WITHDRAWAL.

NEUROADAPTATION

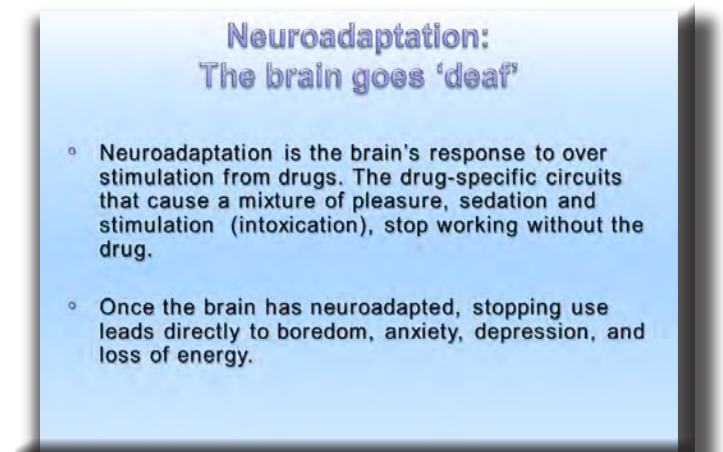
NEUROADAPTATION IS THE PROCESS BY WHICH RECEPTORS IN THE REWARD/ PLEASURE CENTERS OF THE BRAIN ADAPT TO THE HIGH CONCENTRATIONS OF NEUROTRANSMITTERS. THE RECEPTORS BECOME INSENSITIVE TO NORMAL LEVELS OF NEUROTRANSMITTERS.

UNDER UNSTIMULATED CONDITIONS, WITHOUT DRUGS, THERE IS PROFOUND INTERFERENCE IN THE ABILITY TO EXPERIENCE PLEASURE. THE USER INSTEAD FEELS AS IF HE / SHE WAS EXPERIENCING AN UNMET INSTINCTIVE DRIVE:

DYSPHORIA, ANXIETY, ANGER, FRUSTRATION AND CRAVING.

THE DAMAGE CAUSED BY NEUROTRANSMITTER INSENSITIVITY LEADS THE USER TO FEEL, WHEN SOBER, THE OPPOSITE OF FEELING HIGH. FOR THE USER, SOBRIETY BECOMES THE OPPOSITE OF EUPHORIA.

LENGTH OF USE AND INTENSITY OF THE DRUG ARE FACTORS PREDICTING THE EXTENT OF THE INJURY.



TOLERANCE

WHEN YOU HAVE TO KEEP USING MORE AND MORE TO GET HIGH, YOU ARE SAID TO BE "TOLERANT." IT IS THE SIGN THAT YOUR PLEASURE CENTERS ARE NOT WORKING AND THAT A DISEASE OF THE PLEASURE CENTERS HAS BEGUN. IN DRUG TERMS, THE AMOUNT THAT ONCE MADE YOU HIGH DOESN'T WORK ANYMORE. YOU HAVE TO GO TO A STRONGER AND STRONGER DOSE TO "HEAR" THE HIGH. WHEN YOU NEED A HIGHER DOSE TO GET HIGH, YOU HAVE "TOLERANCE." YOUR BRAIN IS NO LONGER NORMAL.

IF YOU WANT TO KNOW IF SOMEONE HAS A NORMAL OR DISEASED BRAIN, ASK THE SIMPLE QUESTION, "DOES THE AMOUNT THAT YOU FIRST USED TO GET HIGH STILL GET YOU AS HIGH?" IF THE ANSWER IS NO (MEANING IT TAKES MORE TO GET HIGH THAN IT USED TO) YOU NOW KNOW WITH MEDICAL CERTAINTY THAT THE BRAIN IS DEVELOPING A DISEASE.

ONCE THERE IS TOLERANCE, PEOPLE WHO NEED MORE TO GET HIGH DON'T FEEL NORMAL WHEN THEY STOP. THEY GO AS LOW AS THEY WERE HIGH.

