Evaluation of Lung Cancer and Other Health Outcomes in Response to Concerns about an Area of Elevated Lung Cancer Incidence (Albany, Rensselaer, and Saratoga Counties)

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Report prepared by:

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INTRODUCTION

The New York State Department of Health (NYS DOH) conducted a review of health outcome, behavioral, and environmental health data in response to questions from certain members of the community regarding health outcomes in an area of elevated lung cancer incidence. This area includes the Norlite, LLC facility in the City of Cohoes. The overall objective was to make available in one report the health outcome and risk factor data that are currently available for the geographic area in question. We examined the patterns of lung cancer and data on emergency department visits and hospitalization for asthma, chronic obstructive pulmonary disease (COPD), myocardial infarction, and silicosis. Additionally, we examined data on smoking, a major risk factor for lung cancer and other respiratory and cardiovascular diseases, and radon, a major risk factor for lung cancer. Environmental data related to general air quality indicators for particular stationary or mobile (e.g., local highway traffic) sources were not part of the current review. This document summarizes the methods used for various analyses and reports its findings.

This type of review cannot prove whether specific exposures may have caused or contributed to health outcomes in a community, nor can it determine the cause of any specific individual's health problem. The relationship between various environmental and behavioral factors and risk for specific health outcomes is complex and would require knowledge at the individual level about residential history, past and current individual exposures and other factors to further explore possible associations. The data currently available to NYSDOH does not include individual-level air quality information or exposure histories. The findings of this type of review may be used, together with findings from other similar investigations, to suggest hypotheses for more in-depth research studies. This report may also be useful to residents because it provides information about levels of health outcomes in their area.

BACKGROUND

In 2022, members of the community group Lights Out Norlite contacted NYS DOH with concerns about the elevation of lung cancer identified by Lung Cancer Highlighted Area LU-H-6 displayed on the Department's Environmental Facilities and Cancer Mapping application (https://www.health.ny.gov/statistics/cancer/environmental_facilities/mapping/), and within which Norlite is located. Also of concern to the community group members was the occurrence of other types of respiratory and cardiovascular effects in the area. Over the course of several weeks, NYS DOH and the representatives of Lights Out Norlite agreed on an analysis plan (described below) that would help address the community's concerns and assess well-established risk factors for lung cancer.

The Norlite facility is in the City of Cohoes, Albany County and its operation is permitted and regulated by the NYS Department of Environmental Conservation (NYS DEC). Operations at the facility, which opened in 1956, include mining shale, crushing it, heating it in high-temperature kilns, and then crushing it to the desired size to produce a lightweight aggregate material. The final aggregate material is stored on the property. Fugitive dust from the facility was the subject of a comprehensive off-site dust study by the NYS DEC in 2021. In addition, Norlite burns liquid hazardous waste, waste fuels, fuel oils, and natural gas to heat the kilns under current permits. Additional information about the facility and previous state and federal agency reports is available at: https://www.dec.ny.gov/chemical/121118.html.

ANALYSIS PLAN AND DATA SOURCES

1. **Refine the spatial boundaries of areas with high lung cancer incidence using the 2011-2015 data from the NYS Cancer Registry.** Based on sociodemographic characteristics, NYS excluding Bronx, Brooklyn, Manhattan, and Queens (NYS excl. BBMQ) is a more appropriate reference population for Albany, Rensselaer, and Saratoga counties when evaluating cancer. Therefore, the sex and age-specific lung cancer incidence rates for NYS excl. BBMQ were used to calculate the expected numbers of lung cancer cases in small geographic areas statewide. An analysis using SaTScan was then conducted to identify and update the areas with a statistically significant excess of 50% or more in lung cancer incidence across NYS excl. BBMQ. SaTScan is used to identify areas of higher- or lower- than expected incidence and to test whether a disease is randomly distributed over space. The specific area of higher-than-expected lung cancer incidence which includes the Norlite facility (Study Area) is the focus of the analyses in this report.

2. **Evaluate patterns of lung cancer incidence in the Study Area using the 2011-2015 data from the NYS Cancer Registry.** The sex and age-specific lung cancer incidence rates for NYS excl. BBMQ were used to calculate the expected numbers of lung cancer cases in the Study Area. For both sexes, NYS DOH examined lung cancer incidence by age group and by cancer cell type (histology). Statistical testing was used to determine the probability that the findings obtained could have occurred by chance. In the evaluations of observed and expected numbers of cancer cases, findings are compared with tables of the Poisson distribution, which describes a process where a rare event occurs in a large population. If the probability of observing an excess is 0.025 or less, the result was considered statistically significant. Nonsignificant excesses or deficits were considered to represent random variations in observed patterns of disease. In addition, NYS DOH compared the proportions of non-smokers among lung cancer patients by cell types in the Study Area to those in the NYS excl. BBMQ area and to other areas of higher-than-expected lung cancer incidence identified by the SatScan in step 1 (above).

3. **Evaluate asthma, chronic obstructive pulmonary disease (COPD), cardiovascular, and silicosis emergency department visits and hospitalizations using 2011-2015 data from the Statewide Planning and Research Cooperative System (SPARCS).** NYS DOH calculated rates of emergency department visits and hospitalization using geocoded records and 2010 population data. Rates are presented as number per 10,000 residents and Study Area rates are compared to NYS excl. New York City (NYC).

