Opium has been actively collected since prehistoric times. It is the dried latex sap obtained from the unripe seed pods from the Papaver somniferum poppy. The traditional method of obtaining the latex is to scratch ("score") the seed pods (fruits) by hand; the latex leaks out and dries to a sticky yellowish residue that is scraped off. Opium, an alkaloid, contains approximately 12% morphine, which is frequently processed chemically to produce heroin. The Papaver somniferum plant contains the phenanthrene alkaloids morphine, codeine and thebaine. Thebaine often serves as the raw material for the synthesis for hydrocodone, hydromorphone and other synthetic opiates. In its raw form, opium can either be ingested or smoked.

Opiates, often called narcotics, are those drugs which are derived from opium, opium derivations or opium synthetics. There are several different drugs in the opiate family, including opium, morphine, heroin, codeine, hydromorphone/Dilaudid and meperidine/Demerol.

Morphine was first isolated from the opium poppy in 1804. Morphine is generally odorless, ranging in color from clear to brown. Morphine is usually found in white crystalline powder, tablet or liquid form. It can be administered orally, inhaled or by injection.

Heroin, the first semi-synthetic opiate, was first synthesized in 1874. Heroin is the diacetyl salt of morphine. Heroin accounts for 90% of opiate abuse in the United States; it can be taken by intravenous injection, intranasally or smoked. One study found heroin to be about two times more potent than morphine. Mixing heroin with other depressant drugs (such as alcohol) significantly increases the depressive effects of heroin and can result in an increased risk of respiratory depression, coma and death.
Heroin Use on the Rise

Although heroin/opiates currently are not a large problem in the Manhattan area, their increase in usage nationally warrants our need to inform the K-State community about their possible abuse because they are highly addictive and have significant negative side effects. Recent surveys of K-State students indicate that approximately 4% had used opium, morphine or heroin within the past year. A recent national study found that heroin use has doubled in the last three years.

Once a primarily lower-class drug, heroin is now gaining popularity with affluent, well-educated users and youths. So why the new interest in heroin? Experts point to several factors: there is a large supply of heroin in the U.S.; its price is cheap; purity is very high; and probably most importantly, those addicted to painkillers are having a much harder time procuring prescription drugs such as oxycodone, hydromorphone and OxyContin. The price on the street for prescription pain pills is $20 to $60 per pill, while heroin costs $3 to $10 a bag. Many young people who use heroin start off snorting the drug, and within weeks, most start shooting up. Almost 90 percent of teens who are addicted to heroin are white. According to recent data from the Substance Abuse and Mental Health Services Administration, 81% of people initiating heroin use had previously abused prescription drugs.

<table>
<thead>
<tr>
<th>HEROIN SYMPTOMS</th>
<th>HEROIN EFFECTS</th>
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</thead>
<tbody>
<tr>
<td>- Constricted pupils</td>
<td>- Short-lived state of euphoria</td>
</tr>
<tr>
<td>- Droopy eyelids</td>
<td>- Respiratory depression</td>
</tr>
<tr>
<td>- Dry mouth</td>
<td>- Reduced vision</td>
</tr>
<tr>
<td>- Low, raspy voice</td>
<td>- Drowsiness followed by sleep</td>
</tr>
<tr>
<td>- Fresh injection wounds</td>
<td>- Relief of pain</td>
</tr>
<tr>
<td>- Depressed reflexes</td>
<td>- Constipation</td>
</tr>
<tr>
<td>- Poor coordination</td>
<td>- Addiction</td>
</tr>
</tbody>
</table>

Symptoms of heroin addiction include extreme mood swings, poor concentration, money problems, lack of sexual desire, depression and secretive behavior. Heroin can also cause scarred and/or collapsed veins, bacterial infections, liver disease, kidney disease, neurochemical changes in the brain, miscarriage and premature delivery. One popular form of treatment for heroin addiction is methadone, a substitute for heroin. Methadone, a synthetic drug, does not produce the same “high” withdrawal as heroin but does significantly reduce the craving to use. Patients in methadone maintenance programs generally also receive counseling, vocational training and education.

Opiates are a group of drugs which are used medically to relieve pain, but also have a high potential for abuse. Medically, opiates can ease pain, suppress coughing and...
relieve diarrhea. Opiates can be taken orally or intravenously. When injected, opiates give the user an immediate “rush.” Other initial effects include restlessness, nausea and vomiting. With very large doses, the user cannot be awakened, pupils become much smaller and the skin becomes cold, moist and bluish in color. Breathing slows down and death may occur. Most opiates leave the bloodstream rapidly and concentrate in the kidneys, liver, lungs and spleen.

Opiate-dependent women who are pregnant experience more spontaneous abortions, breech deliveries, Cesarean sections, premature births and still births. Infants born to opiate-dependent mothers often experience withdrawal symptoms for several weeks or months, and some of these children die.

Opiate withdrawal symptoms usually begin 4 to 6 hours after an opiate-dependent person’s last dose. The symptoms include uneasiness, diarrhea, abdominal cramps, chills, sweating, nausea and runny nose. The negative withdrawal symptoms for most opiates are strongest approximately 24 to 72 hours after the last dose and they begin to subside within 5 to 7 days. Sometimes symptoms such as sleeplessness and drug craving can last months.

Poppy Seeds

Poppy seeds are a common and flavorful topping for breads and cakes. One gram of poppy seeds contains up to 33 micrograms of morphine and 14 micrograms of codeine. However, eating a slice of poppy seed cake or a single poppy seed roll (0.76 grams of seeds) will not produce a positive drug test. In 1998 the Substance Abuse and Mental Health Administration formerly mandated that all drug screening laboratories use a standard cutoff of 2000 nanograms per milliliter to produce a positive urine drug test.

Pain Sufferers Struggle to Get Medicine as States Enact Opioid Restrictions

As a growing number of states enact restrictions designed to clamp down on prescription drug abuse, some pain sufferers say they are not able to get the opioids they need, the Wall Street Journal reports in an October 2012 story.

Some doctors have stopped writing prescriptions for opioids in reaction to state laws that make physicians criminally liable for writing prescriptions for painkillers that lead to overdoses. In some states, regulation of pain clinics have forced “pill mills” to close, leaving people who need pain medication with fewer prescribers.

Last month the National Alliance for Model Drug Laws, a nonprofit which helps states create laws to prevent prescription drug abuse, met to talk about how to balance the fight against improper opioid prescribing, with maintaining patients' access to needed pain medications.
2012 Kansas Communities that Care
Data for 6th-12th Grade Students in Riley County

Average Age of Onset:
First smoked tobacco .......... 12.5 years old
First drink of alcohol .......... 12.6 years old
First smoked marijuana ....... 13.8 years old

Lifetime Prevalence Trends of 12th grade students:
34% of students have smoked cigarettes
23% have used smokeless tobacco
66% have used alcohol
34% have used marijuana.

According to the students, 99% of their parents feel that any use of cigarettes or marijuana is wrong or very wrong. In the past year, 40% of students reported not talking with a parent about the dangers of alcohol, tobacco or drug use.

The Kansas Communities that Care Student Survey was given to Riley county students in the 6th, 8th, 10th and 12th grades. Survey results provided by the Regional Prevention Center, a program of the Central Kansas Foundation.