MARIJUANA MAKES YOU GET HIGH AND GET INTERESTED. BUT ONCE YOU HAVE TO SMOKE MORE TO GET HIGH, YOU DON'T GO BACK TO NORMAL WHEN YOU STOP. YOU GO THE OPPOSITE DIRECTION FROM HOW YOU FELT WHEN YOU WERE HIGH.

FOR MARIJUANA USERS WHO HAVE DEVELOPED TOLERANCE, THE MAIN SYMPTOM THEY EXPERIENCE IS BOREDOM WHEN THEY ARE SOBER. MARIJUANA ADDICTS WHO HAVE BECOME TOLERANT COMPLAIN THAT NOTHING IS INTERESTING. THEY DON'T ENJOY THEMSELVES. THEY DON'T WANT TO DO ANYTHING. EVERYTHING IS BORING. IT'S LIKE THEY DON'T KNOW HOW TO ENJOY THEMSELVES WHEN THEY'RE NOT HIGH.

THEY HAVE DAMAGED THEIR PLEASURE CENTERS. THEY CAN'T HAVE FUN WITHOUT IT. THEY DEPEND ON IT TO FEEL NORMAL, AND THEY FEEL BAD WHEN THEY STOP. THE SOBER STATE OF SOMEONE WHO HAS DEVELOPED TOLERANCE TO DRUGS IS NOT NORMAL. IT'S THE OPPOSITE OF HOW THEY FELT WHEN THEY WERE HIGH.

WITHDRAWAL

THE NAME FOR THESE ABNORMAL WAYS OF FEELING WHEN STOPPING DRUG USE IS CALLED WITHDRAWAL. ONCE YOU ARE TOLERANT AND STOP YOU WILL ALWAYS – 100% OF THE TIME – HAVE WITHDRAWAL SYMPTOMS AND THEY ARE THE EXACT OPPOSITE OF WHAT THE DRUG DOES.

SO IF THE DRUG MAKES YOU INTERESTED, YOU CAN'T GET INTERESTED. IF THE DRUG MADE YOU ENJOY YOURSELF, YOU CAN'T ENJOY YOURSELF. IF THE DRUG MADE YOU LAUGH, YOU CAN'T LAUGH. IF THE DRUG MADE YOU SLEEPY, YOU CAN'T SLEEP. IF THE DRUG MADE YOU HIGH, YOU CAN'T BE HIGH WITHOUT USING MORE AND MORE.

THE DILEMMA FOR PEOPLE WHO HAVE DEVELOPED TOLERANCE TO ANY DRUG IS TOLERATING HOW THEY FEEL WHEN THEY ARE NOT HIGH.

ALTHOUGH THE DAMAGE CAN HEAL, IT LASTS A LONG TIME BEFORE A PERSON GETS BACK TO WHERE THEY CAN HAVE PLEASURE WITHOUT DRUGS. FOR THE "TOO LOUD" DRUGS IT TAKES A LONG, LONG, TIME TO HEAL.

Tolerance

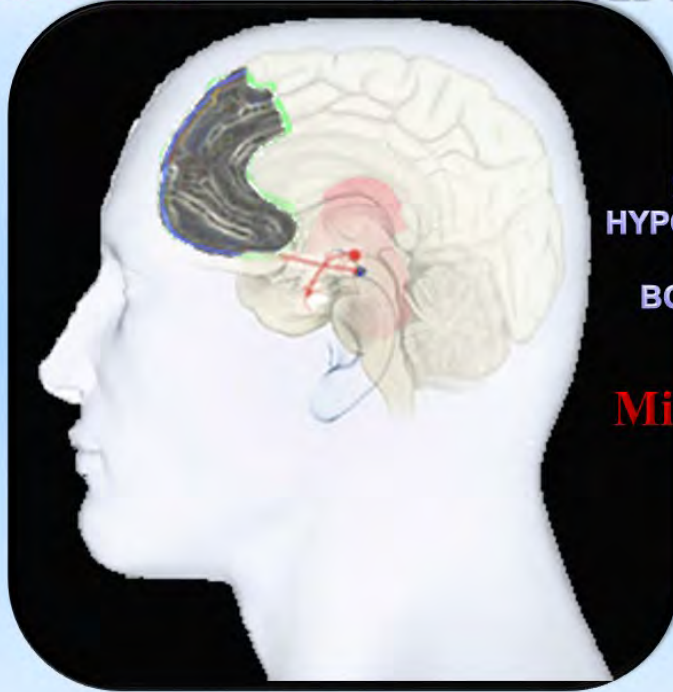
- Neuroadaptation is the brain's response to over stimulation from drugs.
- Tolerance is the process by which the reward and pleasure centers of the brain adapt to high concentrations of pleasure neurotransmitters.
- In response to overstimulation, the brain regions decrease in sensitivity and become unresponsive (deaf) to normal levels of stimulation.
- Once tolerant, the user is "dependent" on the drug to feel normal.

