



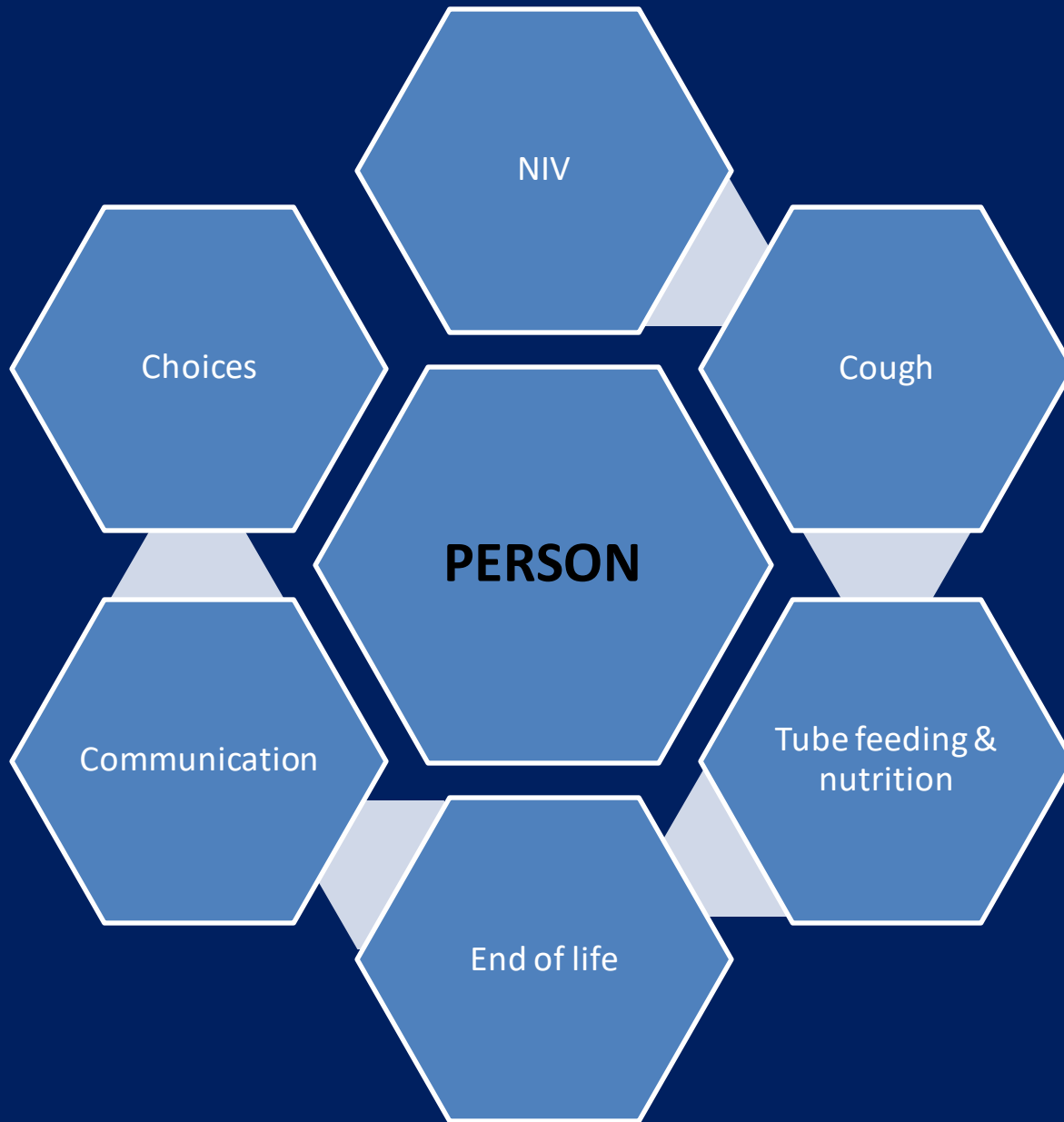
Respiratory Issues and Implications for Care

