Blood Banks

Blood banks are places where they collect, seperate, test, and store blood. They usually take about 1 pint of blood or 500 ml.

How they operate:

* Each donator’s blood is stored in many test tubes for screening for diseases like:
  + Hepatitis B
  + Hepatitis C
  + HIV
  + West Nile Virus
* Any blood with the diseases above is discarded
* Accpeted blood is also typed for ABO groups and Rh factor.
  + ABO
    - ABO blood group system, the classification of human blood based on the inherited properties of red blood cells (erythrocytes) as determined by the presence or absence of the antigens A and B, which are carried on the surface of the red cells. Persons may thus have type A, type B, type O, or type AB blood.
  + RH(<https://www.mayoclinic.org/tests-procedures/rh-factor/about/pac-20394960>)
    - an inherited protein found on the surface of red blood cells. If your blood has the protein, you're Rh-positive. If your blood doesn't have the protein, you're Rh-negative. The "+" or "–" you might see after your blood type refers to Rh positive or Rh negative. It only affects pregnancies.
    - Reasons for RH test
      * Miscarriage
      * Ectopic pregnancy — when a fertilized eggs implants somewhere outside the uterus, usually in a fallopian tube
      * Abortion
      * Removal of a molar pregnancy — a noncancerous (benign) tumor that develops in the uterus
      * Amniocentesis — a prenatal test in which a sample of the fluid that surrounds and protects a baby in the uterus (amniotic fluid) is removed for testing or treatment
      * Chorionic villus sampling — a prenatal test in which a sample of the wispy projections that make up most of the placenta (chorionic villi) is removed for testing
      * Cordocentesis — a prenatal test in which a sample of the baby's blood is removed from the umbilical cord for testing
      * Bleeding during pregnancy
      * Injury or other trauma to your abdomen during pregnancy
      * The external manual rotation of a baby in a breech position — such as buttocks first — before labor
      * Delivery
* Accepted blood is taken and separated into 3 different components:
  + red blood cells, platelets, and plasma
  + White blood cells are removed from the blood to minimize the chance of a reaction in the recipient.
* Stored for up to 42 days (at 4 C or 39.4 F)