Withdrawal

- Neuroadaptation is the brain's response to over stimulation from drugs.
- Tolerance is the process by which the reward and pleasure centers of the brain adapt to high concentrations of pleasure neurotransmitters.
- Once neuroadaptation develops (tolerance), there will always be withdrawal symptoms that are the mirror image of the drug effects. Cessation of drug use leads to 'inversion of the high'; sobriety becomes pleasureless, anxious, sleepless, and lacking energy
- Under unstimulated conditions (without drugs) there is profound interference with the ability to experience normal pleasure. When sober, the user feels anhedonia, anxiety, anger, frustration and craving. The pleasure system remains impaired for months to years, interfering with sobriety, learning, and impulse inhibition.

Prefrontal Cortex

AREAS OF THE BRAIN THAT ARE AFFECTED BY DRUGS



NATURAL
HYPOFRONTALITY
OR
BORN BORED

Mid Brain

ALL DRUGS, IN ADDITION TO MAKING YOU HIGH DO SOMETHING ELSE. PAINKILLERS ("OPIATE DRUGS") MAKE YOU HIGH, GIVE STRONG PLEASURE BUT THEY ALSO KEEP A PERSON FROM HAVING PAIN.

BECAUSE OF NEUROADAPTATION AND TOLERANCE, PAIN PILLS ARE SOMETIMES TAKEN IN LARGER AND LARGER AMOUNTS WITHOUT RELIEVING PAIN. IF MORE AND MORE IS NEEDED, THE TOLERANCE PROCESS HAS SET IN, THE DISEASE PROCESS HAS BEGUN.

EVERYONE WHO IS TOLERANT TO PAIN KILLERS (SUCH AS OXYCONTIN) FEELS INCREDIBLY BAD WHEN THEY STOP USING BECAUSE THE PLEASURE CENTERS ARE INJURED, SO BAD THEY PHYSICALLY CAN'T STAND IT.

IN ADDITION TO TERRIBLE PAIN, THEY FEEL DYSPHORIC AND HAVE INTENSE CRAVING. THEY CAN'T CALM DOWN. THEY CAN'T SLEEP. THEY ARE VERY, VERY ANXIOUS. THEY BECOME JITTERY AND KIND OF SLOW AND THEY STUTTER A LOT AND THEY DON'T REALLY KNOW WHAT'S GOING ON, SOMETIMES THEY DON'T EVEN CARE.

THEY ARE SICK. THEY ARE VOMITING AND THEY GET CRAMPS AND DIARRHEA. WHAT ARE THEY LOOKING TO DO? FINDING THE NEXT DOSE. THEY GET DESPERATE TO RELIEVE THE SEVERE PAIN AND DYSPHORIA THAT APPEAR WHEN THEY TRY AND STOP.

A SIMPLE ANALOGY IS FOR EVERYTHING A DRUG DOES TO A PERSON WHO IS UNDER THE INFLUENCE - "HIGH", AN EQUAL AND OFTEN TIMES GREATER OPPOSITE REACTION IS EXPERIENCED BY THE PERSON WHO IS IN WITHDRAWAL OF THE DRUG.

