

# Pollution Prevention Partnership



# Texas A&M University-Corpus Christi



# Air Quality and Pediatric Respiratory Health Research



# An Air Quality/Public Health Study

- How to Set One Up
- Partners
- Criteria
- Methodology
- Benefits

# Approach the Approachable

- Asthma Coalitions
- Pulmonary Doctors
- Allergists
- Teaching Hospitals
- University Nursing, Sociology and Business Programs
- Clinics
- Air Quality Regulator Databases

# Unique Study

- **Attainment area**
- **High incidence of asthma -12% rate of asthma in predominantly Hispanic community**

# Driscoll Children's Hospital



# Driscoll Children's Hospital

- Serves all of South Texas
- 14 counties
- 516,188 children under the age of 18.
- 40% of the children live below the national poverty level
- 31.3% do not have health insurance



# Texas A&M University-College of Nursing

- Undergraduate and Graduate nursing programs
- 40 undergraduate and graduate students will be trained on data collection, asthma education, and working with underserved children

# Define Study

- **What do you really want to know**
- **What do you want to do with the information**
- **What do you want to report and to whom**
- **Work epi and stat needs backwards**
- **Build criteria**

# Study

- Is there a relationship between attainment ozone and PM levels and pediatric health
- Communicate the study results to those that can make a difference
- Child care and health care providers
- “Emitters”

# Criteria

- Recruit and involve all partners
- Literature review
- ICD 9 code – 460-519
- Date and time, code, age, gender, ethnicity, zip code, x times
- Minimum of 3 years period

# Methodology

- Electronic sorting and abstracting
- Random number assignment
- Exempt status – no human subjects, no informed consent, group data compilation
- Retrospective Correlational Design – SPSS Stat. Pkg. 11.5

# Information Presentation



Allergens



P M Levels



Ozone Levels



Hospital Data

# Benefits of Study

- **Driscoll Benefits**
- **Nursing Benefits**
- **Asthma Coalition Benefits**
- **Community Benefits**

# Study Stats and Status

- **Stats**
  - \$30,000
  - 1 year
- **Status**
  - Data analysis - in process
  - Additional epidemiological work – future funding
  - Reporting out



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