SJSU SAN JOSÉ STATE UNIVERSITY

HEALTH RISKS ASSOCIATED WITH USE AND ABUSE OF ALCOHOL AND OTHER DRUGS

Pursuant to 34 CFR 86.100(a)(3) this supplemental document is part of SJSU's comprehensive Drug and Alcohol Abuse Prevention Program (DAAPP). The following table provides an overview of the health risks associated with use and abuse of alcohol and other drugs, and is derived from information provided by the National Institutes of Health[1] and the Federal Drug Enforcement Administration[2].

Substance	Risk of Substance Abuse and/or Dependence Based on Controlled Substance Schedule[3]	Potential Short-Term and/or Long Term Effects on the Mind and/or Body	Effects of Overdose
Alcohol	Not scheduled	Reduced inhibitions, slurred speech, motor impairment, confusion, memory problems, concentration problems, coma, breathing problems, alcohol use disorder, additional health problems and increased risk for certain cancers[4].	Alcohol overdose can lead to permanent brain damage or death[5].
Amphetamines	Many amphetamines are Schedule II stimulants, which means that they have a high potential for abuse and a currently acceptable medical use (in FDA-approved products).	Increased blood pressure and pulse rates, insomnia, loss of appetite, and physical exhaustion	Agitation, increased body temperature, hallucinations, convulsions, and possible death
Barbiturates	Barbiturates are Schedule II, III, and IV depressants, which range between having low and high levels of potential for abuse. Levels of physical or psychological dependence range from limited to severe.	Barbiturates slow the central nervous system and cause mild euphoria, lack of restraint, relief of anxiety, and sleepiness. Higher doses cause impairment of memory, judgment, and coordination; irritability; and paranoid and suicidal ideation.	Central nervous system depression, decreased respiration, increased heart rate, decreased blood pressure, decreased urine production, decreased body

[1] https://nida.nih.gov/drug-topics/commonly-used-drugs-charts
[2] https://www.getsmartaboutdrugs.gov/publication/drug-fact-sheets
[3] https://www.getsmartaboutdrugs.gov/sites/default/files/publications/Drugs%20of%20Abuse%202020-Web%20Version-508%20compliant-4-24-20.pdf
[4] https://www.niaaa.nih.gov/alcohols-effects-health/overview-alcohol-consumption
[5] https://www.niaaa.nih.gov/sites/default/files/publications/Alcohol_overdose_0.pdf

			temperature, coma, and possible death
Bath Salts	A number of synthetic substances are classified under Schedule I, which have high potential for abuse.	Euphoria, alertness, confusion, acute psychosis, agitation, combativeness, aggressive, violent, and self-destructive behavior. Also rapid heartbeat; hypertension; hyperthermia; prolonged dilation of the pupil of the eye; breakdown of muscle fibers that leads to release of muscle fiber contents into bloodstream; teeth grinding; sweating; headaches; palpitations; seizures; as well as paranoia, hallucinations, and delusions.	Reports of death from individuals abusing drugs in this class indicate the seriousness of the risk users are taking when ingesting these products.
Benzodiazepines	Benzodiazepines are controlled in Schedule IV which have low potential for abuse and may lead to limited physical or psychological dependence.	Benzodiazepines are associated with amnesia, hostility, irritability, and vivid or disturbing dreams. Benzodiazepines slow down the central nervous system and may cause sleepiness and relaxed mood.	Extreme drowsiness, confusion, impaired coordination, decreased reflexes, respiratory depression, coma, and possible death. Overdose effects of concomitant use of benzodiazepines and opioids include: Profound sedation, respiratory depression, coma, and death.
Cocaine	Cocaine is a Schedule II drug under the Controlled Substances Act, meaning it has a high potential for abuse and has an accepted medical use for treatment in the United States. Abuse may lead to severe psychological or physical dependence.	A rapid-onset, intense euphoric effect known as a “rush”, increased alertness and excitation, as well as restlessness, irritability, and anxiety. Taking high doses of cocaine or prolonged use, such as binging, usually causes paranoia. The crash that follows euphoria is characterized by mental and physical exhaustion, sleep, and depression	Irregular heartbeat, ischemic heart conditions, sudden cardiac arrest, convulsions, strokes, and death.