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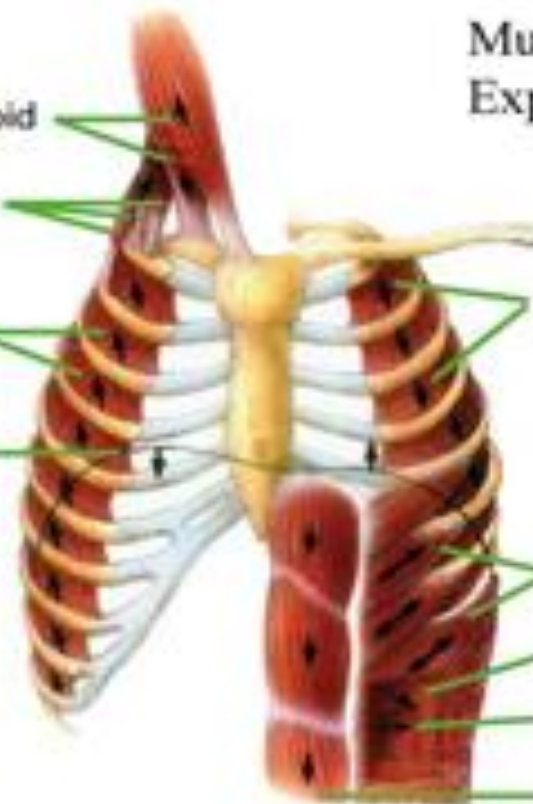
Breathing muscles

Muscles of Inspiration

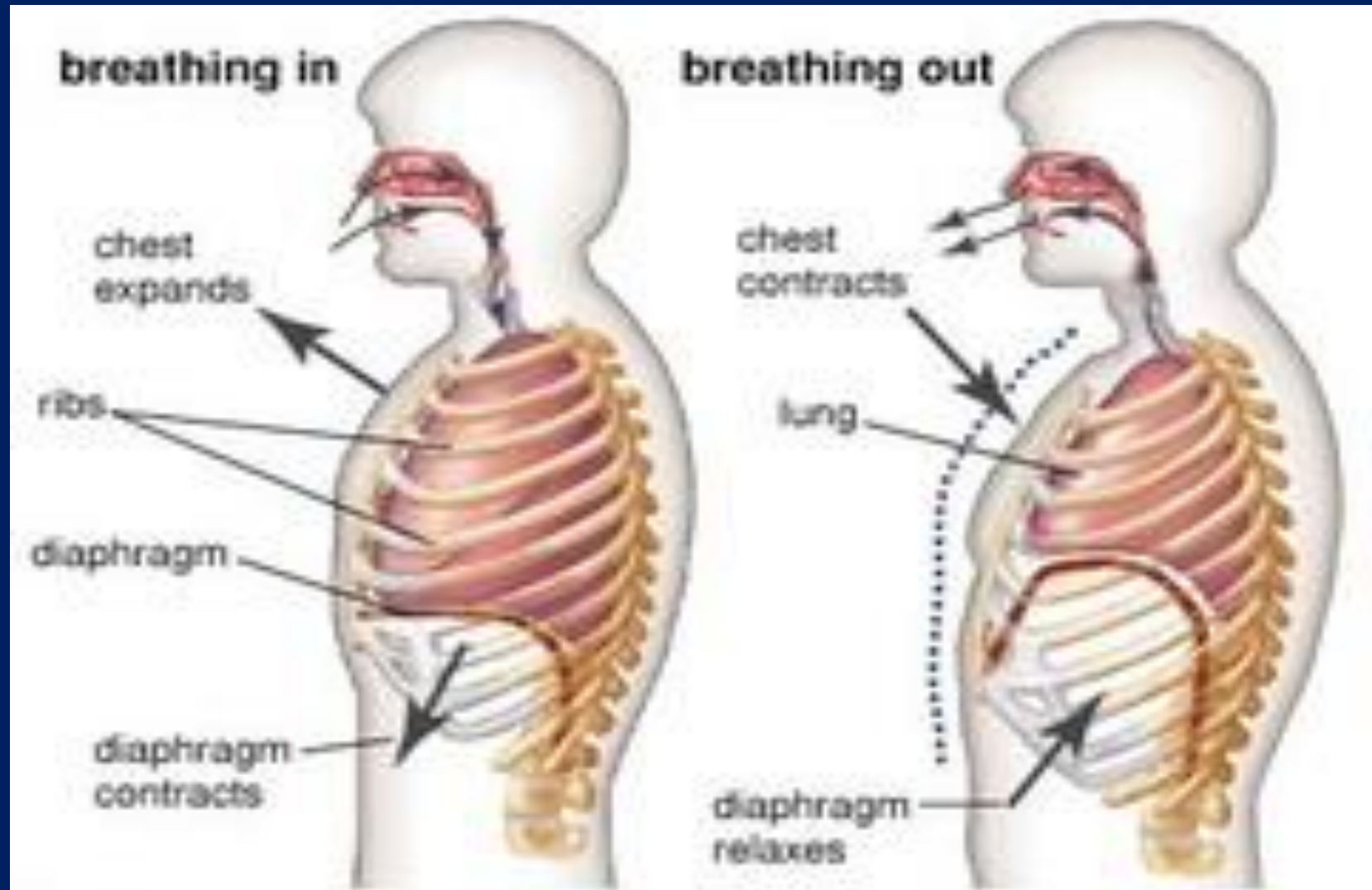
Sternocleidomastoid
Scalenes
External intercostals
Diaphragm

