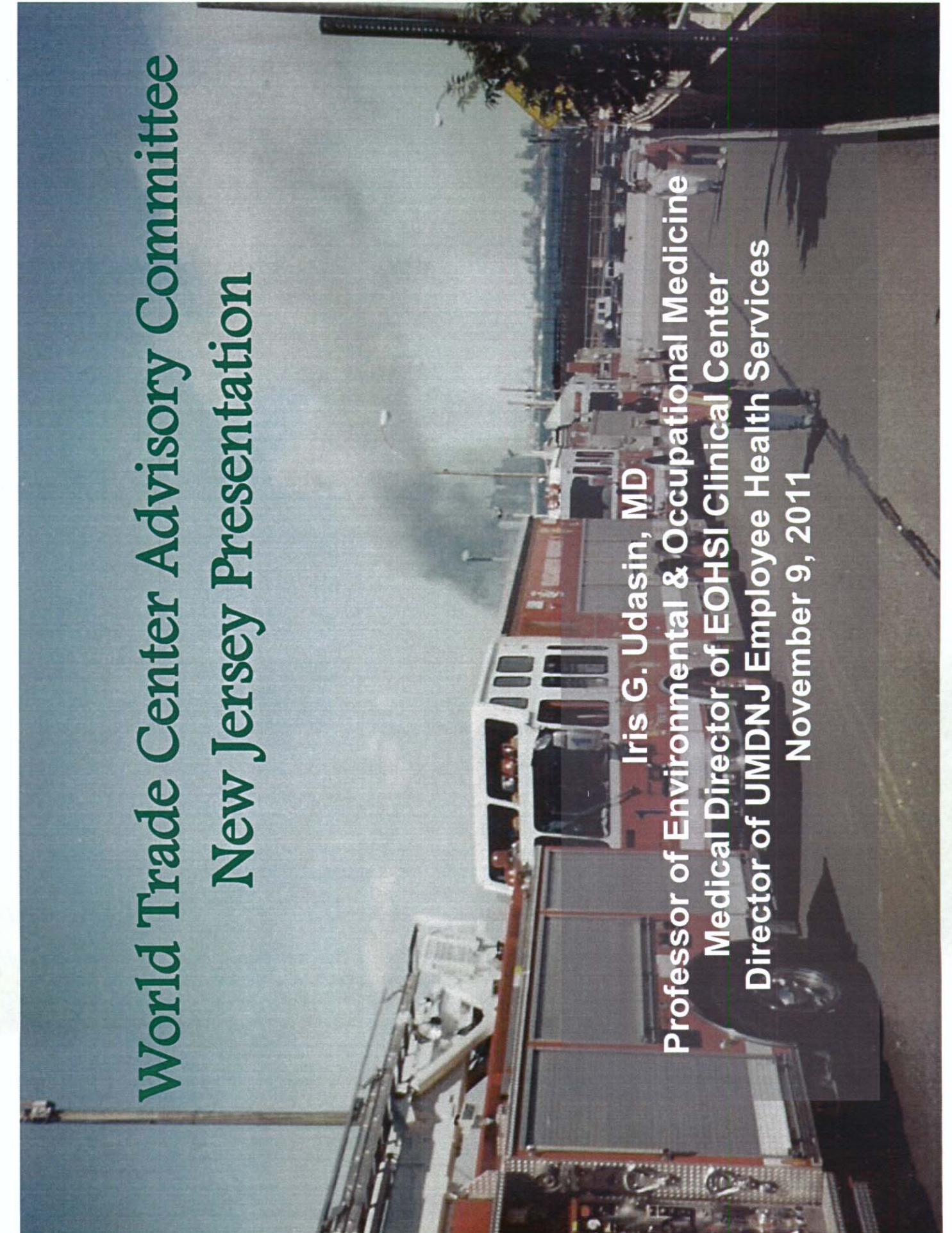


World Trade Center Advisory Committee New Jersey Presentation



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November 9, 2011



New Jersey Cohort: Final Report June 30, 2011

- 4,011 monitoring exams performed
 - More than 1,700 unique patients
 - 80% of patients monitored in NJ offered physical or mental health treatment
 - 90-95% of cohort have health insurance though many are uninsured
 - Most common counties Middlesex, Monmouth, Richmond (SI)
-