		lasting several days. Following the crash, users experience a craving to use cocaine again.	
DXM (Dextromethorphan)	DXM is a legally marketed cough suppressant that is neither a controlled substance nor a regulated chemical under the Controlled Substances Act.	Confusion, inappropriate laughter, agitation, paranoia, euphoria, and hallucinations. Other sensory changes, including the feeling of floating and changes in hearing and touch. Over-excitability, lethargy, loss of coordination, slurred speech, sweating, hypertension, nausea, vomiting, and involuntary spasmodic movement of the eyeballs.	DXM overdose can be treated in an emergency room setting and generally does not result in severe medical consequences or death. Most DXM related deaths are caused by ingesting the drug in combination with other drugs. DXM-related deaths also occur from impairment of the senses, which can lead to accidents.
Ecstasy or MDMA (also known as Molly)	MDMA is a Schedule I drug under the Controlled Substances Act, meaning it has a high potential for abuse, no currently accepted medical use in treatment in the United States, and a lack of accepted safety for use under medical supervision.	Confusion, anxiety, depression, paranoia, sleep problems, and drug craving. Muscle tension, tremors, involuntary teeth clenching, muscle cramps, nausea, faintness, chills, sweating, and blurred vision.	MDMA can interfere with the body's ability to regulate temperature. On occasions, this can lead to a sharp increase in body temperature (hyperthermia), resulting in liver, kidney, and cardiovascular system failure, and death. Because MDMA can interfere with its own metabolism (that is, its breakdown within the body), potentially harmful levels can be reached by repeated drug use within short intervals.
Fentanyl	Fentanyl is a Schedule II narcotic under the United States Controlled Substances Act of 1970, which means there is high potential	Fentanyl, similar to other commonly used opioid analgesics (e.g., morphine), produces effects such as relaxation, euphoria, pain relief, sedation,	Overdose may result in stupor, changes in pupillary size, cold and clammy skin, cyanosis, coma, and

	for abuse which may lead to severe psychological or physical dependence.	confusion, drowsiness, dizziness, nausea, vomiting, urinary retention, pupillary constriction, and respiratory depression.	respiratory failure leading to death. The presence of triad of symptoms such as coma, pinpoint pupils, and respiratory depression are strongly suggestive of opioid poisoning.
GHB - Gamma-Hydroxybutyric Acid	GHB is a Schedule I controlled substance, meaning that it has a high potential for abuse, no currently accepted medical use in treatment in the United States, and a lack of accepted safety for use under medical supervision. FDA-approved GHB products are Schedule III substances under the Controlled Substances Act. In addition, GBL is a List I chemical. GHB was placed on Schedule I of the Controlled Substances Act in March 2000. However, when sold as FDA-approved GHB products (such as Xyrem®), it is considered Schedule III, one of several drugs that are listed in multiple schedules.	Euphoria, drowsiness, decreased anxiety, confusion, and memory impairment. Unconsciousness, seizures, slowed heart rate, greatly slowed breathing, lower body temperature, vomiting, nausea, coma, and death.	GHB overdose can cause coma and death.
Heroin	Heroin is a Schedule I substance under the Controlled Substances Act meaning that it has a high potential for abuse, no currently accepted medical use in treatment in the United States, and a lack of accepted safety for use under medical supervision.	Because it enters the brain so rapidly, heroin is particularly addictive, both psychologically and physically. Heroin users report feeling a surge of euphoria or “rush” followed by a twilight state of sleep and wakefulness. Drowsiness, respiratory depression, constricted pupils, nausea, a warm flushing of the skin, dry mouth, and heavy extremities.	Slow and shallow breathing, blue lips and fingernails, clammy skin, convulsions, coma, and possible death.
Hydromorphone	Hydromorphone is a Schedule II drug under the Controlled Substances Act with an accepted medical use as a pain reliever. Hydromorphone has a high potential for	When used as a drug of abuse, and not under a doctor’s supervision, hydromorphone is taken to produce feelings of euphoria, relaxation,	Acute overdose of hydromorphone can produce: Severe respiratory depression, drowsiness

