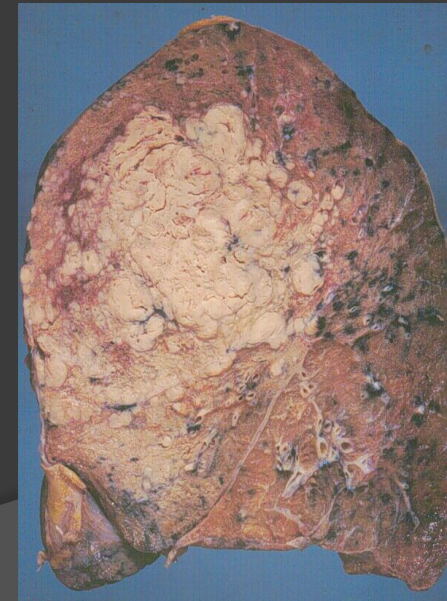




**Lung  
Cancer**

- Overview of lung cancer
- Prevalence of lung cancer in COPD
- Signs and symptoms/Risk factors
- Symptom management
- Questions?



# Overview

- ⦿ Most common cause of cancer death NZ and worldwide
  - For both male and female
  - Top 5 cancer in NZ
- ⦿ In NZ causes 19% of all cancer deaths
  - Worldwide causes 27% of all cancer deaths
  - In 2012 caused 1 in every 5 deaths
- ⦿ 2000 cases/year (1650 deaths/year)
- ⦿ Mean age at presentation 64



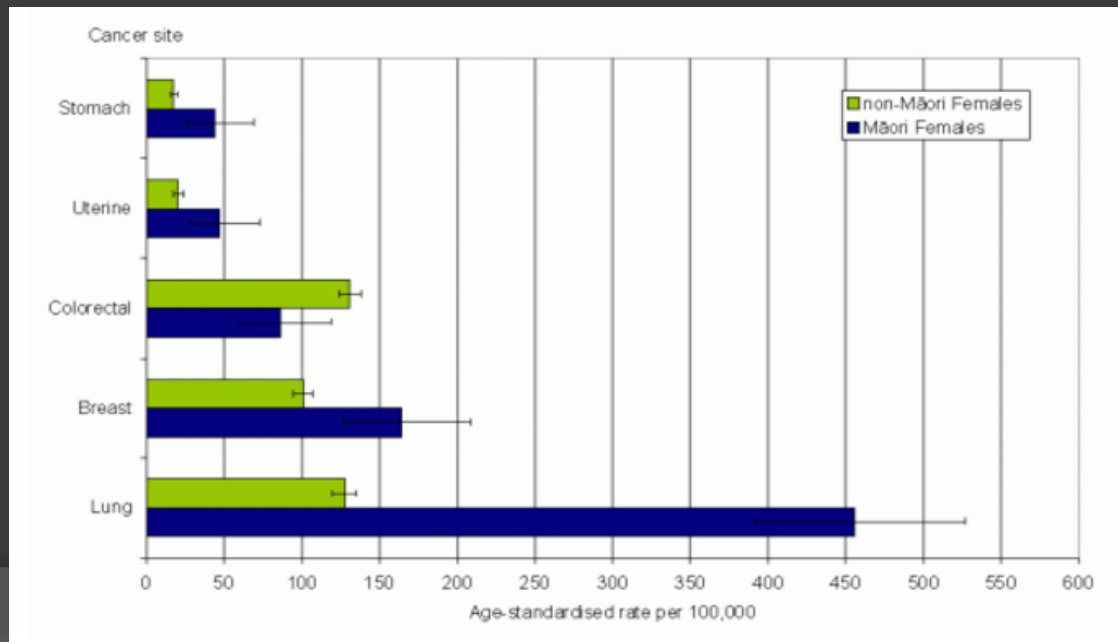
# Overview

- ◎ Before 1900 – medical oddity
  - Increased dramatically in 1950s
  - In 1933 Evarts Graham pioneered a pneumonectomy in US
    - In 1920 asked whether tobacco smoking caused increased incidence of lung cancer, replied “so has the use of nylon stockings”
    - He was a cigarette smoker and ironically died of lung cancer in 1957