ADDICTION AND LOSS OF CONTROL

LOSING CONTROL

ADDICTION, AS A DISEASE, CAN BE DEFINED AS THE INABILITY TO STOP USING OR TO STAY STOPPED. IF SOMEONE HAS DAMAGED THEIR BRAIN PLEASURE CENTERS AND THEIR CALM OR PAIN CENTERS THEN THEY HAVE THE DISEASE.

DEFINITION OF ADDICTION

THE FOLLOWING ARE THE COMPONENTS OF ADDICTION:

1. COMPULSION:

LOSS OF CONTROL

THE USER CAN'T NOT DO IT; HE / SHE IS COMPELLED TO USE.

COMPULSION IS NOT RATIONAL. ONE DOES NOT PLAN TO BE COMPULSIVE.

THE WHOLE ISSUE IN ADDICTION ISN'T WHAT A PERSON USES OR HOW OFTEN THEY USE; IT'S WHETHER THEY CANNOT USE. THE CRITICAL CHANGE IN ADDICTION IS THE LOSS OF THE ABILITY TO CONTROL DRUG USE. EACH TOLERANT DRUG USER HAS CROSSED THE LINE SO THAT THEY CAN'T CONTROL THEMSELVES.

WHEN A PERSON GETS ADDICTED, IT'S LIKE A PARASITE GETS INTO THE PLEASURE CENTERS OF THEIR BRAIN. WE WILL CALL IT THE "CRAVING MONSTER." IT SITS IN THE PLEASURE CENTERS AND TELLS THE PERSON WHAT TO DO. IT SAYS, "YOU DON'T LIKE THE WAY YOU FEEL RIGHT NOW. GO GET ME SOME DOPE." AND WHAT IS THE PERSON GOING TO DO? THEY GO SCORE SOME DOPE.

2. CONTINUED USE DESPITE ADVERSE CONSEQUENCES (C-U-D-A-C):

AN ADDICT IS A PERSON WHO USES EVEN THOUGH HE OR SHE KNOWS IT IS CAUSING PROBLEMS, BUT THEY CAN'T NOT DO IT.

CUDAC IS HOW WE KNOW HOW ADDICTED SOMEONE IS. THE STAGES OF ADDICTION (EARLY, MIDDLE, AND LATE STAGE) ARE NOT DETERMINED BY HOW MUCH IS USED OR HOW OFTEN THERE IS USE, BUT RATHER BY HOW MUCH TROUBLE DRUG USE HAS CAUSED.

3. CRAVING:

THE DAILY SYMPTOM OF THE DISEASE.

THE USER EXPERIENCES INTENSE PSYCHOLOGICAL PREOCCUPATION WITH GETTING / USING THE DRUG.

CRAVING IS DYSPHORIC, AGITATING, **AND IT FEELS VERY BAD.**

CRAVING IS WHAT ADDICTS EXPERIENCE ON A DAILY BASIS. ONCE SOMEONE CROSSES THE LINE INTO ADDICTION AND THE DRUG IS NOT AVAILABLE, INTENSE HUNGER FOR THE DRUG WILL APPEAR. THAT HUNGER IS CALLED CRAVING. SCIENTIFIC STUDIES HAVE DESCRIBED THE CONDITIONS THAT MAKE YOU REALLY HAVE STRONG CRAVINGS. THESE CONDITIONS MAKE YOU CRAVE SO MUCH THAT YOU MIGHT DO THINGS THAT YOU WOULD NEVER OTHERWISE DO IF YOU BECAME DESPERATE BECAUSE OF HIGH CRAVING.

Behavioral and Cognitive Functions of the Prefrontal Cortex (Frontality)

- Controlling impulses
- Inhibiting inappropriate behavior
- Initiating appropriate behavior
- Stopping an activity upon completion
- Shifting/adjusting behavior when situations change
- Providing a temporary mental workspace for working memory
- Organizing things
- Forming strategies and planning behavior
- Setting priorities among tasks and goals
- Making decisions
- Empathy
- Sensitivity to feedback (reward & punishment)
- Insight

4. DENIAL / HYPOFRONTALITY:

A TRUE DISTORTION OF PERCEPTION CAUSED BY CRAVING.