	abuse and use may lead to severe psychological or physical dependence.	sedation, and reduced anxiety. It may also cause mental clouding, changes in mood, nervousness, and restlessness. It works centrally (in the brain) to reduce pain and suppress cough. Hydromorphone use is associated with both physiological and psychological dependence. Constipation, pupillary constriction, urinary retention, nausea, vomiting, respiratory depression, dizziness, impaired coordination, loss of appetite, rash, slow or rapid heartbeat, and changes in blood pressure.	progressing to stupor or coma, lack of skeletal muscle tone, cold and clammy skin, constricted pupils, and reduction in blood pressure and heart rate Severe overdose may result in death due to respiratory depression.
Inhalants	The common household products that are misused as inhalants are legally available for their intended and legitimate uses. Many state legislatures have attempted to deter youth who buy legal products to get high by placing restriction on the sale of these products to minors. Even though some substances are not currently controlled by the Controlled Substances Act, they pose risks to individuals who abuse them.	Inhalant abuse can cause damage to the parts of the brain that control thinking, moving, vision, and hearing. Cognitive abnormalities can range from mild impairment to severe dementia. Weight loss, muscle weakness, disorientation, inattentiveness, lack of coordination, irritability, depression, and damage to the nervous system and other organs.	Because intoxication lasts only a few minutes, users try to prolong the high by continuing to inhale repeatedly over the course of several hours, which is a very dangerous practice. With successive inhalations, users may suffer loss of consciousness and/or death.
Ketamine	In 1999, ketamine, including its salts, isomers and salts of isomers, became a Schedule III non-narcotic substance under the Controlled Substances Act. It currently has accepted medical uses for short-term sedation and anesthesia. Ketamine has the potential for abuse, which may lead to moderate or low physical dependence or high psychological dependence.	Ketamine produces hallucinations. It distorts perceptions of sight and sound and makes the user feel disconnected and not in control. A “Special K” trip is touted as better than that of LSD or PCP because its hallucinatory effects are relatively short in duration, lasting approximately 30 to 60 minutes as opposed to several hours. Increase in heart rate and blood pressure that gradually decreases over the next 10 to	An overdose can cause unconsciousness and dangerously slowed breathing.

		20 minutes. Ketamine can make users unresponsive to stimuli. When in this state, users experience involuntarily rapid eye movement, dilated pupils, salivation, tear secretions, and stiffening of the muscles. This drug can also cause nausea.	
Khat	The chemicals found in khat are controlled under the Controlled Substances Act. Cathine is a Schedule IV stimulant, and cathinone is a Schedule I stimulant under the Controlled Substances Act, meaning that it has a high potential for abuse, no currently accepted medical use in treatment in the United States, and a lack of accepted safety for use under medical supervision.	Khat can induce manic behavior with: grandiose delusions, paranoia, nightmares, hallucinations, and hyperactivity; Chronic khat abuse can result in violence and suicidal depression. Khat causes an immediate increase in blood pressure and heart rate. Khat can also cause a brown staining of the teeth, insomnia, and gastric disorders. Chronic abuse of khat can cause physical exhaustion.	The dose needed to constitute an overdose is not known, however it has been historically associated with those who are long-term chewers of the leaves. Symptoms of toxicity include: Delusions, loss of appetite, difficulty with breathing, and increases in both blood pressure and heart rate.
Kratom	Kratom is not controlled under the Controlled Substances Act; however, there may be some state regulations or prohibitions against the possession and use of kratom. The FDA has not approved Kratom for any medical use. In addition, DEA has listed kratom as a Drug and Chemical of Concern.	At low doses, kratom produces stimulant effects with users reporting increased alertness, physical energy, and talkativeness. At high doses, users experience sedative effects. Kratom consumption can lead to addiction. Kratom's effects on the body include nausea, itching, sweating, dry mouth, constipation, increased urination, tachycardia, vomiting, drowsiness, and loss of appetite. Users of kratom have also experienced anorexia, weight loss, insomnia, hepatotoxicity, seizure, and hallucinations.	The dose needed to constitute an overdose is not known.