4. **Evaluate smoking prevalence using 2013-2014 and 2016 data from the Expanded Behavioral Risk Factor Surveillance Survey (eBRFSS).** NYS DOH calculated prevalence of current smoking using self-reported data from two eBRFSS surveys (note that the eBRFSS is not conducted each year). Prevalence is presented for Study Area ZIP codes, Study Area counties, and NYS excl. NYC.

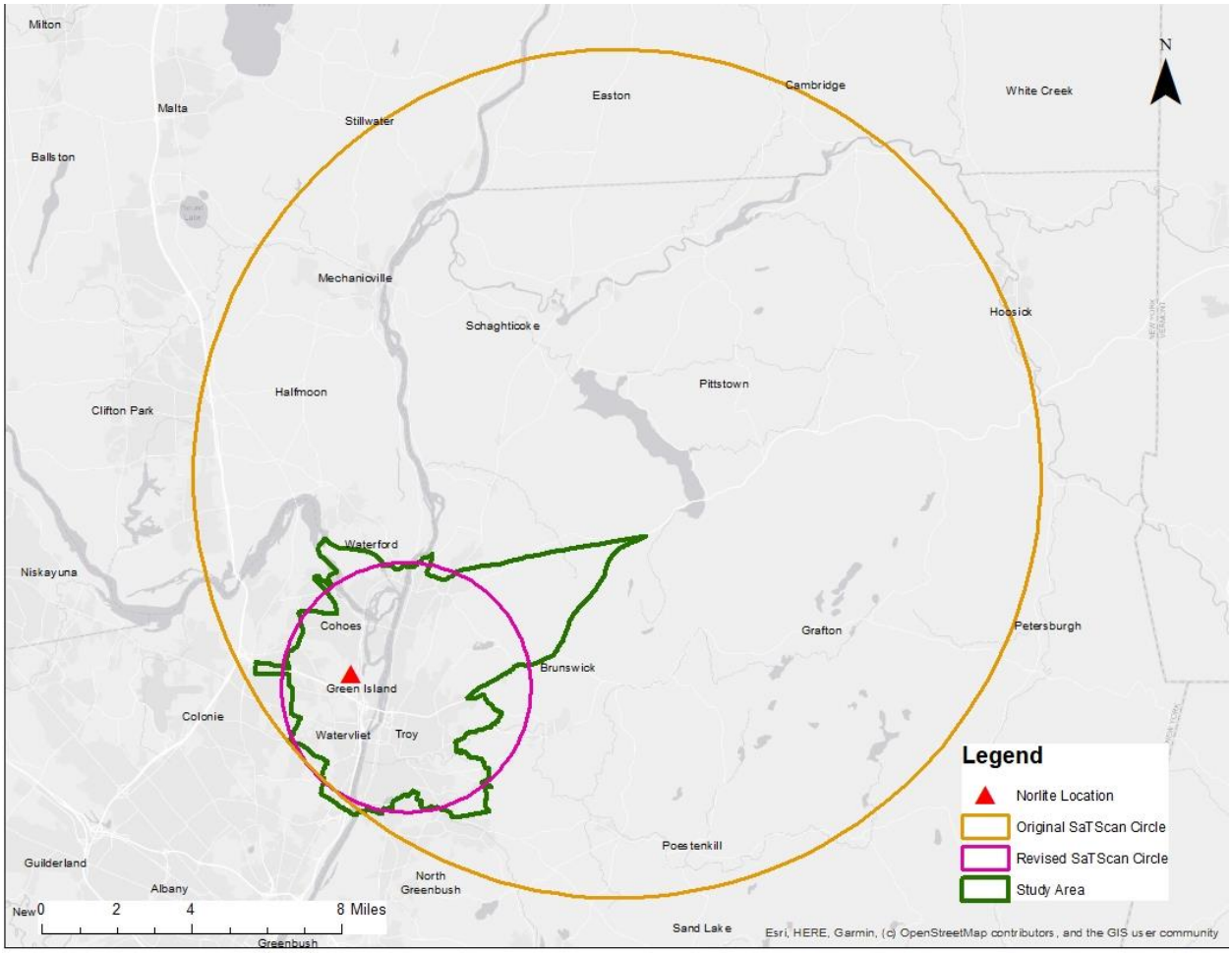
5. **Evaluate indoor radon test results using 2000-2017 data from the NYSDOH Radon Program.** NYS DOH calculated mean and median radon levels and the proportion of tests above the US Environmental Protection Agency's recommended action level of 4 pCi/L. Residential radon test results are presented by floor level in the Study Area, Study Area counties, and NYS excl. NYC.

Links to information about data sources and SaTScan analysis is available in Appendix A.

