# Transplantable Organs

### Pancreas

- The pancreas produces insulin, a hormone that helps the body use glucose (sugar) for energy, and enzymes that break down fat, protein and carbohydrates during digestion.
- The pancreas controls the level of glucose in the blood. It is often transplanted with a kidney because diabetes affects both organs.
- The pancreas can be preserved for 12–24 hours.



- The intestines digest food and absorb nutrients into the blood stream.
- Most intestinal transplants are performed on infants and children.
- Some conditions that could make a transplant necessary are twisted or blocked intestines or short-gut syndrome.
- $\bullet$  Intestines can be preserved for 6–10 hours.

# TAKE THE INTERACTIVE BODY TOUR

Step inside the interactive body tour to learn more about the body and the organs and tissues that can be donated to help others at **www.donateLIFEcalifornia.org/bodytour**.

15

## **Kidneys**

- The kidneys filter wastes and excess water from the blood and balance the body's fluids.
- While waiting for a kidney transplant, many patients undergo dialysis to remove toxins out of their blood.
- Some conditions that could make a kidney transplant necessary are high blood pressure, diabetes and cystic kidney disease.
- Ethnic minorities are four times more likely to develop kidney failure.
- Kidneys are the most commonly transplanted organs and most needed.
- Kidneys can be preserved up to 24–48 hours.

#### Lungs

- The trachea or windpipe carries air to the lungs. The alveoli - tiny air sacs similar to folded balloons extract oxygen and exchange it for carbon dioxide.
- A single lung can save a life. One donor can be the source of two lung transplants.
- Some conditions that could necessitate a lung transplant are cystic fibrosis, pulmonary hypertension, emphysema and pulmonary edema.
- Lungs have a preservation time of up to 4–8 hours.

#### Liver

- The liver is a complex organ that has more than 500 known functions. It breaks down harmful substances in the blood, produces bile that aids in digestion and stores vitamins, sugars and fats.
- A donated liver can sometimes be split between two recipients, so one donor can be the source of two liver transplants.
- Some conditions that could necessitate a liver transplant are birth defects of the liver or bile duct, chronic liver infections such as hepatitis, or drug and alcohol damage.
- Livers have a preservation time of up to 12–15 hours.

# Heart

- The body's hardest working muscle, the heart beats 60-80 times each minute as it pumps blood throughout the body.
- Some conditions that can make a transplant necessary are cardiomyopathy, heart failure, myocarditis and heart disease.
- Hearts can be preserved up to 4–6 hours before they must be transplanted.