Albany South End Community Health Outcome Review

Background:
Residents and community leaders in Albany’s South End neighborhood have expressed concerns about health effects in the community related to air pollution. Air quality in the area is impacted by heavy truck and other diesel vehicle traffic, train traffic and activities at the port of Albany. The Ezra Prentice community is particularly concerned, due to the high traffic rates in the area and their close proximity to the port. In response to these concerns, and in consultation with the Albany County Department of Health, the New York State Department of Health (NYSDOH) conducted a Health Outcome Review. A health outcome review is a type of epidemiological health study which compares rates of disease in one community to those in another area.

About the Health Outcome Review:
- Health outcome rates in the South End were compared to those in the Arbor Hill/West Hill neighborhood and to Albany County
- Health outcomes studied: Asthma, COPD (chronic obstructive pulmonary disease), acute bronchitis, hypertension, myocardial infarction (heart attack), and diabetes
- Data evaluated: Hospital admissions and emergency department visits from 2005-2015

Key Findings:

The NYSDOH compared hospitalization rates in the South End neighborhood to those in Albany County to determine how the South End community compared with the county as a whole.

Hospitalization rates for asthma, COPD, acute bronchitis, hypertension, myocardial infarction (heart attack), and diabetes were all higher in the South End neighborhood than in Albany County.

* Statistically significant difference
Key Findings:

To determine how hospitalization rates compared to other communities in Albany, we compared the South End neighborhood to a community similar in socioeconomic and racial composition.

Hospitalization rates of asthma, COPD, acute bronchitis, and hypertension were higher in the South End neighborhood compared to those in the Arbor Hill/West Hill neighborhoods.

![Hospitalization Rates per 1,000 for South End Study Area Compared to Arbor Hill/West Hill, 2005-2015]

* Statistically significant difference

Additional Findings:

- Emergency department visits for asthma were almost 20% higher than expected among children under 5 in the South End neighborhood when compared to those in the Arbor Hill/West Hill neighborhoods.

- Hospitalizations for those with COPD, hypertension and diabetes were about 30% higher than expected for people living in the Ezra Prentice/Mount Hope community compared to those in the Arbor Hill/West Hill neighborhoods.

Discussion:

Overall, the hospital admissions data show some substantial and consistent elevations for COPD, acute bronchitis, hypertension and diabetes in the South End study area compared to the Arbor Hill/West Hill area. Smaller area analyses were less conclusive, but it is difficult to study disease rates in very small areas because the total number of cases is small. While differences in the health outcome rates suggest exposures may differ between the two communities, this type of study cannot prove a cause and effect relationship because individual level risk factors could not be taken into account.

In addition, it is important to keep in mind that the health outcomes studied (hospital admissions and emergency department visits) do not provide a complete picture of disease burden in the community. While these data reflect the most severely affected individuals, they miss a large portion of those affected by the disease, including those who manage their disease through regular visits to their primary care provider and with medication.

Conclusions:

The health outcome review findings support actions being taken by NYSDEC, the City of Albany, NYSDOT and the Albany Housing Authority to reduce air pollution in the Ezra Prentice neighborhood.

More details about the study are provided on the NYSDOH website.

For additional information contact:

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