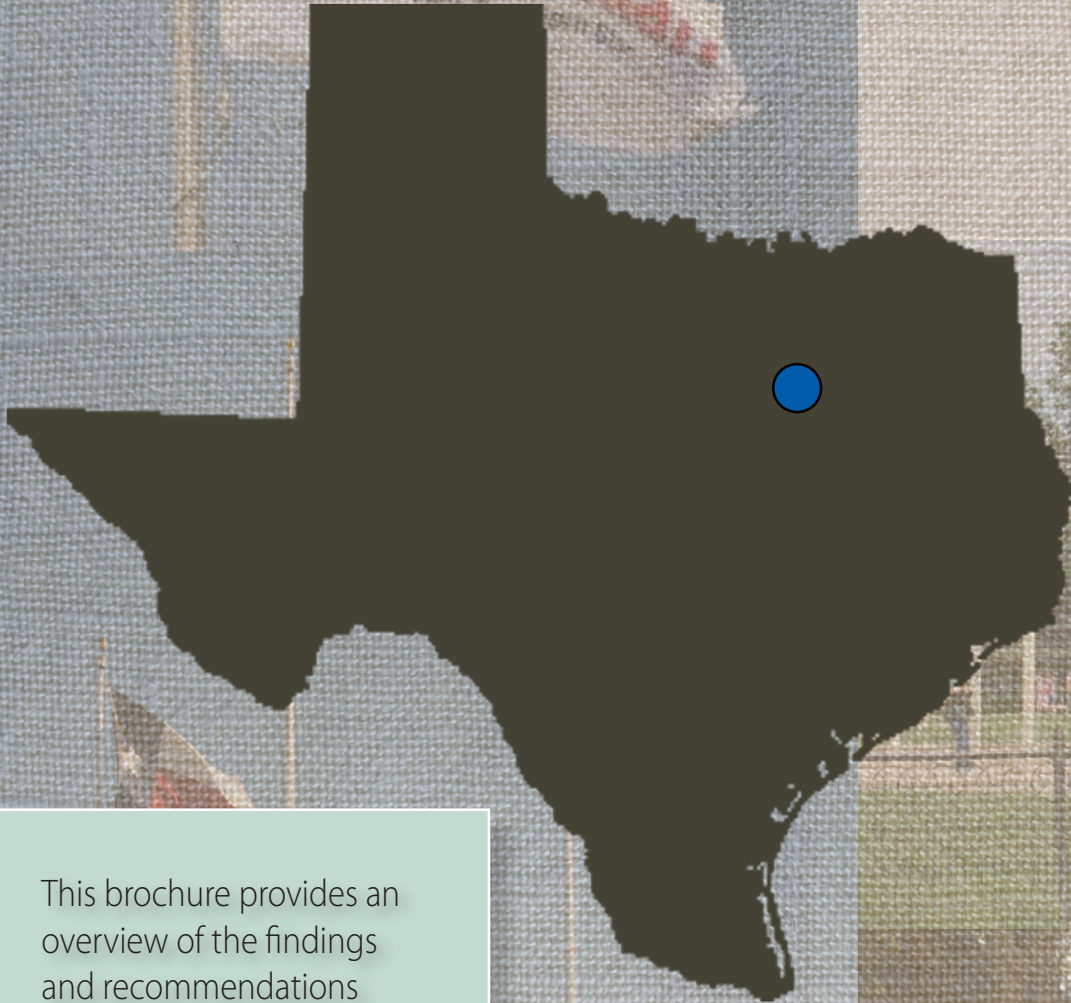


Evaluation of Health Outcome Data *as part of the* Midlothian Area Air Quality Petition Response Midlothian, Ellis County, Texas



This brochure provides an overview of the findings and recommendations from one of the six health consultations prepared for the Midlothian Area Air Quality Petition Response, Midlothian, Texas.