LSD	LSD is a Schedule I substance under the Controlled Substances Act. Schedule I substances have a high potential for abuse, no currently accepted medical use in treatment in the United States, and a lack of accepted safety for use under medical supervision.	Physical effects include: dilated pupils, higher body temperature, increased heart rate and blood pressure, sweating, loss of appetite, sleeplessness, dry mouth, and tremors. During the first hour after ingestion, users may experience visual changes with extreme changes in mood. While hallucinating, the user may suffer impaired depth and time perception accompanied by distorted perception of the shape and size of objects, movements, colors, sound, touch, and the user's own body image. The ability to make sound judgments and see common dangers is impaired, making the user susceptible to personal injury. It is possible for users to suffer acute anxiety and depression after an LSD "trip." Hallucinogen Persisting Perception Disorder, which may include fragmentary recurrences of certain aspects of the drug experience or "flashbacks" have been reported days, and even months, after taking the last dose.	Longer, more intense "trip" episodes, psychosis, and possible death
Marijuana	Marijuana is a Schedule I substance under the Controlled Substances Act, meaning that it has a high potential for abuse, no currently accepted medical use in treatment in the United States, and a lack of accepted safety for use under medical supervision.	Problems with memory and learning, distorted perception, difficulty in thinking and problem-solving, and loss of coordination. The effect of marijuana on perception and coordination are responsible for serious impairments in learning, associative processes, and psychomotor behavior (driving abilities).	No deaths from overdose of marijuana have been reported.

		Short-term physical effects from marijuana use may include: Sedation, bloodshot eyes, increased heart rate, coughing from lung irritation, increased appetite, and increased blood pressure (although prolonged use may cause a decrease in blood pressure). Long term, regular use can lead to physical dependence and withdrawal following discontinuation, as well as psychological addiction or dependence.	
Methadone	Methadone is a Schedule II drug under the Controlled Substances Act. While it may legally be used under a doctor's supervision, its non-medical use is illegal. Methadone has high potential for abuse which may lead to severe psychological or physical dependence.	Abuse of methadone can lead to psychological dependence. Sweating, itchy skin, or sleepiness. Individuals who abuse methadone risk becoming tolerant of and physically dependent on the drug. When use is stopped, individuals may experience withdrawal symptoms including: Anxiety, muscle tremors, nausea, diarrhea, vomiting, and abdominal cramps.	The effects of a methadone overdose are slow and shallow breathing, blue fingernails and lips, stomach spasms, clammy skin, convulsions, weak pulse, coma, and possible death.
Methamphetamine	Methamphetamine is a Schedule II stimulant under the Controlled Substances Act, which means that it has a high potential for abuse and a currently accepted medical use (in FDA-approved products). It is available only through a prescription that cannot be refilled.	Intense sensation, or rush. Oral ingestion or snorting produces a long-lasting high instead of a rush, which reportedly can continue for as long as half a day. Long-term meth use results in many damaging effects, including addiction. Chronic meth users can exhibit violent behavior, anxiety, confusion, insomnia, and psychotic features including paranoia, aggression, visual and auditory hallucinations, mood disturbances, and delusions — such as the sensation of insects creeping on or	High doses may result in death from stroke, heart attack, or multiple organ problems caused by overheating.