RESULTS

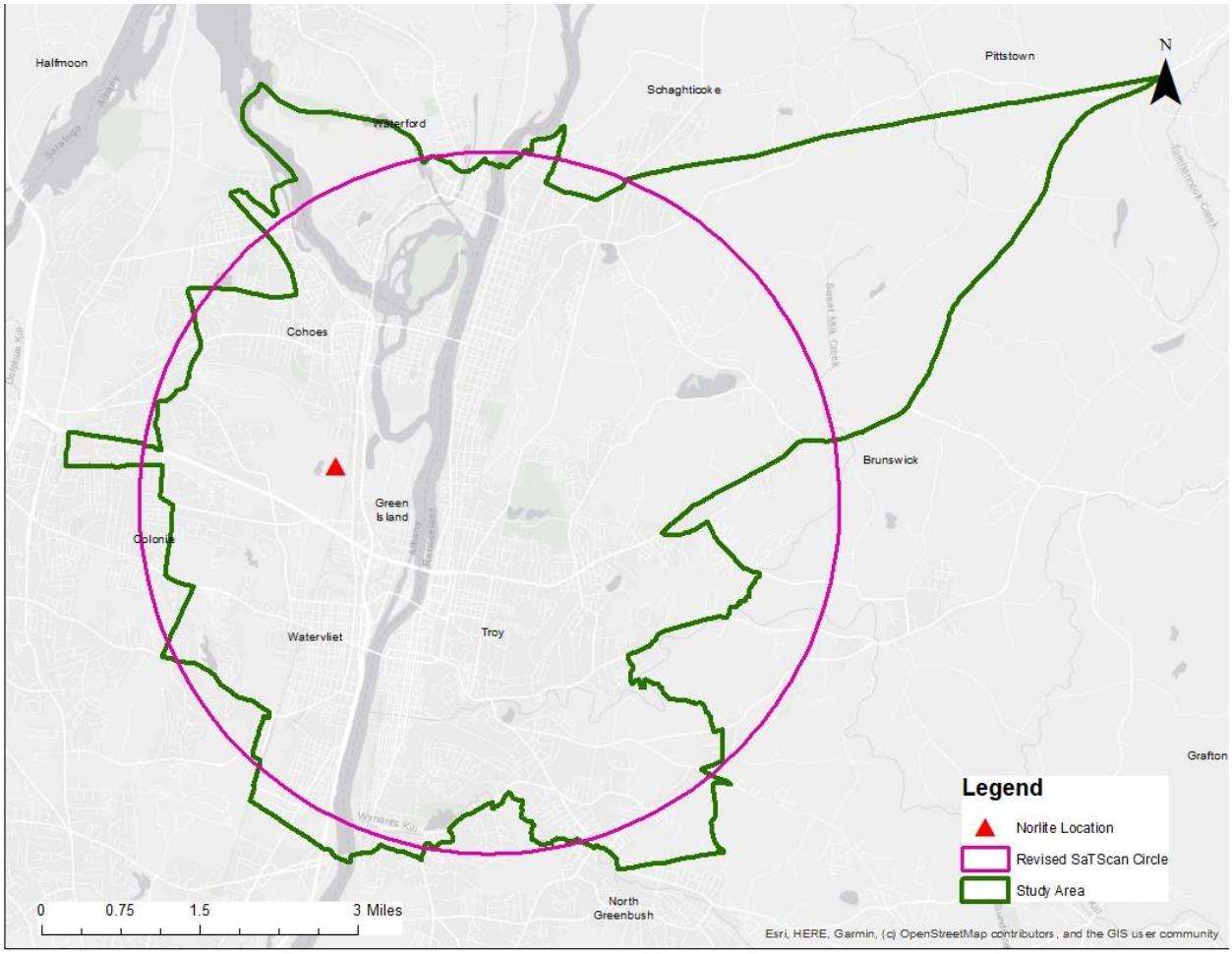
Refined Study Area

Figure 1. Original and Refined Elevated Lung Cancer SaTScan Areas



- When NYS was used as the reference population, SatScan analysis identified a total of 24 areas across the state where lung cancer was higher than expected between 2011 and 2015. The area containing the Norlite Facility had a radius of 11.3 miles.
- The refined SaTScan analysis, which used NYS excl. BBMQ as the reference population, identified 20 areas across NYS excl. BBMQ with a statistically significant excess of 50% or more in lung cancer incidence. Some of the areas of elevated incidence from the original SatScan analysis were no longer elevated in the revised analysis. A few of the larger areas of elevated incidence were split into several smaller areas. The original area of elevated lung cancer incidence containing the Norlite Facility was one of these. The refined circle covered an area with a radius of about 3.3 miles.

