# Physiotherapy session

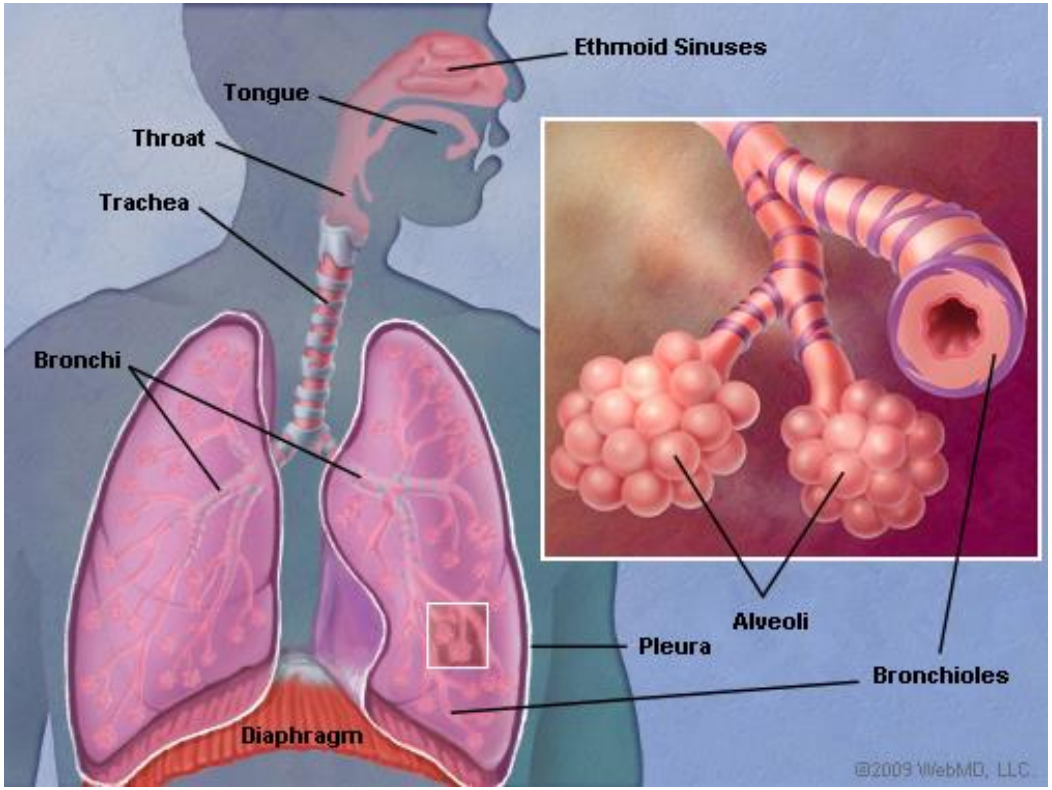
## Respiratory/movement

aucamp&wilsdorf
PHYSIOTHERAPISTS

# Reasons for respiratory distress

- Laryngomalacia ( soft larynx, immature cartilage of upper larynx - causes obstruction and stridor )
- Aspiration of a foreign substance
- Laryngeal oedema: anaphylactic shock, inhalation trauma/injury
- Upper respiratory infection: epiglottis, croup, retropharyngeal abscess
- Lower respiratory tract infection: asthma, bronchiolitis and bronchitis, pneumonia, acute respiratory distress

# Anatomy


Ethmoid Sinuses
Tongue
Throat
Trachea
Bronchi
Alveoli
Pleura
Bronchioles
Diaphragm
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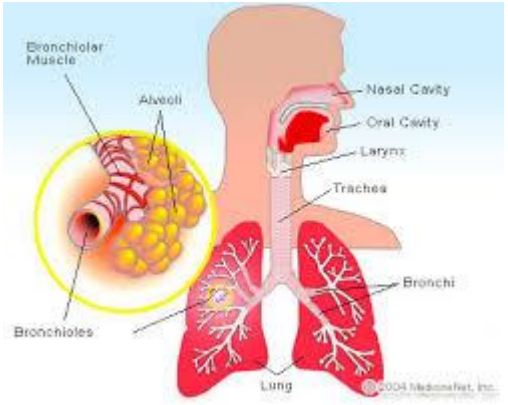
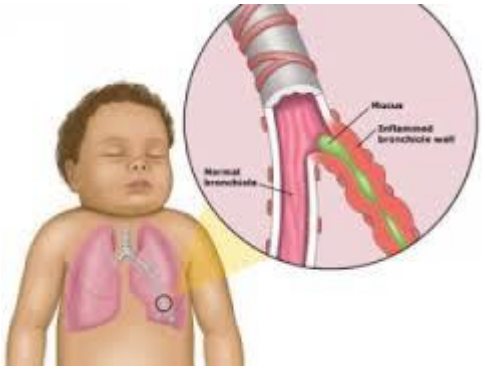
# Most important for you as parents and carers…Lower Respiratory Tract Infections!

