

Digestive System:

The digestive system is responsible for reducing large food particles to a size and chemical nature that can be absorbed (taken from the digestive system into the blood). The digestive system plays a key role in introducing drugs that are swallowed (pills, alcohol, etc.) into the blood. It also plays a role in determining onset of effects, depending upon the contents of the stomach and the type(s) of drug involved.

Urinary System:

The urinary system is responsible for the elimination of wastes from the body. It consists of two kidneys connected by long tubes (ureters) to the bladder, which stores urine. A third tube, the urethra, carries the urine from the bladder out of the body. Many of the waste products are filtered out of the blood as it passes through the kidneys and this waste is then removed from the body in the urine. Since drugs are removed from the blood in the kidneys and passed out of the body in the urine, the urinary system plays a key role in producing evidence of drug use.

How does the body break down chemicals, such as alcohol to its basic elements for elimination?

Examples: Alcohol dehydrogenase breaks down alcohol into hydrogen, carbon and oxygen.

How do you think alcohol and/or drugs might affect an individual's urinary system?

Examples: Evidence of use in urine & loss of bladder control.

Respiratory System:

The chief organs of the respiratory system are the diaphragm and the lungs. The diaphragm is a muscular sheet that separates the thoracic (upper) cavity from the abdominal (lower) cavity, and draws fresh air into the lungs and forces used air out. The transfer of oxygen from the air to the blood and of carbon dioxide from the blood to the atmosphere occurs in the lungs. Oxygen must be supplied to all the body cells, and carbon dioxide must be removed from them in order for life to exist.

The respiratory system forces air through the voice box, which in turn allows for speech to be accomplished. Therefore verbal communication is largely the responsibility of the respiratory system.

What types of signs, related to the respiratory system, could an individual display while under the influence of alcohol and/or drugs?

Examples: Rapid, or slow and shallow, breathing