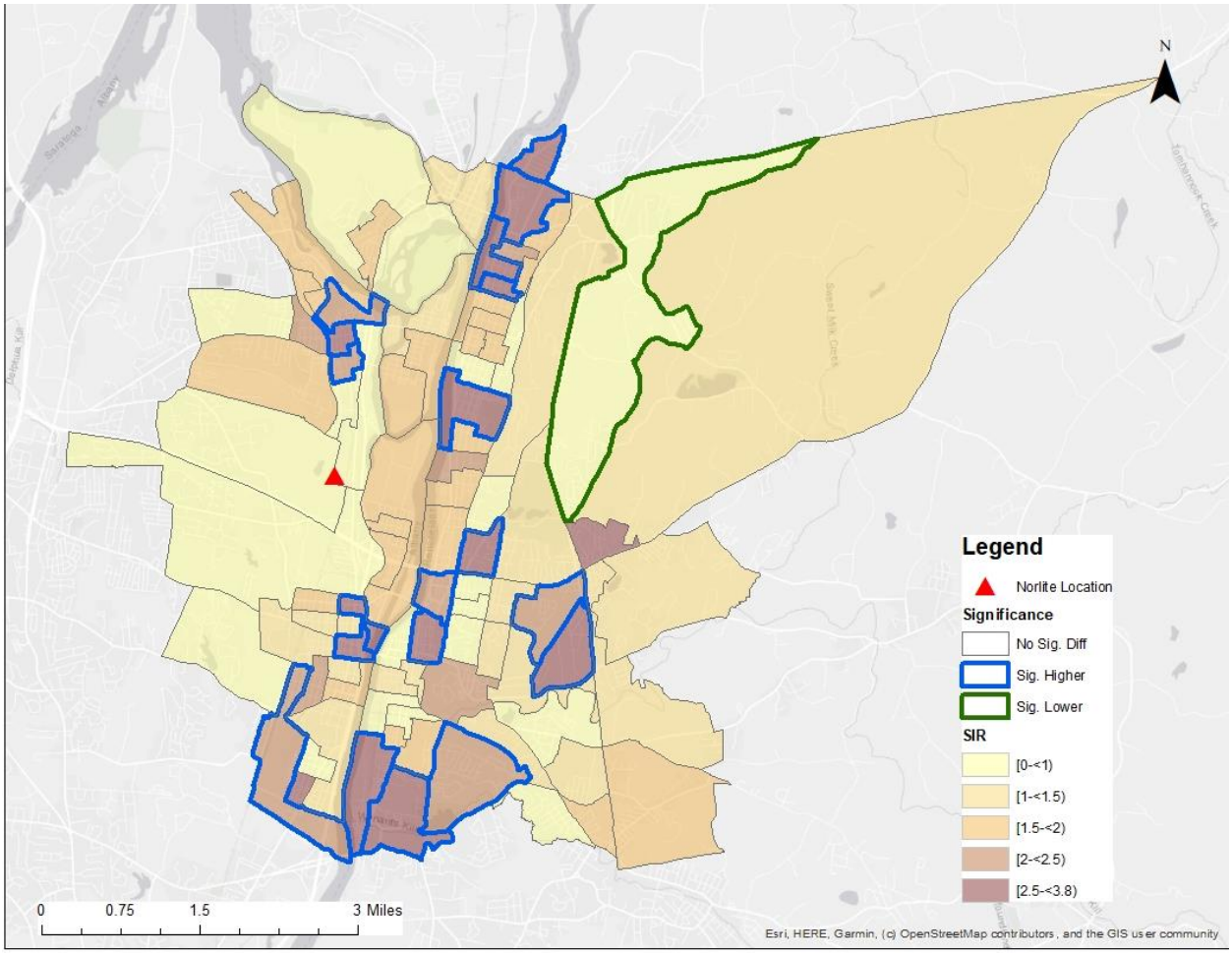
Figure 2. Study Area



- The Study Area shown in Figure 2 included the 89 block groups[1] that have geographic centroids in the area of elevated lung cancer incidence identified in the refined SaTScan analysis. It included parts of the counties of Albany (including the City of Cohoes), Rensselaer, and Saratoga.
- In the Study Area, 533 lung cancer cases were diagnosed (observed) between 2011 and 2015, while 341 cases were expected if the people in the area developed cancer at the same rate as people across NYS excl. BBMQ area. The excess of 56% was statistically significant.

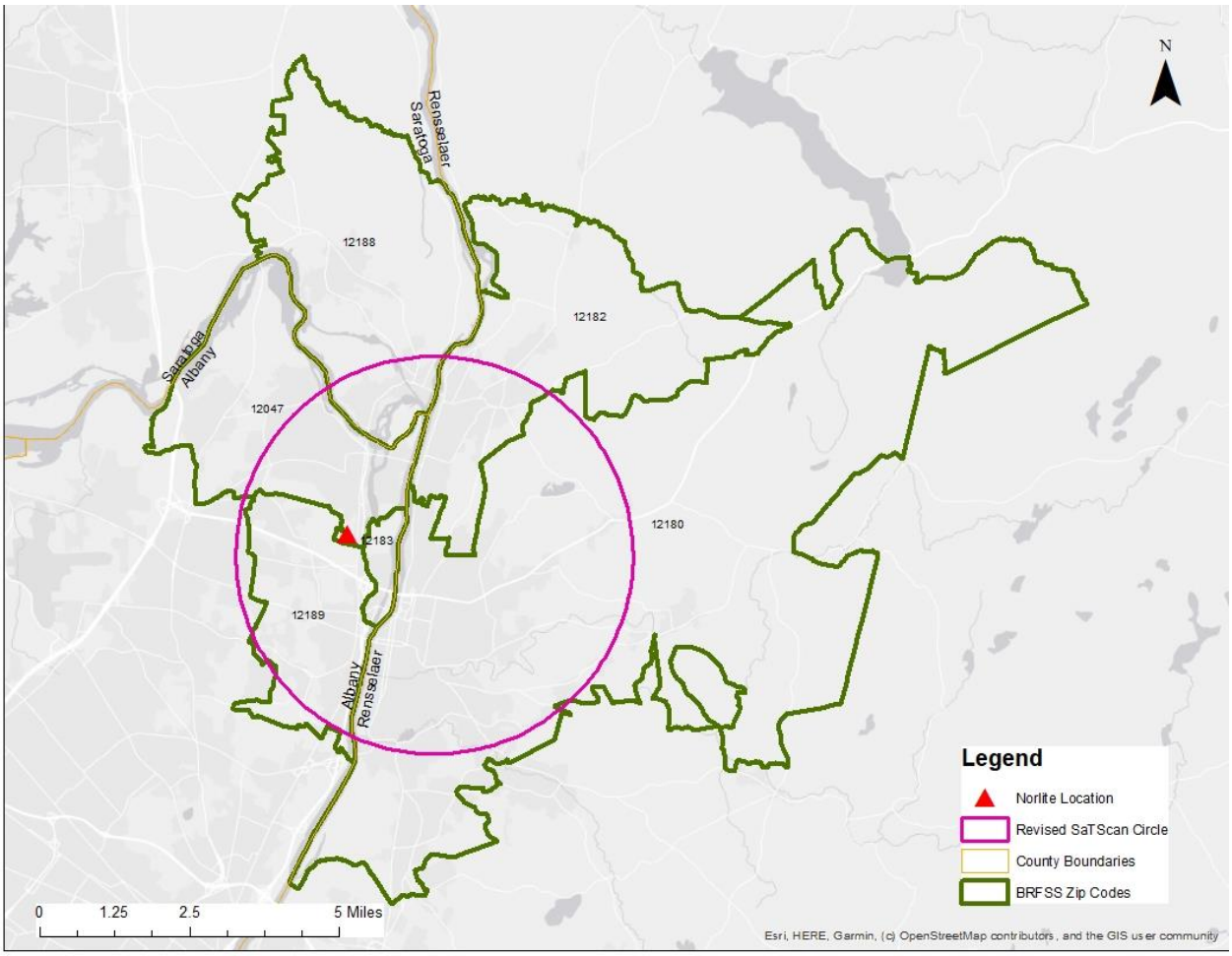
[1] A block group is a geographic area defined by the U.S. Census. It is a collection of city blocks, or their equivalents in rural areas, containing about 1,000 to 2,000 people.

