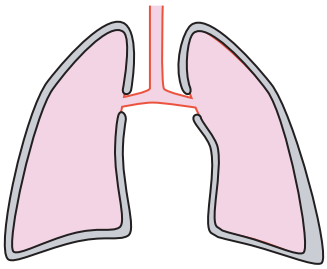
LUNG INFLATION

An Introduction to

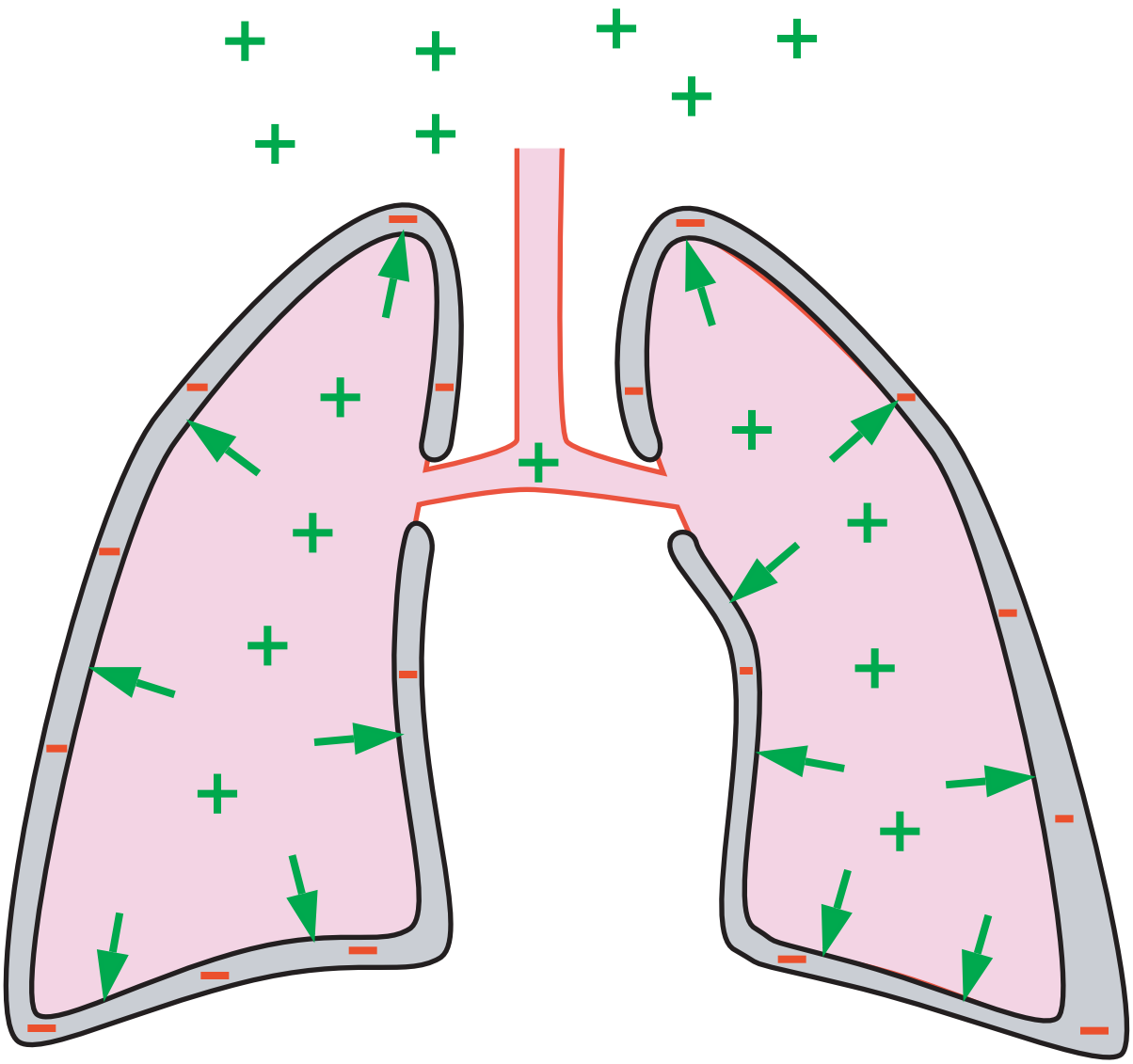
Lung Inflation

and the

Collapsed Lung

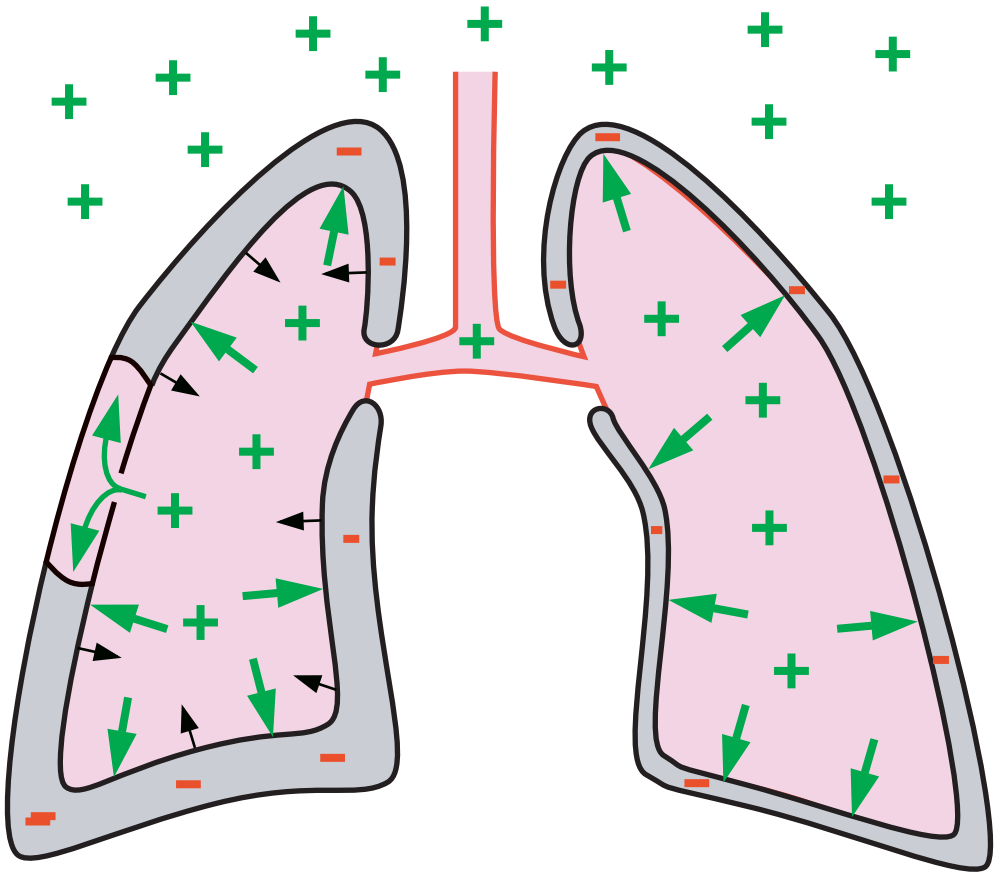


By Noel Ways



Your lungs are in a state of being "inflated" because the plural cavity maintains a negative pressure (about 3 mmHg less than the surrounding air). Therefore, the pressure within the lungs is positive and causes the lungs to press against the parietal pleura.

Your lungs "want" to collapse (even while you are reading this) due to the fact that the elastic connective tissue "wants" to recoil back to a small size; but the positive pressure within the lungs (and the corresponding vacuum within the pleural cavity) are keeping them pressed against the outer pleural cavity wall.



However, should the pleural cavity become perforated and exposed to the outside air, then air will enter the cavity as the lungs begin to recoil (collapse) and pull away from the parietal pleura. As the lung pulls away from the parietal pleura, the enlarging pleural cavity will continue to be filled with air as the air gets **sucked in** as the lung recoils (i.e. collapses).

Once the lung has recoiled (i.e. collapsed), then the pressure in the pleural cavity will be the same as within the lung and the outside air. In this illustration, it is written as a positive pressure to contrast it with the negative pressure of the lung that has not collapsed. On could have just as well have written the pressure as "0" if dealing with the collapsed lung alone.