Muscles of Expiration

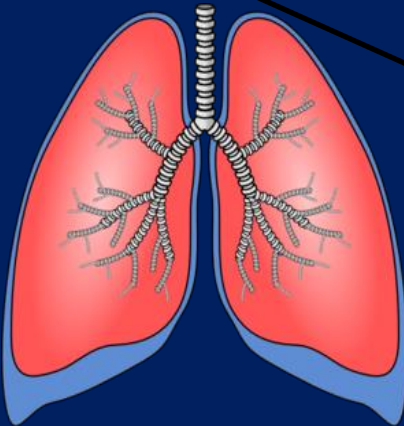
Internal intercostals
External oblique
Internal oblique
Transversus abdominis
Rectus abdominis



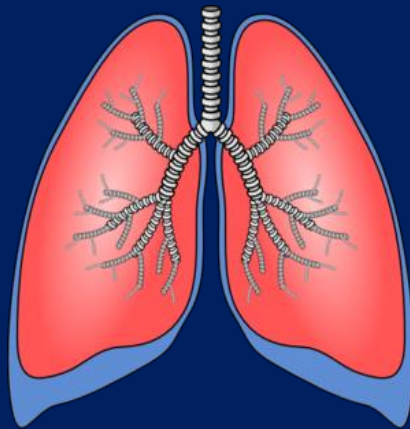
How we breath



Normal breathing



High CO_2 = bad news!
(hypercapnia)



Monitoring: 3 monthly

- Breathless when moving around
- Can't lie flat because of breathlessness
- Waking up feeling tired, a headache that gets better as day goes on
- Poor sleep – nightmares, restless, vivid dreams
- Tired and sleepy in day
- Muddled, poor concentration
- Chest infections, weight loss
- Physiology: blood gases, nocturnal studies, FVC

NIV: Non invasive ventilation

- Ventilator: via mask (mouthpiece / vest)
- Mask over nose or over nose & mouth
- Synchronises with patient
 - Blows air in when you breath in to inflate the lungs more than they can do on their own
 - ‘Blows’ out when you breath out
- Back up breaths
- Wear nocturnal initially







Benefits of NIV

- Feel better:
 - Less tired, more alert, more energy, better concentration
- Reduces risk of complications:
 - Chest infections
 - Clear secretions
- Better quality of life
- Live longer (a year or two?)

Decision making



- Awareness & raise possibility
- Start at appropriate time
- Nocturnal initially leading to possible 24hr use
- When to stop or continue to death
- Discuss end of life wishes in advance



Using myBreathing

Choices

Starting

Living

Later

Our Stories

My choices >



Starting NIV >



Learn about breathing support in MND/ALS

Start Here - The Basics >

Living with NIV >



Later decisions >



Breathing and ventilation

Show menu



Breathing can be affected by MND, but there is a lot of support available. Select from the following to find out more.

“Ask your professionals to explain things...my own experience has shown that you are often not prepared early enough.” Person with MND

+ How does MND affect breathing?

+ Why is it risky to have extra oxygen with MND?

9 How does ventilation support breathing?



Challenges



- Getting used to it
 - Having to wear a mask
 - Taking mask on/off, living alone
- Realisation things are getting worse. Loss of control
- Dry airways – humidifier
- Wet – sialorrhea
- Planning for the future - dependency

Withdrawal of Assisted Ventilation at the Request of a Patient with Motor Neurone Disease

Guidance for Professionals

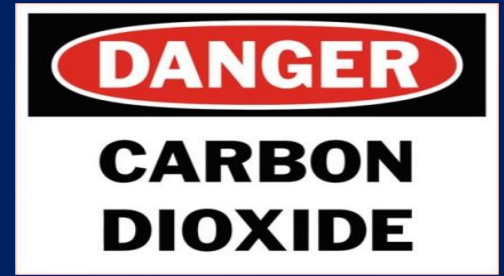
**Association for Palliative Medicine of
Great Britain and Ireland**

November 2015



Association for
Palliative Medicine
Of Great Britain and Ireland

Why not oxygen?

