

HEALTHY CARIBBEAN 2008

Revolutionizing the Prevention and Management of Lung Disease

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Lung Disease

- Which lung diseases are we talking about?
- What is the size of the problem in the Caribbean?

Lung Diseases

- Chronic Obstructive Pulmonary Disease – COPD.
 - a heterogeneous group of diseases that include emphysema and chronic bronchitis and are clinically defined by the concept of fixed airflow obstruction.
- Lung Cancer.
 - Primary Bronchial Carcinoma – a variety of cancer that presents the greatest challenges in treatment as it remains largely untreatable.
- Asthma.
 - The commonest chronic disease of childhood but a disease that has a myriad of forms and has a very significant impact on adults.

COPD

- GOLD (Global Obstructive Lung Disease initiative) statistics indicate COPD prevalence of 10.1% (11.8% Male 8.5% female).
- WHO estimates 600 million COPD sufferers worldwide
- 4th leading cause of death in the US.
- COPD is the only leading cause of death that is **INCREASING** in prevalence
- Economic costs of COPD in the USA are >US\$14 billion per annum.
- No regional/local statistics.

Causes of COPD

Cigarette smoking – 73% of cases in developed countries, 45% in underdeveloped countries.



Causes of COPD

- Pollution –
contribution of
pollution
unknown
- COPD higher
in urban
environments



Lung Cancer

Lung Cancer is the most common fatal malignant cancer in the USA.

2nd leading cause of death amongst black males (after coronary artery disease)



Causes of Lung Cancer

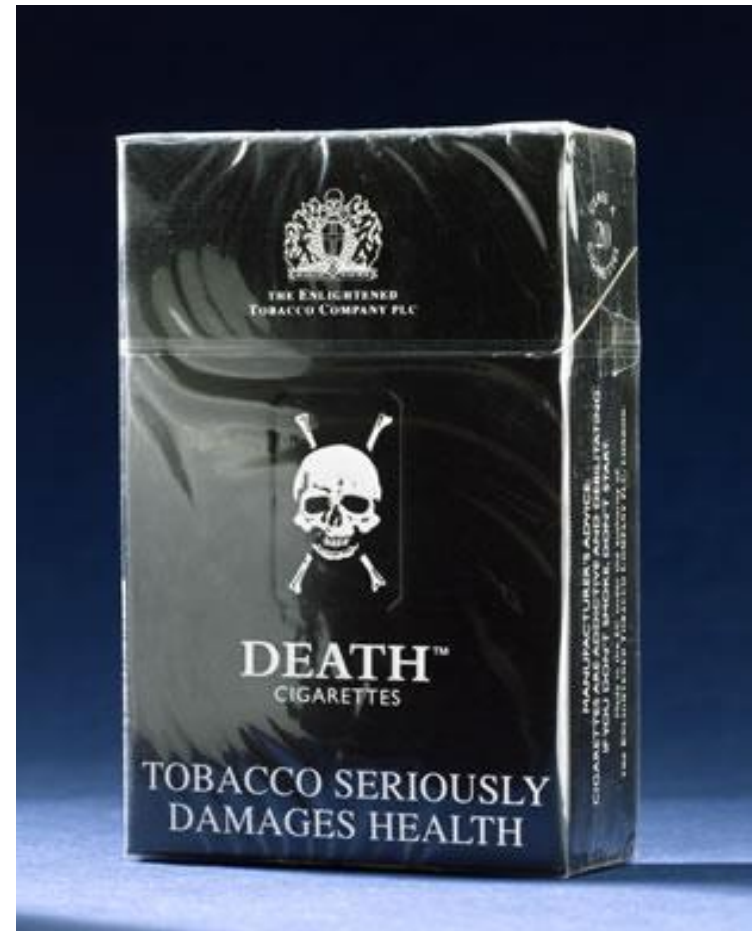
- Cigarette smoking – 85% of lung cancer cases due to tobacco smoking.
- Other causes – e.g. asbestos etc – very rare.



Action on Tobacco

International Framework Convention on Tobacco Control

- **Urgent** ratification for all signatory states.
- **Legislation:**
 - to limit or eliminate smoking in public places.
 - ban the sale, advertising and promotion of tobacco products to children (to everybody?)
 - to have effective warning labels.
 - To introduce fiscal measures to reduce tobacco consumption - increase taxes .