# Overview

- Rates are similar for Maori and non-Maori
  - Mortality higher for both males and females in Maori
  - 4.2 x rate for Maori versus non Maori female
- Poor prognosis - 5 year survival 10%, 7% for Maori
  - In Australia and US survival is 12-16%
  - Poor survival due to late diagnosis
  - **Lung Cancer is curable if found early enough!**



# The *silent* killer

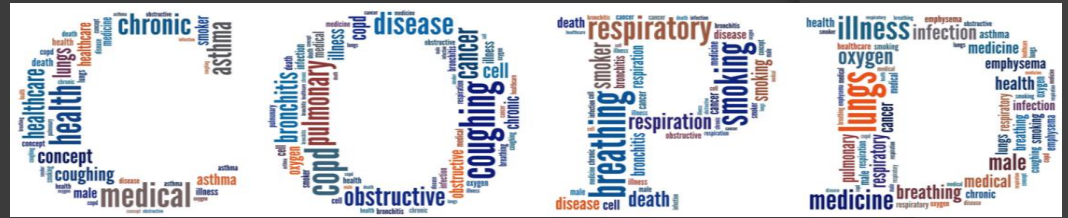


Up to 50% of lung cancer patients have their first presentation through ED

# Treatment options

- ⦿ **Surgery**
  - Wedge/segmentectomy
  - Lobectomy
  - Pneumonectomy
- ⦿ Radiation therapy
  - Palliative
  - Radical
  - **SABR (stereotactic ablative radiotherapy)**
- ⦿ Chemotherapy
  - Palliative
  - Radical if combined with radiation (chemo-radiation)
- ⦿ Targeted agents
  - for specific mutations
- ⦿ Palliative care