Agency for Toxic Substances and Disease Registry
Division of Community Health Investigations



Midlothian Site Midlothian, Texas

Introduction

In response to community concerns, the Agency for Toxic Substances and Disease Registry (ATSDR), a federal public health agency, is working with the Texas Department of State Health Services (DSHS) to determine whether pollutants in Midlothian could cause health problems in people and animals. This health consultation looks at the overall health status of the community by evaluating health outcome data¹. This is one of a series of six health consultations prepared by ATSDR for this site.



The Bottom Line

Disease rates were no higher in Midlothian than in other communities in Texas.

●	Birth defects rates in Midlothian were similar to rates in Ellis County, Health Region 3, and the state of Texas.
●	In the Midlothian ZIP code 76065, new cancer cases and the death rates of people with cancer are the same as the state of Texas
●	The blood lead levels in children tested in Midlothian were the same as those tested in Texas statewide.
●	The rates of asthma and other chronic respiratory diseases, such as COPD, bronchitis, and emphysema, were similar in Midlothian ZIP code 76065, Ellis County, Health Region 3, and Texas.
●	There are no public health reporting systems for severe symptoms such as headache or burning eyes and throat. The health consultation on Midlothian air quality data show there were periods of time when irritant chemicals were present and residents may have experience these symptoms.

● Green means we don't believe there is a problem.

● Yellow means we don't know if there is a problem, or there may have been a problem in the past.

Community Concerns

Since 2005, ATSDR and DSHS have been keeping a record of community concerns regarding the Midlothian facilities. The health issues community members wanted ATSDR to look at:

- Disease rates in Midlothian as compared to other communities.
- The impact of chemicals on pregnant women, infants, children, the elderly, and people whose immune systems are not functioning properly.
- Birth defects, including hypospadias and Down syndrome.
- Cancer rates, including childhood cancer and leukemia.
- Rates of respiratory problems, such as asthma.
- Specific health effects, such as amyotrophic lateral sclerosis (ALS) and Graves disease.



¹Health outcome data is a collection of information used to determine the rate of disease in one population with a reference population, such as a county, the state, or the United States.

Questions and Answers about This Health Consultation

What did ATSDR do?

ATSDR reviewed current available Health Outcome Data (HOD) for the Midlothian area by looking at a number of data sources to gain a picture of the health status of the community. The evaluation includes:

- birth defects
- other adverse birth outcomes
- cancer rates
- mortality (death) data
- asthma
- chronic disease rates
- other community health concerns.

This HOD evaluation used existing sources to help address concerns about different health issues in the Midlothian area. The DSHS maintains several health outcome data bases that were used to generate area-specific information. These databases include the birth defects registry, the cancer registry, vital statistics records (birth and death certificates), and hospital discharge information. These data bases are well maintained and follow national standards.

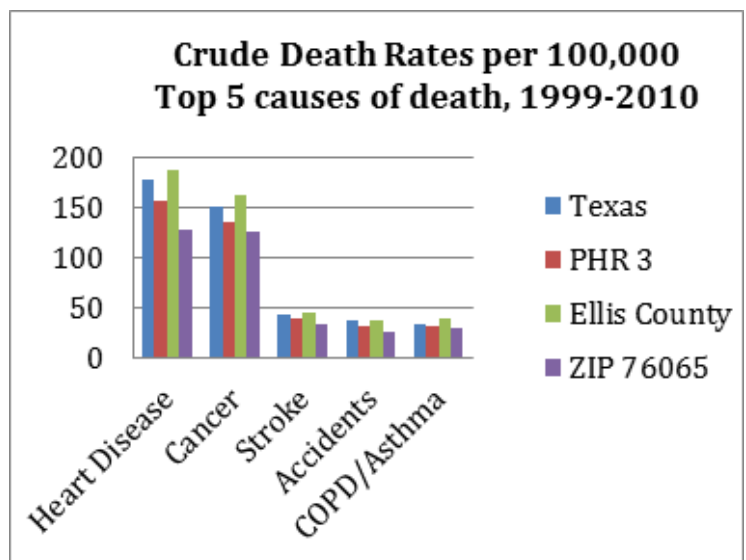
The DSHS also participates in several national health surveillance studies such as the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS) and the Childhood Lead Poisoning Prevention Program (CLPPP). The combined evaluation of these multiple data sources provided information that helped describe the health status of the Midlothian community.

