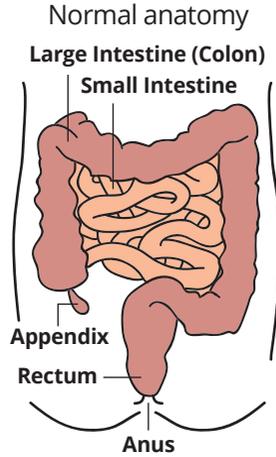
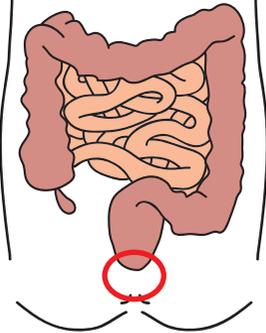


## Anatomy of an imperforate anus



Anal opening missing or closed off



## Down syndrome and imperforate anus

- Down syndrome occurs when an individual has a full or partial extra copy of chromosome 21.
- It is the most frequent chromosomal anomaly in humans and is associated with a host of other problems, including heart and gastrointestinal problems.
- Imperforate anus is one of the birth defects that occur more frequently in babies with Down syndrome.
- This defect means that the baby has an improperly developed anus, where the opening to the anus is missing or blocked.
- Imperforate anus almost always requires surgery. Multiple procedures are sometimes necessary to correct the problem.
- The type of surgery depends on the specifics of the defect. In a perineal anoplasty, the baby's surgeon closes any fistulas and creates an anus in the normal positioning.

## Atrioventricular Septal Defect

Blue blood coming back to heart from head and upper body (SVC)

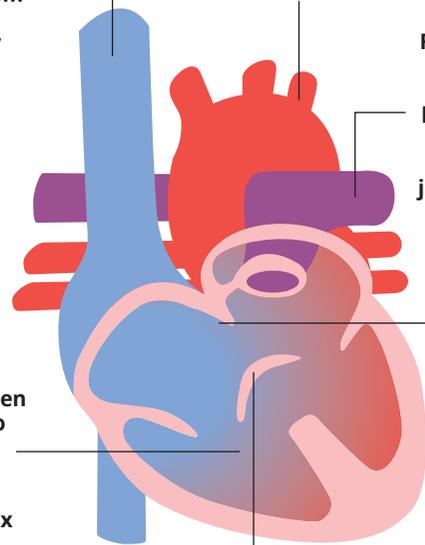
Red blood being pumped to all parts of the body (Aorta)

Hole between bottom two chambers allows red and blue blood to mix

Common atrioventricular (AV) valve between upper and lower chambers, instead of two separate valves. This valve leaks back into the upper chambers

Red and blue blood being pumped to lungs at high pressure instead of just blue (PA)

Hole between top two chambers allows red and blue blood to mix (atrial component)



## Things you should know

- An atrioventricular septal defect (AVSD) is a heart defect affecting the valves between the heart's upper and lower chambers, and the walls between the chambers. There are various types, depending on the site and severity of the defects.
- The defects result in blood flowing in the 'wrong' direction. Such blood have a lower than normal amount of oxygen, and extra blood can flow to the lungs.
- The heart and lungs have to work harder to compensate, and this may lead to heart failure.
- In the United States, the Centers for Disease Control and Prevention estimates that about 1 in 2,000 babies are born with this defect.
- AVSD is common in babies with Down syndrome, a genetic condition that involves an extra chromosome 21 (also called trisomy 21).
- The defect may be diagnosed during pregnancy or soon after the baby is born.
- All AVSDs usually require surgery. When this is done depends on the child's general health as well as the type of AVSD.