Figure 3. Standardized Incidence Ratios (SIRs) and Statistical Significance by Block Group



- Standardized incidence ratios (SIRs) are measures of the association between an exposure or risk factor and a health outcome. A ratio of 1.0 means the study population and comparison are the same. A ratio greater than 1.0 means the study population had a higher level of the health outcome than the comparison group, while a ratio of less than 1.0 means the study population had a lower level than the comparison group.
- Some individual block groups within the "high" areas identified by SatScan may have average or even below-average rates. Out of 89 block groups in the Study Area, the observed number of lung cancer cases was lower than the expected in 20 block groups. However, only one had a statistically significant deficit.
- Out of the remaining 69 block groups where SIR values were greater than one, only 19 (28%) had a statistically significant elevation in lung cancer incidence.
- In most block groups in the Study Area (69 out of 89), the lung cancer incidence was statistically not different from the NYS excl. BBMQ comparison group.

Figure 4. eBRFSS Analyses ZIP Codes



- eBRFSS data, which was used to evaluate current smoking prevalence, is only available at the ZIP Code level. This map displays the ZIP codes which are within or partially within the Study Area.
- The revised SaTScan circle includes portions of six ZIP codes (12047, 12180, 12182, 12183, 12188, and 12189).
- eBRFSS data from those six ZIP codes were analyzed for this report.
- Even though the ZIP boundaries extend well past the Study Area boundaries, approximately 74% of the population residing in those ZIP codes live within the Study Area.
- See Table 5 below for the eBRFSS community smoking prevalence results for these zip codes.

Lung Cancer

Age and sex. The average age of lung cancer patients at diagnosis was 67 years for males and 68 years for females in the Study Area, while the average age of lung cancer patients at diagnosis was 70 years for both sexes across NYS excl. BBMQ. Table 1 shows observed and expected numbers of lung cancer diagnoses in the Study Area by sex and age group. To protect patient confidentiality, some results were not shown due to low numbers reported in their respective categories.

Table 1. Observed and expected number of lung cancer cases by sex and broad age group in the Study Area, 2011-2015

Age (years)	Males			Females		
	Observed	Expected	Excess (%)	Observed	Expected	Excess (%)
0-39	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*
40-64	*ns*	*ns*	127 *	*ns*	*ns*	91 *
65+	150	109.1	37 *	166	127.9	30 *
Total	264	159.3	66 *	269	181.5	48 *

ns: not shown. Data are suppressed to protect patient confidentiality.

* *Statistically significant* ($p < 0.025$)

- For both males and females, observed lung cancer cases were statistically significantly higher than expected in ages 40-64 and 65+ years, but statistically similar to the expected among individuals ages 39 years or younger.
- There were similar statistically significant excesses comparing males to females in the 40-64 and 65+ age groups as well as overall.
- The largest portion of the excess (approximately 55-60%) occurred among ages 40-64 years.
- Data was not shown in cells of Table 1 with less than 6 observed cases and where straightforward calculations could identify the number of observed cases less than 6. This was done to protect patient confidentiality.

Cell Type. Most lung cancers fall into one of two categories: small cell and non-small cell lung cancers. There are three subtypes of non-small cell lung cancers: adenocarcinoma, squamous cell carcinoma, and large cell carcinoma. Table 2 presents observed and expected numbers of the different major types of lung cancer in the Study Area.

Table 2. Observed and expected number of lung cancer cases by cell type and sex in the Study Area, 2011-2015

Cell type	Males			Females		
	Observed	Expected	Excess (%)	Observed	Expected	Excess (%)
Small cell carcinoma	33	17.2	92 *	34	22.2	53 *
Squamous cell carcinoma	76	39.1	94 *	60	29.2	106 *
Adenocarcinoma	96	66.4	45 *	108	86.5	25 *
Large cell carcinoma	18	10.5	72 *	16	11.0	45

* *Statistically significant ($p < 0.025$)*

- For both males and females, there were excesses in all types of lung cancer, though the 45% elevation of large cell carcinoma in females was not statistically significant.
- Adenocarcinoma was the most frequently diagnosed type of lung cancer and the most frequent type expected.
- The largest elevations were in squamous carcinoma and small cell carcinoma. Together, these two subtypes accounted for approximately 50% of the excess in lung cancer incidence in the Study Area.