Demographics of NJ Cohort

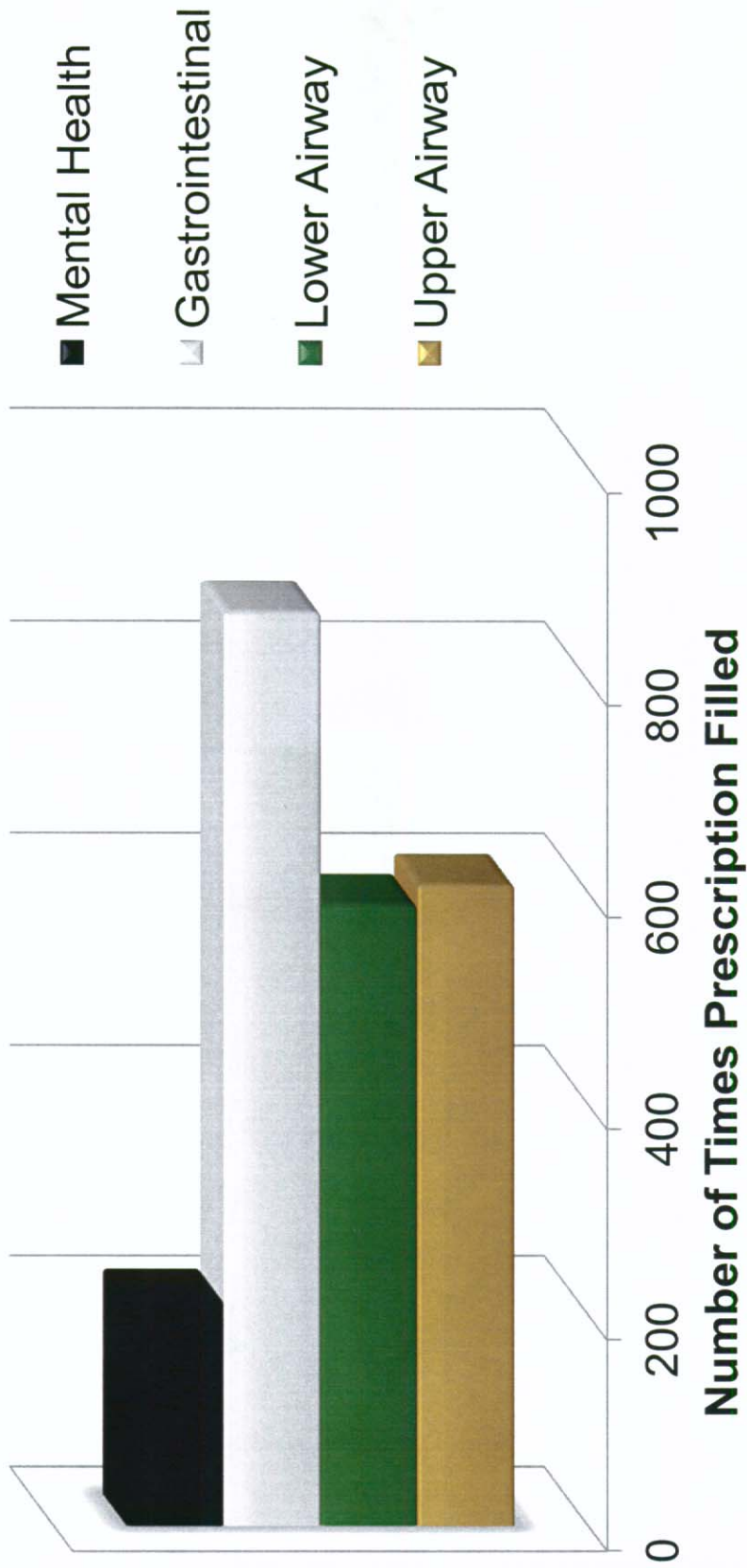
- 35% Law Enforcement (PAPD, NYPD, NJ State Police, county and municipal police departments)
- 13% construction
- 10% utilities
- 7% firefighters (Elizabeth largest dept)