# Prevalence i

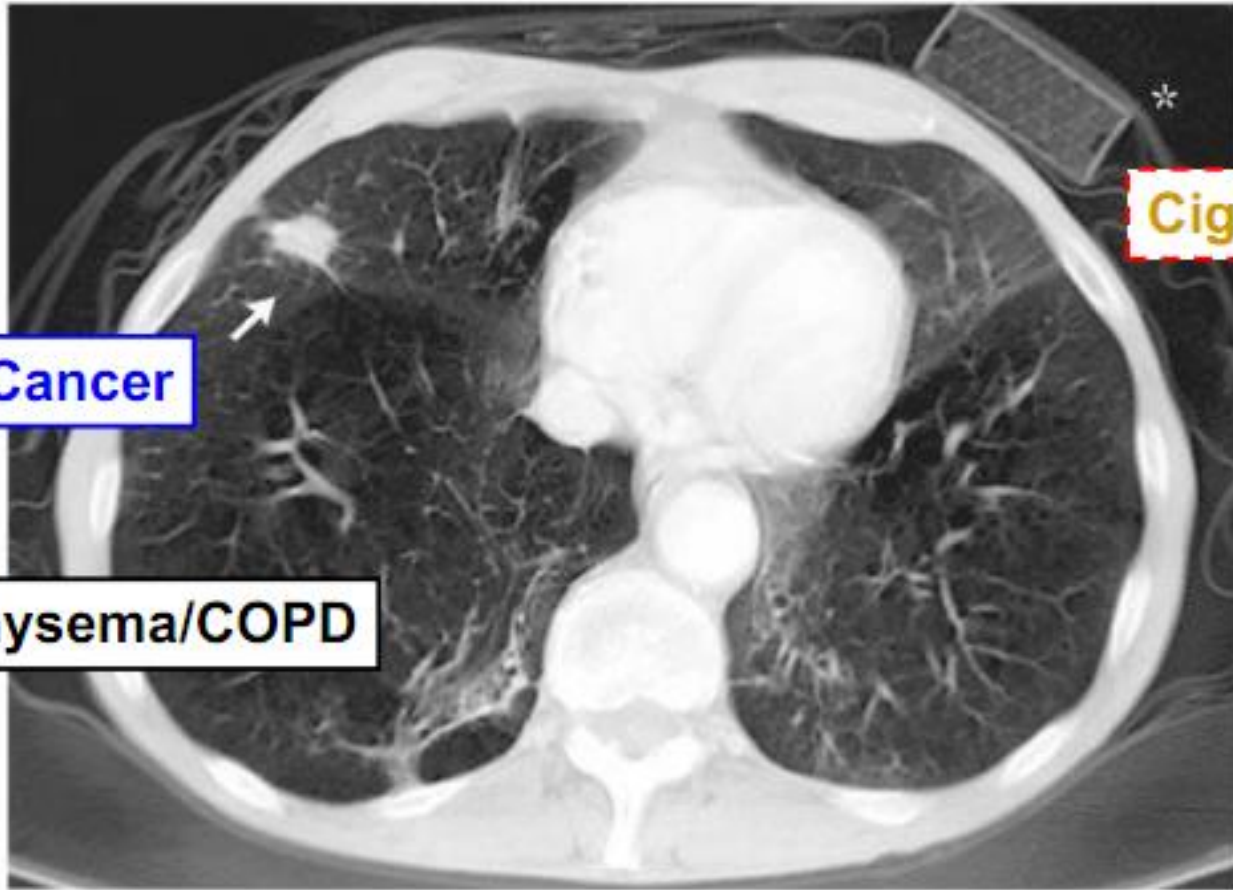


- ④ 4 - 6 fold increase in lung cancer with COPD
  - ?genetic susceptibility
  - chronic inflammation
  - risk factor independent of smoking
    - due to airflow limitations
    - ?due to emphysema
    - Moderate-severe COPD at higher risk





# Genetic overlap with COPD



Lung Cancer

Emphysema/COPD

Cigarettes

# Risk factors for lung cancer



85-90% caused by cigarette smoking

# Symptoms

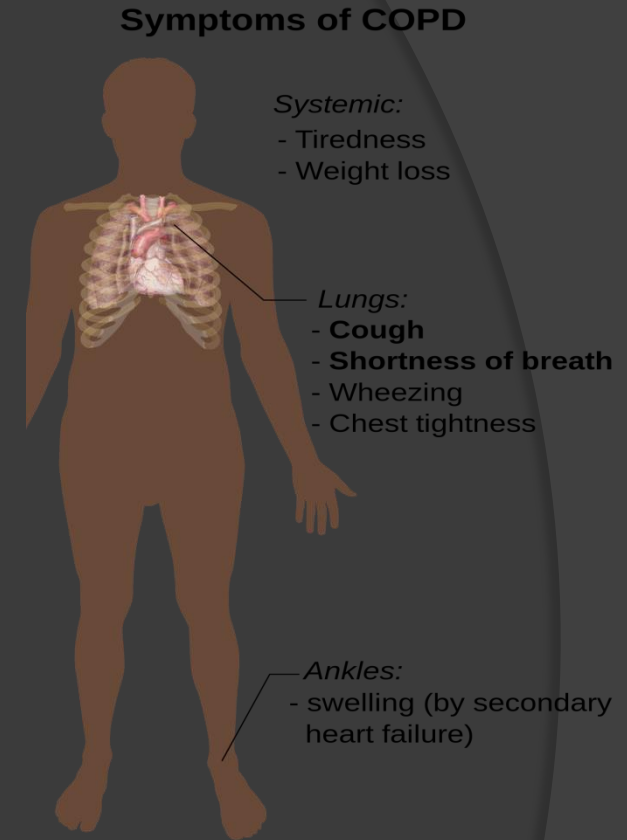


- Haemoptysis
- Recurrent chest infections
- Hoarse voice
- Wheezing
- Nail clubbing
- Headaches