Smoking Status. The NYS Cancer Registry collects information on tobacco use status for people diagnosed with cancer. Tobacco use among people in the Study Area with lung cancer are displayed in Table 3 by type of lung cancer. For comparison, results for lung cancer patients in the NYS excl. BBMQ area and in other areas of higher-than-expected lung cancer combined are presented.

Table 3. Proportion (%) of lung cancer patients[1] who reported never using tobacco by major cell type, the Study Area compared to NYS excl. BBQM area or other high lung cancer clusters combined, 2011-2015

Cell type	Study Area	NYS excl. BBMQ	Other Areas with Elevated Lung Cancer
Small cell carcinoma	0.0	2.9	3.6
Squamous cell carcinoma	1.6	2.7	2.3
Adenocarcinoma	7.4	10.9	6.7
Large cell carcinoma	3.2	10.3	6.2
Overall	5.1 *	8.7	5.8

[1] Patients with missing tobacco use history were excluded from the analyses.
** Statistically significantly lower compared to NYS excl. BBMQ ($p < 0.025$)*

- Among lung cancer patients whose tobacco use history were reported to the registry, the majority of the people with the most common types of lung cancer reported a history of using tobacco at some time in their lives.
- The percent who had never used tobacco among all lung cancer cases in the Study Area was statistically significantly lower compared to that in the NYS excl. BBMQ area, but statistically similar when controlling for cell type.
- For each cell type, as well as across all cell types, the percent who had never used tobacco in the Study Area was statistically similar to that in the other areas of elevated lung cancer combined.

Non-cancer Health Outcomes

Table 4. Rate[1] and 95% Confidence Interval (CI) of Emergency Department Visits & Hospitalizations in the Study Area compared to NYS excl. NYC, 2011-2015

	Study Area	NYS excl. NYC
Reason & Type		
Asthma		
Emergency Department	80.5 (78.2-82.7)*	49.5 (49.3-49.7)
Hospitalization	10.9 (10.1-11.7)*	9.7 (9.6-9.8)
COPD		
Emergency Department	88.9 (86.5-91.3)*	47.5 (47.4-47.7)
Hospitalization	31.0 (29.6-32.4)*	19.8 (19.7-20.0)
Ischemic Heart Disease		
Emergency Department	3.4 (3.9-3.8)*	4.4 (4.3-4.5)
Hospitalization	5.4 (4.8-6.0)*	8.5 (8.5-8.6)
Myocardial Infarction[2]		
Hospitalization	15.4 (14.5-16.4)*	17.6 (17.5-17.7)
Silicosis		
Emergency Department	0.02 (0.00-0.05)	0.01 (0.01-0.01)
Hospitalization	0.02 (0.00-0.05)	0.01 (0.01-0.01)

[1] per 10,000 population

[2] calculated for ages 35+

** Statistically significant difference*

- Residents of the Study Area were more likely to have an emergency department visit or be hospitalized for asthma and COPD.
- Residents of the Study Area were less likely to have an emergency department visit or be hospitalized for ischemic heart disease. They were also less likely to be hospitalized for myocardial infarction.
- There was no difference in the rates of emergency department visits or hospitalizations for silicosis.

Community smoking prevalence

Table 5. Smoking prevalence in Study Area ZIP Codes, Study Area Counties, and NYS excl. NYC, 2013-2014 and/or 2016.

Area	Number of eBRFSS responses	Prevalence (95% CI)
Study Area ZIPs[1,2]	652	25.3 (20.1-30.6)*
Albany[3]	699	14.3 (11.0-17.7)
Rensselaer[3]	463	18.7 (13.7-23.8)
Saratoga[3]	775	16.5 (12.7-20.4)
Rest of State (excluding NYC ZIPs)[1]	57,978	16.7 (16.0-17.4)

[1] Summary of smoking prevalence from pooled results of NYS 2013-2014 and 2016 eBRFSS

[2] Includes ZIP codes 12047, 12180, 12182, 12183, 12188, and 12189

[3] New York State Behavioral Risk Factor Surveillance System 2016.

** Significant difference compared to NYS excl. NYC*

- Residents of the Study Area were more likely to be smokers compared to the reference population. They were also more likely to be smokers when compared to other residents of the counties that make up the Study Area.

Radon

Table 6. Residential radon test results by floor level in the Study Area, Study Area counties, and NYS excluding NYC, 2000-2017.

Area	Total # of tests	Basement Mean Radon Test value (pCi/L) (and range)	Basement Median Radon Test value (pCi/L)	First Floor Mean Radon Test value (pCi/L)	Percent of tests with results ≥4 pCi/L
Study Area	730	5.5 (0.2-56.3)	3.2	2.6 (0.2-41.1)	35%
Albany	2,420	6.1 (0.2-394.6)	2.0	3.9 (0.2-109.9)	25%
Rensselaer	2,477	7.8 (0.2-134.7)	3.8	3.7 (0.2-43.0)	41%
Saratoga	1,575	4.8 (0.2-185.8)	2.6	2.5 (0.2-63.1)	28%
NYS excl. NYC	52,198	7.3 (0.2-601.4)	3.0	4.0 (0.2-254.7)	35%

- Reported radon test results were not notably different between the Study Area and comparison areas.

