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September 26, 2018

VIA EMAIL

Mayor Frank Trilla
Village of Willowbrook
835 Midway Drive
Willowbrook, IL 60527

Re: Update on cancer incidence study activities and responses to constituents' questions

Dear Mayor Trilla and Willowbrook officials:

Thank you for meeting with us on September 11, 2018. We understand your concerns and interest in this important, complicated study. As we discussed at that meeting, IDPH is pleased to provide periodic updates on the epidemiologic study that will assess cancer incidence in the population surrounding the Sterigenics facility. The study's methodology is to examine cancer occurrence data over many years from the study area and compare them to the county and state numbers. Demographic differences between populations will be statistically adjusted in this comparison.

Since our meeting, we have undertaken the following activities:

1. Obtained air monitoring and modeling shape files from ATSDR and matched them to GIS maps to determine appropriate scopes for the cancer incidence study
2. Started a literature review on ethylene oxide exposure and cancer associations
3. Started data cleaning and conducted quality control for cancer data in and around Willowbrook
4. We have begun the process of converting, or "geocoding," physical addresses to specific geographical coordinates. For questionable records with inaccurate locations, our epidemiologists make a number of efforts to correct the data, including following it back to the original medical records. This will be a time-consuming process but it must be done to ensure the accuracy of data, which allows for accurate determination of locations.

We will continue to keep you updated regarding the status of our study. We also thank you for passing along the questions you have received from your constituents. Below are our answers to these questions:

1. *Have actual cancer rates (both type and frequency) in the affected area been reflective of the rates cited in the report?*

Answering this question is ultimate the goal of the Willowbrook cancer incidence study; however, at this stage, it is too early to say. We have prioritized this study and are moving quickly according to the plan we shared with Willowbrook leadership. At this time, however, we have not reached the point where we can look at actual results.

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2. *Is there any data available on the incidence of cancer of people living/working/attending school in the area vs. other non-affected areas?*

We unfortunately do not have complete data at this point because we are in the early stages of the study. We will be using data from the Illinois State Cancer Registry (“Registry”), which is the only population-based source of cancer data in our state, and including individuals who lived in the study area at the time of cancer diagnosis. Using the Registry also means that individuals who lived somewhere else when their cancer was diagnosed will not be included. Unfortunately, no information is available from the Registry regarding whether and where someone was working or attending school.

3. *What are the effects of exposure to look for in adults and children other than lifetime cancer risk? I am not interested in the elevated percentage of cancer across tracts, I want to know at the 2014 rates you have quantified in our region, what would be the physical side effects of this level of exposure for an otherwise healthy child age 5-15, and an adult age 30-50?*

For possible non-cancer health effects please consult with the ATSDR or U.S. EPA. Here are the links to the relevant documents from these agencies:

- ATSDR: <https://www.atsdr.cdc.gov/toxprofiles/tp.asp?id=734&tid=133>;
- US EPA: <https://www.epa.gov/sites/production/files/2016-09/documents/ethylene-oxide.pdf>

4. *What type of data do you have about how the higher levels of emissions before 2001 have affected cancer rates of those who live and work in the area?*

We plan to examine multiple years of data for cancer cases that were diagnosed while individuals were residents of the area. Our state cancer registry is one of the best in the country and has high-quality data (as certified by external organizations) going back 20 years. For this study, we intend to use all the high-quality data available from the state cancer registry.

As we discussed, IDPH will conduct our study using the highest scientific standards. We would like to reiterate that our study, as with any epidemiological study, cannot and will not prove causality. The most it can show is an association, if any, between living in the exposure area and cancer. As a general rule in epidemiological research, a correlation between an exposure and a disease does not necessarily mean that the exposure caused the disease.

We will continue to provide regular updates to the Village of Willowbrook so that you are able to keep the community informed. Thank you again.

Sincerely,



Bill Dart, MBA
Deputy Director
Office of Policy, Planning and Statistics

cc: Director Shah, IDPH
Division Chief Shen, Epidemiologic Studies