While this data review could not tell us if the chemicals of concern at the site are directly tied to the illnesses that are of interest to the community; it did provide an overview of the community's health. This is important information because it helps public health agencies focus on prevention efforts.

What did ATSDR find?

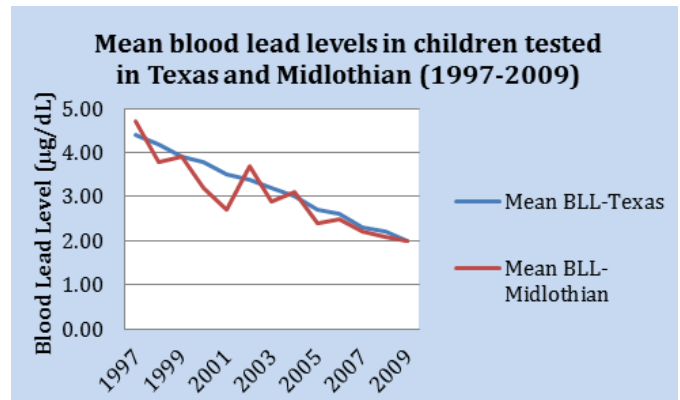
After reviewing the HOD, ATSDR concluded that:

- Birth defects rates in the Midlothian area were similar to those in Ellis County, Health Region 3, and Texas.
 - Rates for hypospadias (a condition where the urinary opening is on the underside of the penis) were higher in Midlothian, Ellis County, and Public Health Region 3 when compared to rates in the state of Texas. When adjusted for the mother's age and race, hypospadias rates in Midlothian were not different than the rates in Public Health Region 3 or Texas.
 - There were no differences in the unadjusted or mother's age and race adjusted rate of Down syndrome in Midlothian and Ellis County when compared to the state of Texas.



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- Rates for preterm births, low birth weight births, very low birth weight births, fetal deaths, and infant deaths in Midlothian were not different than rates in Ellis County or the state of Texas.
- New cancer cases and the death rate from cancer, including leukemia and childhood cancers, in the Midlothian ZIP code 76065 were the same as the rates in Texas.
- Death rates in the Midlothian ZIP code 76065 were similar to the rates in the state of Texas.
- Children, between the ages of 1 to 5, tested in the city of Midlothian have similar blood lead levels to those tested elsewhere in the state of Texas.
- BRFSS data show that the current rate of adult and childhood asthma in the Midlothian area was similar to Ellis County, Public Health Region 3, and the state of Texas. These rates were similar to those in the United States.
- Adult cardiovascular diseases and risk factors show that the Midlothian area is similar to comparison populations. The rates of hypertension, coronary heart diseases, and stroke were similar to those in the United States.
- The rate of diabetes was similar in Midlothian ZIP code 76065, Ellis County, Health Region 3, and the state of Texas.
- There was no information available from public health reporting systems to evaluate how often irritant symptoms happened such as headache, burning eyes and throat, rash, and nosebleeds. The health consultation on Midlothian air quality data show that there were periods of time when sulfur oxides and particulates were present at levels high enough to cause irritant symptoms, such as burning eyes and throat. Midlothian residents may have experienced these symptoms during those times.
- No reporting systems exist to evaluate autoimmune diseases, ALS, and some other community health concerns in the Midlothian area.
- Information available did not allow for conclusions to be made about community concerns on autism and attention deficit hyperactivity disorder (ADHD).



What can I do to protect my health?

If you are worried that chemical or particulate matter in the air is affecting your health, we recommend that you visit your doctor or talk about your concerns.

To get more information about ATSDR's public health activities in Midlothian, visit our website at: www.atsdr.cdc.gov/sites/midlothian/.



What are the next steps?

- ATSDR and DSHS will meet with Midlothian community members to share and answer questions about the findings in this Health Consultation.
- At this time, ATSDR is not requesting additional health outcome data from DSHS and there are no recommendations for additional health studies.