		under the skin. Such paranoia can result in homicidal or suicidal thoughts.	
Morphine	Morphine is a Schedule II narcotic under the Controlled Substances Act, which has high potential for abuse which may lead to severe psychological or physical dependence.	Morphine's effects include euphoria and relief of pain. Chronic use of morphine results in tolerance, and physical and psychological dependence. Morphine use results in relief from physical pain, decrease in hunger, and inhibition of the cough reflex.	Cold and clammy skin, lowered blood pressure, sleepiness, slowed breathing, slow pulse rate, coma, and possible death.
Opium	Opium is a Schedule II drug under the Controlled Substances Act. Most opioids are Schedule II, III, IV, or V drugs. Some drugs that are derived from opium, such as heroin, are Schedule I drugs. Drugs in all schedules range in levels of abuse potential resulting in various levels of psychological or physical abuse.	The intensity of opium's euphoric effects on the brain depends on the dose and route of administration. It works quickly when smoked because the opiate chemicals pass into the lungs, where they are quickly absorbed and then sent to the brain. An opium "high" is very similar to a heroin "high"; users experience a euphoric rush, followed by relaxation and the relief of physical pain. Opium inhibits muscle movement in the bowels leading to constipation. It also can dry out the mouth and mucous membranes in the nose. Opium use leads to physical and psychological dependence, and can lead to overdose.	Overdose effects include: Slow breathing, seizures, dizziness, weakness, loss of consciousness, coma, and possible death.
Oxycodone	Oxycodone products are in Schedule II of the Controlled Substances Act, which has high potential for abuse which may lead to severe psychological or physical dependence.	Euphoria and feelings of relaxation are the most common effects of oxycodone on the brain, which explains its high potential for abuse. Physiological effects of oxycodone include: Pain relief, sedation, respiratory depression, constipation, papillary constriction, and cough suppression. Extended or chronic use of oxycodone containing	Overdose effects include: Extreme drowsiness, muscle weakness, confusion, cold and clammy skin, pinpoint pupils, shallow breathing, slow heart rate, fainting, coma, and possible death.

		acetaminophen may cause severe liver damage	
Peyote and Mescaline	Peyote and mescaline are Schedule I substances under the Controlled Substances Act, meaning that they have a high potential for abuse, no currently accepted medical use in treatment in the United States, and a lack of accepted safety for use under medical supervision.	Abuse of peyote and mescaline will cause varying degrees of: Illusions, hallucinations, altered perception of space and time, and altered body image. Users may also experience euphoria, which is sometimes followed by feelings of anxiety.	The dose needed to constitute an overdose is not known.
Psilocybin	Psilocybin is a Schedule I substance under the Controlled Substances Act, meaning that it has a high potential for abuse, no currently accepted medical use in treatment in the United States, and a lack of accepted safety for use under medical supervision.	The physical effects include: Nausea, vomiting, muscle weakness, and lack of coordination. The psychological consequences of psilocybin use include hallucinations and an inability to discern fantasy from reality. Panic reactions and a psychotic-like episode also may occur, particularly if a user ingests a high dose.	Effects of overdose include: Longer, more intense “trip” episodes, psychosis, and possible death
Rohypnol	Rohypnol® is a Schedule IV substance under the Controlled Substances Act. Rohypnol® is not approved for manufacture, sale, use, or importation to the United States. However, it is legally manufactured and marketed in other countries. Penalties for possession, trafficking, and distribution involving one gram or more are the same as those of a Schedule I drug.	Drowsiness (sedation), sleep (pharmacological hypnosis), decreased anxiety, and amnesia (no memory of events while under the influence of the substance). Increased or decreased reaction time, impaired mental functioning and judgment, confusion, aggression, and excitability. Slurred speech, loss of motor coordination, weakness, headache, and respiratory depression. Rohypnol® also can produce physical dependence when taken regularly over a period of time.	High doses of Rohypnol®, particularly when combined with CNS depressant drugs such as alcohol and heroin, can cause severe sedation, unconsciousness, slow heart rate, and suppression of respiration that may be sufficient to result in death.
Salvia Divinorum	Neither Salvia divinorum nor its active constituent Salvinorin A has an approved medical use in the United States. Salvia divinorum is not controlled under the	Psychic effects include perceptions of bright lights, vivid colors, shapes, and body movement, as well as body or object distortions. Salvia divinorum may	The dose needed to constitute an overdose is not known.