Other large groups include NJUSAR, Hazardous waste workers, OSHA inspectors, volunteers

Conditions Identified in NJ Treatment Programs

- 85% Upper Airway
 - 51-58% GI
 - 24-38% Mental Health
 - 28-32% Lower Airway
-

Frequency of WTC Diseases Requiring Prescription 2009-2010



Top 15 Medication 2009-2010

Most Used

1. Nexium-Gastrointestinal
2. Nasonex-Upper airway
3. Advair –Lower airway
4. Proair-Lower airway
5. Fluticasone-Upper airway
6. Singulair-Lower airway
7. Lexapro-Mental health
8. Prevacid-Gastrointestinal
9. Cymbalta-Mental health
10. Proventil-Lower airway
11. Aciphex-Gastrointestinal
12. Veramyst-Upper airway
13. Omeprazole-Gastrointestinal
14. Clonazepam-Mental health
15. Fexofenadine-Upper airway

Most Expensive

1. Sumatriptan- Mental Health
2. Gabapentin-Mental Health
3. Provigil –Mental Health
4. Seroquel-Mental Health
5. Abilify –Mental Health
6. Effexor-Mental Health
7. Catapres-Mental Health
8. Advair-Lower airway
9. Depakote-Mental Health
10. Cymbalta-Mental Health
11. Symbicort-Lower airway
12. Spiriva-Lower Airway
13. Aciphex-Gastrointestinal
14. Carafate-Gastrointestinal
15. Prevacid- Gastrointestinal



Emerging Illnesses / New Jersey Highlights

**Unique Features of Obstructive Sleep Apnea in
World Trade Center Responders With
Aerodigestive Disorders**

Sunderram, Jag MD; Udasin, Iris MD; Kelly-McNeil, Kathie BA;
Ko, Susan BA; Cepeda, Clarimel BPH; Marroccoli, Barbara MD;
Perret, Carol MS; Ohman-Strickland, Pamela PhD; Scardella,
Anthony MD; Kipen, Howard MD

Objectives: To compare obstructive sleep apnea (OSA) in World Trade Center (WTC) responders with aerodigestive disorders and snoring with non-WTC habitual snorers, and to distinguish features of OSA in a subset of responders with worsening of snoring after 9/11 from responders with previous habitual snoring.