UNDER THE PRESSURE OF INTENSE CRAVING, IS TEMPORARILY BLINDED TO THE RISKS AND CONSEQUENCES OF USING.

THE TERM DENIAL NO LONGER MEANS "I DON'T HAVE A PROBLEM." MOST COMMONLY, WHAT WAS FORMERLY VIEWED AS DENIAL IS NOW MORE PROPERLY CALLED TREATMENT RESISTANCE.

MOST ADDICTED PEOPLE HAVE BEEN THROUGH BAD AND HURTFUL EPISODES OF WITHDRAWAL AND ARE FRIGHTENED ABOUT HAVING TO GO THROUGH THEM AGAIN. SOME HAVE ACHIEVED SOBRIETY AND FIND IT IS AN UNHAPPY, NEGATIVE PLACE. FOR THEM, THE DRIVE TO USE IS LESS CAUSED BY A DESIRE TO GET HIGH, BUT RATHER A STRONG NEED NOT TO BE SOBER.

THE MODERN TERM FOR DENIAL IS HYPOFRONTALITY. IN A HYPOFRONTAL PERSON, THE PART OF THE BRAIN THAT CONTROLS BEHAVIOR WENT TO SLEEP; IT IS UNDERACTIVE. ONE OF THE BIGGEST PROBLEMS FOR A DRUG ADDICT IS THAT WHEN CRAVING BUILDS UP, THINKING GOES DOWN. THE LOSS OF REASONING CAUSED BY CRAVING IS TERMED HYPO-(LOW)-FRONTALITY (THE COMBINED FUNCTIONS OF THE PREFRONTAL CORTEX WHICH IS THE PART OF THE BRAIN THAT CONTROLS BEHAVIOR).

MANY ADDICTS SAY, "YOUR MIND GOES BLANK. YOU JUST DON'T REMEMBER THE TROUBLE, YOU DON'T REMEMBER WHY YOU'RE NOT SUPPOSED TO DO IT AND YOU DON'T REMEMBER WHAT'S GOING TO HAPPEN."

ADDICTED PEOPLE CANNOT SEE WHAT THEY ARE DOING, AND DON'T REALIZE THE TROUBLE THAT THEY ARE IN.

Causes of Craving in Addicts

E W M S

Environmental cues (Triggers)

Immediate, catastrophic, overwhelming craving stimulated by people, places, or things associated with prior drug-use experiences

Drug **W**ithdrawal

inadequately treated or untreated

Mental illness symptoms

inadequately treated or untreated

Stress equals craving

CAUSES OF CRAVING

THE FOUR MOST POWERFUL TRIGGERS OF CRAVING ARE **EWMS**:

**ENVIRONMENT
WITHDRAWAL
MENTAL HEALTH SYMPTOMS
STRESS**

IT IS IMPORTANT TO KEEP IN MIND THE DEFINITION OF ADDICTION (COMPULSION, CUDAC, CRAVING AND HYPOFRONTALITY) WHEN THINKING ABOUT THE CAUSES OF CRAVING. TO PUT IT SIMPLY, ONCE SOMEONE NEUROADAPTS AND BECOMES TOLERANT TO A DRUG, IT IS THE EWMS FACTORS THAT KEEPS PEOPLE ADDICTED.

ENVIRONMENTALLY CUED (TRIGGERS)

OF THESE FOUR, THE MOST POWERFUL IS ENVIRONMENTAL CUEING. ENVIRONMENTAL CUES ARE THE MOST COMMON CAUSE OF RELAPSE. HALF OF THE TIME THAT SOMEBODY TRIES TO STOP THEY GO BACK TO USING BECAUSE THE DRUG IS AROUND THEM.