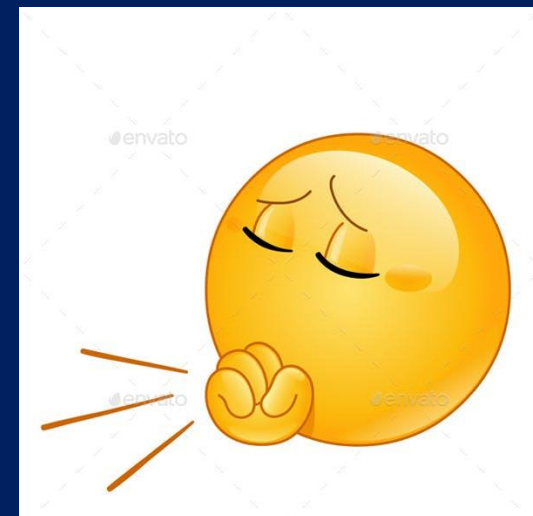


- Oxygen improves oxygen levels but does not improve ventilation
- Does not help breathlessness
- Worsens hypercapnia – dangerous – fatal!!

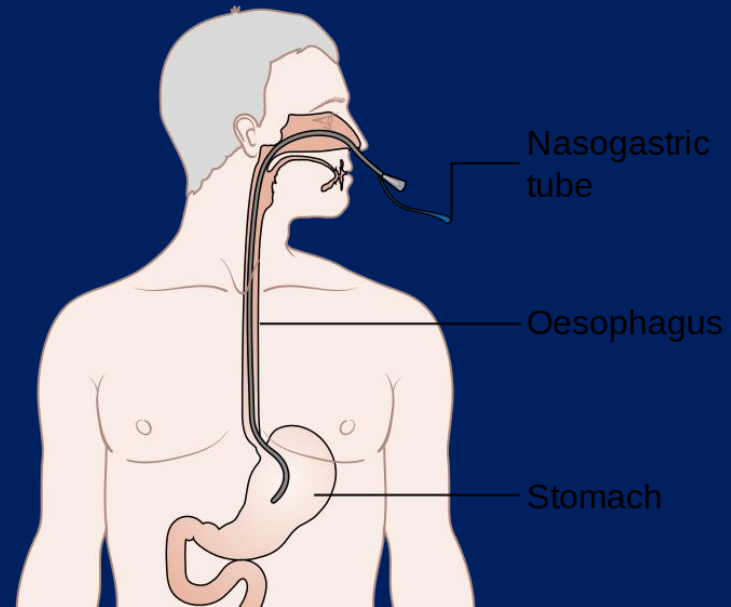
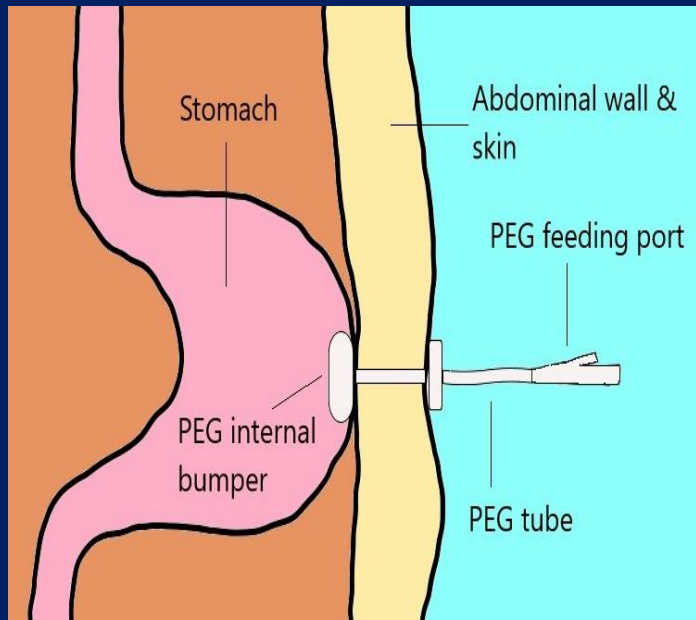


Cough

- Breath in, close glottis, forced expiration
 - Difficult with weak breathing/throat muscles
- Measure strength – cough peak flow
- Aspiration risk – bulbar symptoms
- Respiratory infections
- Physiotherapist intervention



Feeding tubes: PEG, RIG, NG



- Lying down
- Sedation
- RISKS increase if breathing problems



Using myTube Thinking Fitting Living Caring Our Stories

THINKING about a tube >



FITTING a tube >




Learn about tube
feeding in MND/ALS

The Basics - Start Here >

LIVING with a tube >



CARING for someone >



Summary

- Team approach – breathing is more than lungs
- Regular monitoring, early intervention
- Choice, work together, support
- Longer life, better quality
- Oxygen in not appropriate
- End of life plan
- Feeding tubes – early intervention

THANK YOU

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