DISCUSSION

The Department's Environmental Facilities and Cancer Mapping application accounted for age and sex in the analyses that identified the LU-H-6 cluster area, which included parts of Albany, Rensselaer, and Saratoga Counties. Compared to the NYS population, the NYS excl. BBMQ area is a more appropriate reference population to examine cancer incidence because it is socio-demographically similar to the LU-H-6 area. Therefore, the refined Study Area used here, identified by using the NYS excl BBMQ area as the reference population, should better account for the possible impact of sociodemographic variation

on our results.

Cigarette smoking is generally considered to be the most important risk factor for lung cancer, with over 80% of lung cancer diagnoses occurring among current or former smokers. Although smoking increases the risk for all types of lung cancer, the risk is greatest for small cell and squamous cell carcinomas, and least for adenocarcinomas. Secondhand smoke is also a risk factor. Other non-occupational risk factors include ionizing radiation to the chest from medical procedures, a positive family history of lung cancer, exposure to radon, and exposure to air pollution (e.g., small particles and toxic substances). Exposure to other chemicals and substances which can cause lung cancer occurs primarily (but not exclusively) in the workplace. Most notably, these include asbestos, arsenic, chloromethyl ethers, beryllium, chromium, cadmium, nickel, silica, diesel exhaust, and soot.

Incidence of the two subtypes of lung cancer that are most closely associated with smoking were significantly elevated in the Study Area. Most of lung cancer patients in the Study Area had a history of tobacco use at some time in their life. The proportion of non-smokers among lung cancer cases in the Study Area was significantly lower than in the NYS excl. BBMQ comparison area and similar to other areas of elevated lung cancer combined. One explanation may be that smoking tends to drive the elevations in areas of elevated lung cancer incidence. The observed excess in lung cancer would be expected to reflect a higher prevalence of cigarette smoking in the Study Area 20 to 30 years ago, however NYS DOH does not have smoking prevalence information for that time. The eBRFSS results showed that the proportion of "current" smokers in the Study Area was 51% higher than in NYS excl. NYC at the time the survey was administered (i.e., between 2013 and 2016). This difference was statistically significant. This suggests that smoking will likely continue to be a factor contributing to lung cancer risk in the Study Area in the future.

The analysis of past tobacco use among lung cancer patients was done to examine the impact of smoking on lung cancer. A larger contribution of local factors to lung cancer risk might be suspected if lung cancer patients in the Study Area were more likely to be never smokers than those from the comparison areas. For this purpose, NYS DOH compared the proportion of Study Area lung cancer patients reporting never using tobacco against other regions and found that the Study Area was significantly lower than NYS excl BBMQ, and similar to other areas of NYS with elevated lung cancer. While this finding is consistent with the eBRFSS data in suggesting a role for smoking in the lung cancer results, the available data are insufficient to fully evaluate lung cancer among non-smokers or the potential contribution of non-smoking factors to the elevation in lung cancer incidence in the Study Area.

Radon is an important environmental risk factor for lung cancer. Results of radon tests conducted between 2000 and 2017 indicate that radon levels in the Study Area were comparable to the levels statewide. Although it is possible that radon may be contributing to lung cancer risk in a limited number of localities, it is unlikely to explain the lung cancer excess in the Study Area.

Smoking and exposure to secondhand smoke are also known risk factors for respiratory and cardiovascular health outcomes. While Study Area residents were more likely to use emergency departments and be hospitalized for asthma and COPD, the converse was true for ischemic heart disease and myocardial infarction. This pattern does not suggest a particular behavioral or environmental factor and would require more detailed information than currently available to explore further. Additional information about NYS DOH asthma control programs is available in Appendix B.

The pattern of SIRs in individual block groups within the SATScan area of elevated incidence is summarized in Figure 3. The Study Area block groups with statistically significant elevations of lung cancer did not follow any apparent geographic pattern.

In addition to the factors evaluated above, there are a variety of community sources of air pollution that may impact lung cancer risk including stationary (e.g., Norlite, other industries, domestic heating) and mobile (e.g., highways, truck delivery terminals, bus routes, rail corridors) sources. It is particularly challenging to assess these sources individually or in aggregate over the latency period associated with the health outcomes evaluated here, especially in areas with relatively small populations.

Contact with fugitive dust in the coarse particulate matter fraction (PM_{10}) has been identified as a potential route for area residents to be exposed to site-related substances. Regarding the possible impact of exposure to silica in fugitive dust, only a single case of silicosis among Study Area residents was identified in the ED and hospitalization data.

LIMITATIONS

There are several limitations associated with this type of health outcomes review. A health outcomes review cannot consider important personal information that may be related to health outcomes, such as medical and family history, dietary and lifestyle choices, and occupational exposures. In addition, NYS DOH lacked information about actual individual-level exposures or air quality information for specific addresses.