WHAT THIS MEANS TO ANY ADDICT WHO WANTS TO STAY OFF DRUGS IS THAT THEY MUST GET AWAY FROM THE DRUG. NO ONE STAYS OFF DRUGS IF PEOPLE AROUND THEM ARE USING IT; IT IS THE FIRST THING YOU HAVE TO DO, GET AWAY FROM THE DRUG. CRAVING CAN APPEAR FROM THINGS LIKE THE SMELL OF A DRUG, GOING INTO THE ROOM WHERE IT WAS USED IT AND SIMPLY THINKING ABOUT IT. TRIGGERS CAUSE IMMEDIATE, CATASTROPHIC, OVERWHELMING CRAVING STIMULATED BY THE PEOPLE, PLACES, THINGS ASSOCIATED WITH PRIOR DRUG USING EXPERIENCES.

THIS CRAVING IS KNOWN AS "ENDOGENOUS", OR "COMES FROM WITHIN". THIS IS SECONDARY TO A CHEMICAL IMBALANCE CREATED BY PROLONGED DRUG USE.

WITHDRAWAL

EVERYONE WHO HAS USED A DRUG ENOUGH TO BECOME TOLERANT TO IT WILL GO THROUGH WITHDRAWAL WHEN THEY STOP USING. AND WHEN WITHDRAWAL GETS BAD IT CAUSES VERY HIGH LEVELS OF CRAVING. IF THE SYMPTOMS THAT APPEAR ON STOPPING INCLUDE FEELING SO BAD THAT DYSPHORIA IS PRODUCED, ADDICTS WILL TAKE DESPERATE MEASURES TO GET WELL. IN REALLY BAD CASES OF WITHDRAWAL, MORALS AND GOOD JUDGMENT ARE IGNORED WHEN AN ADDICT IS LOOKING FOR RELIEF. IT IS IMPORTANT TO REMEMBER THAT FOR SOME DRUGS, LIKE OXYCONTIN, THE WITHDRAWAL IS SO BAD THAT USERS WILL DO ANYTHING TO GET MORE DRUGS, INCLUDING STEALING FROM THEIR FAMILIES. THEY ARE NOT CHOOSING TO STEAL BUT ARE FORCED BY THE DESPERATE NEED TO NOT SUFFER.

MENTAL HEALTH

DRUGS DO MORE THAN MAKE YOU HIGH, THEY CAN IMPROVE THE SYMPTOMS OF MENTAL HEALTH DISORDERS. IF YOU ARE ANXIOUS, DON'T USE DRUGS. IT WILL TAKE AWAY THE ANXIETY. IT WILL DO MORE FOR YOU THAN JUST MAKE YOU HIGH. IF YOU ARE DEPRESSED, DON'T USE DRUGS. WHY? IT WILL TAKE AWAY THE DEPRESSION. IF YOU ARE BORED, DON'T DO DRUGS. WHY? IT WILL TAKE AWAY THE BOREDOM. FOR SOMEONE WITH THESE SYMPTOMS OF "DEPRESSED, ANXIOUS, BORED", THE USER DISCOVERS THAT THE DRUG TAKES AWAY THOSE THINGS.

IT WILL DO MORE FOR PEOPLE WITH THESE SYMPTOMS THAN FOR SOMEONE WHO DOESN'T. IT WILL WORK TOO WELL. AND IT IS TRUE; THEY REALLY DO FEEL BETTER. THEY THINK BETTER. IT REALLY WORKS FOR THEM AND THEY QUICKLY COME TO DEPEND ON THE DRUG TO FEEL LESS DEPRESSED OR ANXIOUS OR BORED.

HOWEVER, IF THEY CONTINUE TO USE, THEY WILL DEVELOP TOLERANCE, MEANING THAT THEY NEED MORE AND MORE TO DRIVE AWAY THE BAD SYMPTOMS. WHEN THEY STOP USING, THEY FEEL WORSE THAN BEFORE THEY STARTED USING DRUGS. IT TRAPS THE USER IN A CYCLE IN WHICH THEY USE TO RELIEVE MENTAL HEALTH SYMPTOMS BUT NEED TO USE MORE AND MORE FOR THE DRUG TO WORK. WHEN THEY TRY TO STOP, THE MENTAL HEALTH SYMPTOMS COME BACK WORSE THAN BEFORE AND THEY DEVELOP VERY HIGH CRAVING TO USE.

