**Heroin** also known as smack, skag or junk is an illegal drug that is a processed form of morphine. It is a form of morphine that can enter the brain faster. It comes from a naturally occurring substance extracted from certain poppy plants. It usually appears as a white or brown powder.

### So how does it work?

Upon injection, there is a sudden rush of pleasure. Then, a dreamy, pleasant state occurs in which pain is not felt. Breathing will slow down, skin may become flushed, and pupils will become the size of pinpoints. Smoking and snorting will produce the same effects but without the sudden rush of pleasure; they only produce the effect of pleasant drowsiness.

### Is there a chance this substance could contain contaminants if it is obtained “on the street”? If so, what are the effects of these contaminants?

- Depending on the source, heroin can be contaminated with inactive ingredients including talc, quinine, and baking powder.
- These substances may not dissolve in the body which results in clogging the blood vessels that lead to the lungs, liver, kidneys, or the brain. This can lead to infection to either infection or death of small patches of cells in vital organs.

### Short term effects of taking Heroin

#### Judgment

A pleasurable euphoria feeling is often followed by drowsy feeling for several hours which is caused by depression of the central nervous system. This may impair judgment and cloud mental functioning.

#### Memory

Memory could be impaired because of the drowsy feeling and depression of the central nervous system.

#### Health

- In the brain, heroin is converted to morphine and binds rapidly to opioid receptors. Then a pleasurable euphoria feeling occurs. This is followed by a drowsy feeling for several hours which is caused by depression of the central nervous system. Then there is an accompanying warm flushing of the skin, dry mouth, and a heavy feeling in the extremities. This can be followed by nausea, vomiting, and severe itching.
- Heroin can depress breathing by changing the activity in the brain stem, where automatic body functions are controlled.
- Heroin can change the limbic system, which controls emotions, to increase feelings of pleasure.
- Heroin can block pain messages transmitted through the body.

### What happens when Heroin is mixed with....

#### Alcohol?

When mixed with alcohol, it may result in increased risk of respiratory depression, low blood pressure or coma.

#### Marijuana?

When mixed with marijuana, it may result in increased feelings of euphoria.

### What if you take Heroin when you are pregnant?

When taken during pregnancy, heroin can cause low birth weight and developmental delays for the child.

### Other things to consider...

The user often does not know the strength of heroin or its true contents so there is a risk of overdose and death. Overdose can be fatal and can happen with the first use. Breathing will slow down to the point that it ultimately ceases.

### Long term effects of taking Heroin

#### Judgment

Use results in addiction which is characterized by chronic compulsive drug seeking and use. Long-term addiction causes changes in the brain. It can also cause tolerance and physical dependence. Once an abuser becomes addicted their primary purpose in life becomes seeking and using drugs. Heroin will literally change a person's brain and behavior.

#### Memory

Withdrawal effects such as insomnia may impair memory.

#### Health

- All types of heroin can cause:
  - Poor health; liver or kidney disease; chronic constipation
  - Sexual dysfunction including impotence and decreased sperm count in men or lack of menstrual cycle in women
  - Development of tolerance which means the abuser must use more heroin to achieve the same intensity of effect
  - Physical dependence that leads to use of higher doses of heroin. The body has adapted to the presence of the drug and withdrawal symptoms may occur if use is reduced.
  - Withdrawal causes drug craving, restlessness, muscle and bone pain, insomnia, diarrhea and vomiting, cold flashes with goose bumps, and kicking movements. These symptoms peak in 48 to 72 hours after the last dose and subside after a week.
- Injected heroin causes:
  - Collapsed veins • bacterial infections of the blood vessels and heart valves • HIV/AIDS and hepatitis B or C because of sharing injection equipment or fluids • abscesses (boils) and other soft tissue infections
- Inhaled heroin causes:
  - Lung complications including pneumonia and tuberculosis.