Most cancers begin to develop long before they are diagnosed. The latency period for cancer is defined as the amount of time that elapses between the initial exposure to a cancer-causing substance and the diagnosis of cancer. The latency period for lung cancer is between five and 40 years, but generally 10 years at a minimum. The latency period can vary depending on factors such as the specific cancer-causing substance, dose and duration of the exposure, age at exposure, genetic susceptibility, and other medical conditions. This long latency gives people time to live and work in different places in the period between exposure and the diagnosis of cancer and is one of the reasons it is difficult to determine what causes cancer in humans. Cancer cases were identified among persons who resided in the Study Area when their cancers were diagnosed. Former residents of the Study Area could not be included in this analysis, and information about how long each patient lived in the Study Area was not readily available. Residential migration (the movement of people in and out of the Study Area) influences the ability to determine if living in the Study Area increases or decreases an individual's risk of getting cancer.

The respiratory and cardiovascular health data reviewed are limited to emergency department use and hospitalizations. Such use of medical facilities tends to be for more severe or acute illness, or by people with more difficult access to medical care for chronic conditions. The data used in these analyses could understate the burden of less severe chronic illness on the community.

Behavioral data from eBRFSS are reported at the ZIP code level. ZIP codes are relatively large so NYS DOH cannot be certain how much the data can be generalized to the Study Area residents. However, approximately 74% of people in the ZIP codes that were analyzed reside in the Study Area, so there is some confidence on the appropriateness of the comparisons.

The eBRFSS smoking data is self-reported and only provides an indication of the proportion of people who reported that they currently smoke. It does not provide insight into health outcomes experienced

by any of the eBRFSS respondents. Furthermore, former smokers are also at increased risk of many cancers. The current smoking prevalence data offered by current survey responses cannot answer questions about past smoking behaviors and may not correlate with historical smoking prevalence among area residents.

There are also limitations associated with the statistical tests. For very small areas, the lack of statistically significant findings may be because the numbers of outcomes are too small. On the other hand, even with a larger number of cases it is possible to observe statistically significant findings that are truly just due to chance or population factors that cannot be adequately accounted for with available data.

CONCLUSIONS

This data review is intended to provide a summary of the information available regarding health outcomes and risk factorsin an area of elevated lung cancer incidence which includes Norlite. While this review showed excesses for some of the evaluated outcomes among the Study Area population, this type of review does not allow conclusions to be made about whether the identified excesses were caused by residence in the Study Area. This review cannot make any conclusions about whether a particular health outcome of a specific individual living in the Study Area was or was not caused by living in the area, or due to their personal, lifestyle or other environmental risk factors. Nor can this review make any conclusion about whether residents of the Study Area are likely to experience similar health outcomes in the future.

APPENDIX A. Data Sources & Analyses

Additional information about the data sources and analyses used in this report are available online at the links below. The dates used for each analysis were selected variously to align with the SaTScan analysis, availability of particular datasets and aggregation of years to facilitate census tract level summaries.

New York State Cancer Registry:
http://www.health.ny.gov/statistics/cancer/registry/about.htm

New York State Statewide Planning and Research Cooperative System (SPARCS):
https://www.health.ny.gov/statistics/sparcs/

New York State Behavioral Risk Factor Surveillance System (BRFSS):
http://www.health.ny.gov/statistics/brfss/

New York State Expanded Behavioral Risk Factor Surveillance System (eBRFSS):
https://www.health.ny.gov/statistics/brfss/expanded/

New York State Radon Testing Data:
https://www.health.ny.gov/statistics/environmental/public_health_tracking/environmental/radon.htm

SaTScan:
https://www.satscan.org/

APPENDIX B: Asthma Control Program Information

The NYS Department of Health's Asthma Control Program, with funding from the Centers for Disease Control and Prevention (CDC) National Asthma Control Program's Cooperative Agreement *A Comprehensive Public Health Approach to Asthma Control Through Evidence-Based Interventions* (CDC-RFA-EH19-1902), works to ensure the availability of and access to guidelines-based medical management for people with asthma, support public health and health care linkages, and promote evidence-based strategies shown to reduce the burden of asthma.

Through a contract with the American Lung Association, the NYS Asthma Control Program implements two key initiatives focused on improving asthma-related health outcomes and quality of life among children with asthma and their families, *Project BREATHE NY* and the *NYS Asthma Management in Schools and School-Based Health Centers Initiative.*

- Project BREATHE NY is a systems level quality improvement initiative which aims to reduce avoidable asthma-related ED visits and hospitalizations and improve health outcomes for children with asthma and their families by expanding the delivery of comprehensive guidelines- based asthma care. Project BREATHE NY provides a framework to engage health systems and community-based partners in integrating sustainable, evidence-based strategies and best practice tools across settings to educate patients and providers, drive quality improvement in asthma care, build clinical-community linkages, and address health equity.

- NYS Asthma Management in Schools and School-Based Health Centers Initiative engages schools and school-based health centers (SBHCs) in high burden asthma regions across NYS in delivery of evidence-based asthma self-management education programming for students and supports school and SBHC adoption of guidelines, protocols, and policies supportive of students with asthma and their families.

For more information regarding asthma initiatives in NYS please visit:
https://www.health.ny.gov/diseases/asthma/ny_action.htm

Additionally, asthma publications, which are free to order or download, are located at:
https://www.health.ny.gov/diseases/asthma/brochures.htm

The NYS Department of Health Asthma Data Dashboard, which tracks asthma data at state, county, and ZIP code levels and is a key resource for assessing asthma burden in New York State and tracking intervention progress is available at:
https://www.health.ny.gov/statistics/ny_asthma/

For any other questions or inquiries please reach out to asthma@health.ny.gov.