# Recognising signs

- ⦿ No symptoms
- ⦿ Most common presenting symptoms
  - Cough 45-74%
  - Dyspnoea 37-58%
  - Weight loss 46-68%
  - Chest Pain 27-49%

- ⦿ Commonly can metastases to lymph nodes, adrenals, liver, bone and brain



# Symptom management

## ⦿ Breathlessness

- Medications
  - antibiotics
  - diuretics
  - inhalers
  - clonazepam
  - low dose morphine
  - dexamethasone
- Breathing techniques/positioning/relaxation exercises
- Radiation/chemotherapy/stenting
- Oxygen therapy
- Pleurodesis / pleural tap / tunnelled catheter





# Breathing techniques

allow diaphragm and lungs to expand



## When you are aware of your breathlessness:

1. Tell yourself to stop and respond by pausing, breathe out slowly through your mouth.
2. Use positive, reassuring self-talk. (For example, *“This will pass, slow down...calm down... I can slow my breathing.”*)
3. Sigh slowly and gently...letting out a soft sound while you flop and drop your shoulders.
4. Focus on your slow and gentle out breath making your out breath twice as long as your in breath. Don't think about breathing in...it will happen naturally.
5. Put yourself in a position that supports your head and shoulders to relax comfortably (elbows resting on knees or sit/recline well-supported).
6. Remind yourself *“Slow down...calm, relax...it will be okay”* because you can slow your breathing and get enough air. Allow yourself to feel comfortable and at ease.
7. Breathe out slowly through ‘pursed’ lips in the shape of an ‘O’ (as if you were going to blow gently through a straw). This helps you breathe out the old air from your lungs making room for fresh air.
8. Continue to breathe slowly and gently.
9. Your breathing is slowing...allow your mind to focus on a feeling or place that helps you feel comfortable and relaxed. Take yourself there while you continue to breathe out slowly in a position that is comfortable for you. Let your body become heavy and loose.

## When your breathing has settled:

- Think about breathing in ‘smelling the flowers’ through your nose.
- Breathe out slowly and softly through your nose or breathe out slowly and softly through your mouth - enough to lightly flicker a candle flame.
- Feel your breathing deep and low in your body.



# Symptom management

## ⦿ Cough

- Treat the lung cancer
  - Radiation can worsen it initially
- OTC Cough suppressants
- Saline spray, lozenges
- Codeine
- Low dose morphine

## ⦿ Pain

- Escalation as appropriate with medication
  - Palliative Care team are specialists
- Can be multi-factorial
- Treat the lung cancer
  - Radiation can be very effective for 'spot' pain

# Symptom management

## ◎ Psychosocial distress

- Support from family/friends – ask for help
- NTA funding
- Exercise
- Diet
- Supplements
- Treat symptoms
- Cancer Society
- Counsellors
- Hospice
- Psychologist



# Symptom management

## Early Palliative Care for Patients with Metastatic Non-Small-Cell Lung Cancer

Jennifer S. Temel, M.D., Joseph A. Greer, Ph.D., Alona Muzikansky, M.A., Emily R. Gallagher, R.N., Sonal Admane, M.B., B.S., M.P.H., Vicki A. Jackson, M.D., M.P.H., Constance M. Dahlin, A.P.N., Craig D. Blinderman, M.D., Juliet Jacobsen, M.D., William F. Pirl, M.D., M.P.H., J. Andrew Billings, M.D., and Thomas J. Lynch, M.D.

- ◎ **Temel study**
  - Early palliative care showed ↑QoL
- ◎ More psychosocial distress and unmet needs than any other cancer group
- ◎ Stigma and nihilism

# The *silent* killer



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ANY  
QUESTIONS  
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