

## **The Role of Governmental Agencies and the Environmental Public Health Tracking Network**

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Thank you for attending this short, but important conference on pediatric environmental health. The Houston Department of Health and Human Services is pleased to be a co-sponsor of this event.

As some of you may know, I'm rather new to the City of Houston. I was raised in Georgia, spent time in Alabama. Worked in Maricopa County Arizona for a while and most recently was the director of the Travis County Health and Human Services Department.

I've enjoyed my first year in Houston, but I must admit that I am generally impressed, frequently surprised and occasionally appalled at this huge, complex and diverse community.

All but the first 50 years of Houston's history is intertwined with the petrochemical industry. But the first 50 years were no picnic. Yellow Fever's annual arrival could be expected to kill over ten percent of the city's population. Malaria and typhoid were also frequent seasonal risks. The city's weather, climate and lack of elevation were key features in the early health outlook of the city.

Cotton and timber were the early industries, industries that were aided by their proximity to shipping

The first area oil field was discovered in 1908. The Houston Ship Channel was completed in 1914. The first refinery was built on the Channel in 1918. Today the region is host to more than 50 percent of the nation's petrochemical production.

Petrochemical plants, barges, pipelines and other infrastructure release large quantities of volatile organic compounds into the air. Combustion of fuel in on-road vehicles and off-road equipment contributes VOCs and considerable nitrogen oxides contributing to our ozone problem.

The most common response, until relatively recently, to the pervasive stink of the Ship Channel was “It smells like money!” Houston has been blessed by the generosity of the early industrialists and cursed by their legacy of significant environmental impact and resistance to regulation.

So here’s one of those appalling things about Houston. In spite of our wealth and medical research capacity and institutions of higher learning, we do not know the health impacts of the industries we live with.

The Texas Medical Center was launched in the early 20<sup>th</sup> century by the financial interests of MD Anderson, a financier of cotton exports. The very streets of the TMC bear the names of many early industrialists: MD Anderson, Ross Sterling, Lamar Flemming,

I wonder why the TMC institutions avoided environmental health studies for all these years?

In the last century, chronic diseases replaced infectious disease as the leading cause of death in the United States. Chronic conditions such as cardiovascular disease, cancer and diabetes are among the most prevalent, costly and preventable of all health problems. Annually, 70 percent of American deaths, more than 1.7 million people, die from chronic disease.

The medical care costs for people with chronic disease total more than \$400 billion annually and constitute 60 percent of total medical expenditures. Cardiovascular disease and cancer account for almost two-thirds of all deaths.

An estimated 500,500 local residents, approximately 15 percent of Houston/Harris

County, are affected directly by lung cancer, chronic bronchitis, childhood and adult asthma and emphysema.

The Houston area leads the nation for ozone pollution and Harris County is number two in the nation for releases of toxic air emissions. In 1998, Harris County industries reported almost 26 million pounds of toxic chemicals released into the air. The Houston metropolitan area reported 44.2 million pounds of toxic emissions for the same period.

Disease prevalence in populations and ecosystems is influenced by numerous factors including infectious organisms such as fungi and viruses, pollutants such as chemical and biological wastes and shortages of food and nutrients. More than 300 chemicals released by manufacturers and communities are tracked by the Toxic Release Inventory. Once released, these and other toxic substances inevitably affect the nearby ecosystems and humans directly or indirectly.

Nationally and locally, there is an environmental health gap:

- There is a lack of basic information that could document possible links between environmental hazards and chronic disease.
- There is a lack of critical information needed to reduce and prevent negative environmental exposures
- While overt poisoning from environmental toxins has long been recognized, the environmental links to a broad array of chronic diseases of uncertain causes is unknown.

The Environmental Public Health Tracking Network was established to address these gaps in our local and national knowledge. HDHHS is one of only three local sites in the nation to receive funding for this study.

The objectives of the EPHTN grant include:

- Identify populations at risk and respond to outbreaks, clusters and emerging threats
- Establish the relationship between environmental hazards and disease

- Guide intervention and prevention strategies including lifestyle improvements
- Identify, reduce and prevent harmful environmental risks
- Improve the public health basis for policy making
- Enable the public's right to know about health and the environment
- Track progress in achieving a healthier nation and environment.

The EPHTN grant has busily formed coalitions, alliances and contracts too numerous to mention tonight over the past two years to reach our objectives...

Providing the numerous services offered locally to our extremely diverse population can be very challenging logistically and economically. Houston's unique environmental challenges make innovative and comprehensive environmental health services extremely crucial. On behalf of the Mayor and HDHHS I look forward to your assistance and input on this important project.

Thank you.