STRESS

"STRESS" IS THE FOURTH CAUSE OF CRAVING. ONE OF THE MOST REMARKABLE THINGS ABOUT PEOPLE WHO GET ADDICTED IS THAT THEY ARE VERY SENSITIVE TO STRESS. IF THEY GOT UPSET, THEY NEED TO USE. IF THEY FEEL DOWN, THEY NEED TO USE. IF THEY GET ANGRY OR LONELY, THEY NEED TO USE. IF THEY GET OVERTIRED, THEY NEED TO USE.

ADDICTION IS ONE OF THE MOST STRESS SENSITIVE CONDITIONS KNOWN TO MEDICINE. IF YOU ARE AN ADDICT, YOU CAN'T BE STRESSED WITHOUT WANTING TO USE AND OFTEN THE FEELINGS OF STRESS CARRY WITH THEM A GREAT DEAL OF CRAVING TO USE DRUGS. ADDICTS EXPERIENCE STRESS AS CRAVING.

ONCE YOU ARE ADDICTED, TO BE STRESSED IS TO NEED TO USE. AS WITH MENTAL HEALTH SYMPTOMS, DRUGS RELIEVE STRESS. TOBACCO IS A GOOD EXAMPLE: IF A PERSON IS STRESSED, USING TOBACCO RELIEVES IT IMMEDIATELY, AND TOBACCO SMOKERS COME TO DEPEND ON TOBACCO TO RELIEVE STRESS.

Drugs Induce Hypofrontality and Intensify Impulse

INTOXICATION:

Disturbance of perception

Impaired thought: rapid, over-focused, confused, disorganized

Impaired memory

Perseveration

BEHAVIORAL DISINHIBITION:

Failure of executive function to adequately restrain impulse, aggression, and/or belligerence

IRRITABILITY:

Lowered threshold for anger

Exaggerated anger response to stimulus

SLEEP DEPRIVATION:

Impaired memory, Dissociation, Derealization, and Depersonalization

LAW OF ADDITION:

STRESS EQUALS CRAVING (STRESSORS).
STRESSORS ACTIVATE CRAVING THAT
BUILDS OVER A PERIOD OF HOURS TO
DAYS.

WHAT IS PHYSICAL DEPENDENCE?

PHYSICAL DEPENDENCE:

WHEN THE USER STOPS THE DRUG,
PHYSICAL ILLNESS OCCURS.

ABSTINENCE SYNDROME:

THE NAME OF THE ILLNESS CAUSED
BY WITHDRAWAL SYMPTOMS.

THE DRUG EVENT

THE ENVIRONMENT HELPS SHAPE THE
DRUG EXPERIENCE.

SET:

THE INDIVIDUALS BELIEFS,
ATTITUDES AND STATE OF MIND AT
THE TIME OF USE.

SETTING:

THE PHYSICAL AND SOCIAL
ENVIRONMENT WITHIN WHICH DRUG
USE OCCURS.

USER SET AND SETTING ARE SHAPED BY
BOTH PRESCRIPTIONS AND
PROSCRIPTIONS OF AN INDIVIDUAL'S
CULTURE AND SOCIAL GROUP. ONE'S
VALUES AND THE RULES OF CONDUCT
INFLUENCE THE RESPONSE ONE WILL HAVE
TO THE USE OF ANY DRUG. (BECK, 1994,
P 28)

ADDITIONAL FACTORS:

IF THE INITIAL EXPERIENCE OF THE
DRUG WAS POSITIVE OR NOT.

THE CHARACTERISTICS OF THE
DRUG. CERTAIN DRUGS HAVE A
HIGHER POTENTIAL FOR ADDICTION.