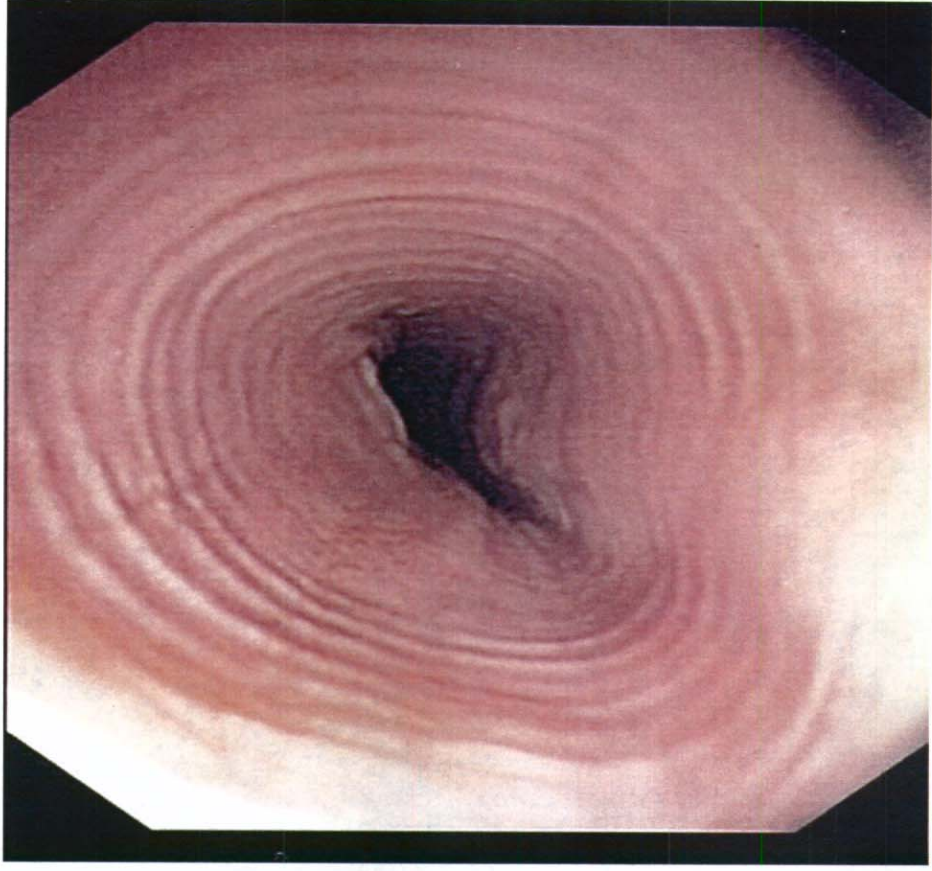
Methods: Cross-sectional comparative study of 50 WTC Medical Monitoring and Treatment Program responders with aerodigestive disorders and snoring and 50 nonresponders with snoring. Responders with worsening of snoring after 9/11 were compared with previous habitual snorers.

Results: While there was a strong correlation between body mass index (BMI), weight, and Apnea + Hypopnea Index ($r = 0.36$, $P = 0.001$; $r = 0.29$, $P = 0.044$) in the nonresponders, no correlation between either BMI or weight and Apnea + Hypopnea Index was found in the responders. Responders with worsening of snoring after 9/11 had a significantly lower BMI than previous habitual snorers.

Conclusion: Mechanisms other than obesity are important in the pathogenesis of OSA in WTC responders with aerodigestive disorders.

Eosinophilic Esophagitis

- Condition is not well understood, but thought to be allergic, inflammatory, may be associated with food allergy
- Symptoms are swallowing difficulty, food impaction, and heartburn
- Dx by clinical pathology on endoscopy
- 15 eosinophils/HPF, concentric rings



**Prevalence of Eosinophilic Esophagitis Among
WTC Rescue Workers**

Karl Kwok, David Lee, Hazar Michael, Eric Shen, Carol Perret, Iris Udasin

**Abstract presented at Digestive Disease Week,
May 2009**

EE: New Jersey Experience

- Retrospective review of 45 patients referred to GI for refractory heartburn
- Average age 49, BMI 27.7
- 20 patients on inhaled steroids
- 27 patients had endoscopy
- 3 had EE

Since this review, we identified at least 5 more patients in NJ cohort

Cancer Cases Identified in New Jersey

Hematopoietic Malignancies

- Multiple Myeloma
 - 4 cases
 - Age at diagnosis : 58, 51, 56, 68
- Non-Hodgkin's Lymphoma
 - 5 cases
 - Age at diagnosis: 35, 41, 45, 64, 36
 - 4 are low enforcement
- CLL
 - 2 cases
 - Age at diagnosis: 56, 51
- AML
 - 1 case (age 37)
- Myelofibrosis
 - 1 case (age 45)

Head and Neck Cancer

- 5 cases in NJ, 4 are squamous cell

Age at diagnosis: (39, 41, 42, 41, 40)

- 1- Construction worker
 - 2- Verizon / communications
 - 2- Law enforcement
-

Other Cancers Seen in NJ

- Adenocarcinoma of lung (2 cases)
 - Non small cell lung cancer (2 cases)
 - Thyroid (2 cases)
 - Epitheloid sarcoma first noted in hand, spread to lung
 - Liposarcoma (2 cases)
 - GI cancers, prostate, Breast
-

Questions

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