	Controlled Substances Act. Salvia divinorum is, however, controlled by a number of states. Since Salvia divinorum is not controlled by the CSA, some online botanical companies and drug promotional sites have advertised Salvia as a legal alternative to other plant hallucinogens like mescaline.	also cause fear and panic, uncontrollable laughter, a sense of overlapping realities, paranoia, and hallucinations. Users typically experience rapid onset of intense hallucinations that can impair judgment and disrupt sensory and cognitive functions. Adverse physical effects may include: Loss of coordination, dizziness, and slurred speech	
Spice/ K2, (Synthetic Marijuana)	These substances have no accepted medical use in the United States and have been reported to produce adverse health effects. Currently, 43 substances are specifically listed as Schedule I substances under the Controlled Substances Act either through legislation or regulatory action. In addition there are many other synthetic cannabinoids that meet the definition for "cannabimimetic agent" under the Controlled Substances Act and thus are Schedule I substances.	Acute psychotic episodes, dependence, and withdrawal are associated with use of these synthetic cannabinoids. Some individuals have suffered from intense hallucinations. Other effects include severe agitation, disorganized thoughts, paranoid delusions, and violence after smoking products laced with these substances. Adverse effects included tachycardia (elevated heart rate), elevated blood pressure, unconsciousness, tremors, seizures, vomiting, hallucinations, agitation, anxiety, pallor, numbness, and tingling.	Severe adverse effects have been attributed to the abuse of synthetic cannabinoids, including agitation, anxiety, seizures, stroke, coma, and death by heart attack or organ failure. Acute kidney injury requiring hospitalization and dialysis in several patients reportedly having smoked synthetic cannabinoids has also been reported by the Centers for Disease Control and Prevention.
Steroids	Anabolic steroids are Schedule III substances under the Controlled Substances Act. Only a small number of anabolic steroids are approved for either human or veterinary use. Anabolic steroids may be prescribed by a licensed physician for the treatment of testosterone deficiency, delayed puberty, low red blood cell count, breast cancer, and tissue wasting resulting from AIDS.	Case studies and scientific research indicate that high doses of anabolic steroids may cause mood and behavioral effects. In some individuals, anabolic steroid use can cause dramatic mood swings, increased feelings of hostility, impaired judgment, and increased levels of aggression (often referred to as "roid rage"). When users	Anabolic steroids are not associated with overdoses. The adverse effects a user would experience develop from the use of steroids over time.

		stop taking steroids, they may experience depression that may be severe enough to lead one to commit suicide. Anabolic steroid use may also cause psychological dependence and addiction. A wide range of adverse effects is associated with the use or abuse of anabolic steroids. These effects depend on several factors including: Age, sex, the anabolic steroid used, amount used, and duration of use.	
Vaping and Marijuana Concentrates	Marijuana is a Schedule I substance under the Controlled Substances Act, meaning that it has a high potential for abuse, no currently accepted medical use in treatment in the United States, and a lack of accepted safety for use under medical supervision.	Being a highly concentrated form of marijuana, the effects upon the user may be more psychologically and physically intense than plant marijuana use. To date, long term effects of marijuana concentrate use are not yet fully known; but, the effects of marijuana use are known. These effects include: paranoia, anxiety, panic attacks, and hallucinations. Additionally, the use of plant marijuana increases one's heart rate and blood pressure, although prolonged use can produce hypotension. Plant marijuana users may also experience withdrawal and addiction problems.	The dose needed to constitute an overdose is not known.