

Chemical Dependency Services

The Relationship Between Neurotransmitters, Their Functions, Street Drugs, and Mental Illness			
Column 1	Column 2	Column 3	Column 4
Neurotransmitter	Some Major Functions	Street Drugs Which Disrupt the Neurotransmitter	Mental Illness
Serotonin	Mood stability, appetite, sleep control, sexual activity, aggression, self esteem	Alcohol, nicotine, amphetamine, Cocaine, PCP, LSD, MDMA (ecstasy)	Anxiety, depression, manic depression, obsessive compulsive disorder
Dopamine	Muscle tone/ control, motor behavior, energy, reward mechanism, attention span, pleasure, emotional stability	Cocaine, nicotine, PCP, amphetamine, caffeine, LSD, Ritalin, marijuana, alcohol, opiates	Schizophrenia, Parkinson's disease
Norepinephrine and Epinephrine	Energy, motivation, eating, attention span, pleasure, muscle tone, stimulation, heart rate, blood pressure, dilation of bronchi, assertiveness, alertness and confidence	Cocaine, nicotine, amphetamine, caffeine, all stimulants, PCP, marijuana	Depression, manic depression, anxiety & panic disorders, narcolepsy, sleep problems, attention deficit disorder
Endorphins and Enkephlins	Pain control, reward mechanism, stress control (physical & emotional)	Heroin, other opiates, PCP, marijuana, alcohol, anabolic steroids	Schizophrenia, depression
GABA (gamma aminobutyric acid)	Inhibitor of many neurotransmitters, muscle relaxant, control of aggressions, arousal	Alcohol, marijuana, barbiturates, PCP, benzodiazepines	Anxiety and sleep disorders
Acetylcholine	Memory, learning, muscular reflexes, aggression, attention, blood pressure, heart rate, sexual behavior, mental acuity, sleep, muscle control	Marijuana, nicotine, alcohol, cocaine, PCP, amphetamine, LSD	Alzheimer's disease, Schizophrenia, tremors
Cortisone and Corticotropin	Immune system, healing, stress	Heroin, anabolic steroids, cocaine	Schizophrenia, depression, insomnia, anxiety
Histamine	Regulator of emotional behavior, sleep, inflammations of tissues, stomach acid secretion, allergic response	Antihistamines, opiates	Depressive illness