# Lower Respiratory Tract Infection

- Inflammation of the airways/pulmonary tissue because of a bacterial or viral infection, below the level of the larynx



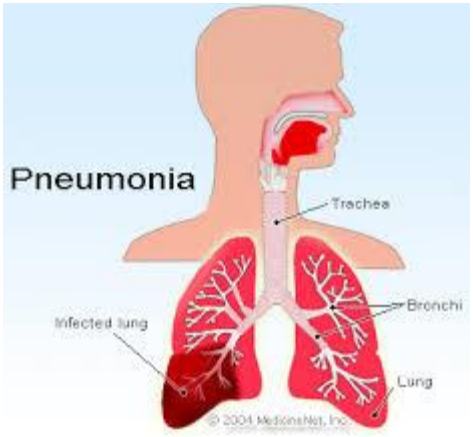



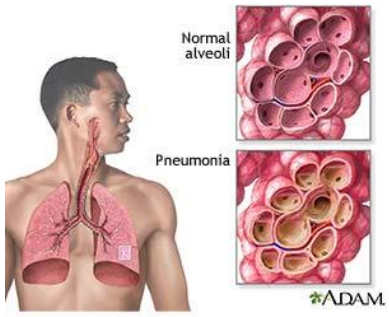
# Bronchiolitis

- Acute infection of lower respiratory system, usually because of a virus, of which RSV is the most common culprit
- The infection causes increased production of sputum and oedema causes narrowing and obstruction of small airways.

# Pneumonia

- Acute inflammation with intense infiltration of neutrofills in and around the alveoli and terminal bronchioles.
- The affected bronchopulmonary segment or the whole lob can be consolidated because of the inflammation or oedema.



# RSV

- Respiratory syncytial virus
- Causes infection of the lungs and airways.
- In adults causes only mild symptoms ( similar to that of a cold ) : runny nose, sore throat, headache, cough
- In children that already has respiratory or other problems, or are premature, the virus can affect the heart, lungs and immunity system

- Highly contagious
- Spreads by particles that contains the virus ( someone that has the virus coughs and sneezes, or the virus sits on surfaces like toys, hands, etc. )
- RSV season is April-August, but can be through out the year
- Treatment is supportive, control the symptoms.
- No antibiotics, only when bacteria is present

# Adenovirus

- Group of viruses that affects the membranes of the respiratory system, eyes, intestines and urinary system
- It can cause respiratory infections as well as diarrhoea

# Chronic pneumonitis

- Can be caused by gastro-esophageal reflux
- Smoke and chemical inhalation

# Symptoms lower respiratory tract infections

- Fever
- Cough, vomiting
- Tachypnoea ( fast breathing )
- Rib retraction
- Drinks and eats badly
- Irritated
- Sleeps badly
- Makes strange noises when breathing
- History of recurrent upper respiratory infections

# Practical

- Position correctly
- Percussion of lungs
- Stimulate cough reflex
- Suction
- Nebs
- Tip: always keep sputum loose, nose clean, rinse with saline if necessary

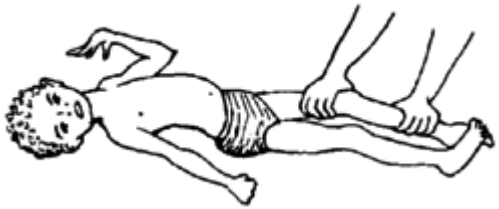
# Movement

- No matter if your child is spastic/hypertonic, or flaccid/hypotonic it is still important to move their joints daily
- A joint that is not being mobilized, gets stiff and can cause a lot of pain.
- The same goes for a joint that is flexible and is being moved to far the whole time

Spasticity made it hard for Alex's brain to talk to his arms and legs.


His muscles didn't know what to do so they stayed tight all the time.

# Spasticity



- Increased resistance against passive movement or stretching of muscles
- It influences mobility, self care and positioning and leads to joint contractures
- Children with spasticity has increased reflexes and clonuses ( up and down movement at joint in reaction to a muscle that is being stretched )

# Hypotonia

- The child appears floppy
- They usually rest with their elbows and knees loosely in extension ( straight )
- They have poor/no head control
- With children with low muscle tone positioning is very important, because the joints does not get the necessary support from the muscles.

# Practical

- Daily passive movement of the joints and stretching of the muscles is very important in children that cannot do it themselves
- Does not have to be long.
- Do it in a playful manner ( part of playtime )
- See it as a special time with your child