Asthma

- Commonest chronic disease of childhood.
- International prevalence rates vary enormously.
- The International Study of Asthma and Allergies in Childhood (ISAAC): highest prevalence countries (25% of schoolchildren) were New Zealand, Australia, UK and Ireland, lowest prevalence were Indonesia, India and Eastern Europe.



Asthma

- Barbados, Jamaica and Trinidad have all reported prevalence rates between 17-20%.
- 1 in 5 Barbadian schoolchildren suffer with symptoms of asthma



Risk Factors for Asthma

Children exposed to cigarette smoke in utero and in infancy are more likely to suffer with asthma.



Risk factors for Asthma

- Obesity –Increased BMI is associated with increased asthma Prevalence. Weight reduction has been demonstrated to improve lung function, symptoms, morbidity and health status



Risk Factors for Asthma.

- **Allergen sensitization and exposure:** House Dust mite, cockroach, Pet allergens
- **Infections – the hygiene hypothesis:** Children who have frequent respiratory infections and pneumonia have a lower prevalence of asthma i.e. there is an inverse association between infectious burden in early life and the development of atopy and asthma



Risk Factors for Asthma

- **Exposure to farm animals:**
exposure to a farming environment confers protection against asthma. Mechanism not understood but there is strong epidemiological evidence.

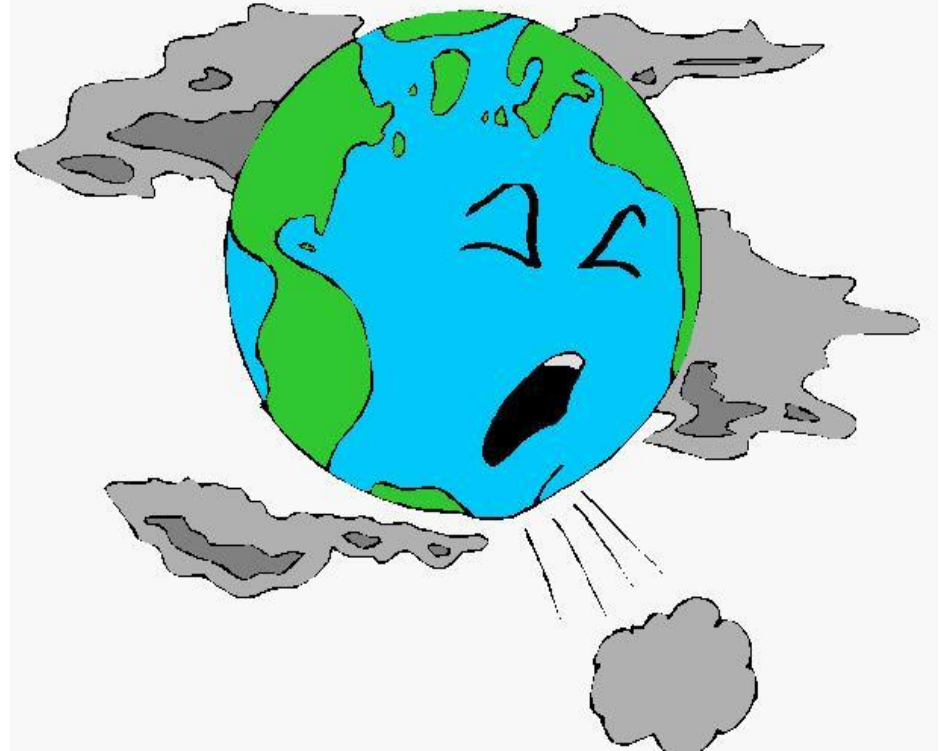


Recommendations for the prevention of Asthma.

- Breastfeeding for the first six months of life
- Avoidance of smoking during pregnancy and during infancy.
- Reducing exposure to HDM allergen in environments where HDM levels are high.
- No firm recommendations on pet allergen exposure.

Other Concerns

- Air Quality
- Sick Buildings
- Climate Change



Recommendations

- What is needed?
 - Political Commitment at the highest level
 - Economic justification
 - Legislation
 - Tobacco control
 - Taxation on food (food baskets)
 - Behavior Change
 - Research

