



**2022**  
**Healthy Community Planning Report**

**MIDDLESEX COUNTY**  
**North Brunswick Township**

Promoting Better Health and a Better Environment for New Jersey



# INTRODUCTION



## What is Healthy Community Planning New Jersey?

Healthy Community Planning New Jersey, referred to as “HCP-NJ”, is a website jointly developed by the NJ Departments of Health (NJDOH) and Environmental Protection (NJDEP) to assist local community planning activities. The site provides individual, municipal-level reports that offer a snapshot of a municipality’s health and environmental data to help promote a healthy and safe environment. HCP-NJ was developed by NJDOH and NJDEP working in partnership as part of the New Jersey Environmental Public Health Tracking (NJ EPHT) project, with funding from the federal Centers for Disease Control and Prevention.

## Who can use Healthy Community Planning Reports?

The HCP-NJ target audience is local government officials and community organizations including health officers, environmental commissioners, and planners; non-profit and community groups; and the state agencies working with these partners. Each municipality is encouraged to use their customized HCP-NJ report to inform their community assessment and planning efforts. The data in the reports can help prioritize local health and environmental concerns, guide public health actions, identify strategies for improvement, and shape policy decisions. HCP-NJ can also directly help the public learn more about environmental public health to make a difference in their community.

## What kind of information is provided in a Healthy Community Planning Report?

HCP-NJ health indicators were largely selected from indicators developed by the national EPHT Program, whose work focuses on health outcomes and environmental indicators. Each HCP-NJ report begins with a **Community Data Summary** page which outlines the municipality’s most recent public health and environment indicator values, with relevant county and State values included for comparison. Following the **Community Data Summary** page is the **About the Town** page which provides municipal level demographic, land use, and health care data. The remainder of each report provides context on each indicator and ideas on how to turn the data into action. The [HCP-NJ website](#) also includes a glossary, FAQs, data limitations, and map books.

## What resources are available to better understand and use this information?

The [HCP-NJ website](#) provides a list of resources with links to additional information to help users better understand how to use these data to implement actions to improve health outcomes.





Each Healthy Community Planning NJ (HCP-NJ) report begins with a one-page Community Data Summary table. This provides a snapshot of health and environment-related indicators for the municipality with county and state comparisons using the most recent available data. The About the Town page follows the Community Data Summary table and gives additional detail on demographics, land use, and health care facilities in the municipality. The remainder of the report consists of Context pages for each of the Community Data Summary indicators that provides additional measures, details, and maps; and Turning Data into Action pages that provides a starting place for communities to consider in developing actions to improve indicators over time.

## How Can I Use the Community Data Summary table?

The Community Data Summary table provides each New Jersey municipality with individual health and environmental data with county and state comparisons to help identify priorities for improvement. The Community Data Summary table provides the indicator value for each municipality in the blue column, the county's value in the yellow column, and the State's value in the green column.

Below is a detailed explanation of the column headings used in the Community Data Summary Table. For a detailed understanding of the indicators, please see the Context and Turning Data into Action pages that follow the Community Data Summary and About the Town pages. A glossary, FAQs, Data Limitations, and Map Books are also provided on the [HCP-NJ website](#).

### 1<sup>st</sup> Column | Issue

The information in the Community Data Summary table is grouped into five issue areas: demographics, environment, sites, built environment, and public health. The data and information in each area are related, and when seen together may help guide users to better understand a given topic area.

### 2<sup>nd</sup> Column | Indicator

Municipal level indicators offer objective measures of outcomes that describe community conditions. An environmental public health indicator provides information about the environment in the community and/or the population's health status. Users can review each indicator's context page, the HCP-NJ glossary, FAQs, and data limitations, for additional information important to understanding these reports.

#### →How does HCP-NJ define poverty?

Poverty can be defined many ways. The Community Data Summary table uses the federal definition of poverty and Census data. The Census Bureau uses a set of income thresholds that vary by family size and composition to determine individuals in poverty. If a family's total income is less than the family's threshold, then that family and each individual in it is considered "in poverty." The official poverty thresholds do not vary geographically, are based on income before taxes, and do not include capital gains or non-cash benefits such as public housing, Medicaid, or food stamps.

#### →How does HCP-NJ define minority population?

The Community Data Summary table uses the standard, federal definition of minority status; all persons except individuals classified as non-Hispanic White.

### 3<sup>rd</sup> Column | Units

These are the standard measurements used to quantify each indicator. For example, the unit for the low birth weight indicator is the **percent** of live births in a population with birth weight less than 5 pounds 8 ounces. The unit for an environmental indicator of drinking water quality for example is the **number of health standard violations** over a specific time period.

#### **4<sup>th</sup> Column | Time Period**

This is the time interval during which data used to calculate the indicator were collected. While HCP-NJ data are generally the most recent data available at the time of report finalization, it is important to note that there can be a time lag between when data are collected, when a dataset is made publicly available, and when HCP-NJ reports are released.

#### **5<sup>th</sup> Column | Municipality** (blue)

The blue column includes the name of the municipality matching the Report heading. The numbers in this column present the numeric results for each indicator for that municipality.

#### **6<sup>th</sup> Column | County** (yellow)

The two columns highlighted in yellow present information comparing the relevant county to the report municipality. The first yellow column includes the name of the county where the municipality is located. The numbers in this column present the numeric results for each indicator for that county.

#### **7<sup>th</sup> Column | County Comparison** (yellow)

The second county column compares the report municipality to all municipalities in their county. The number used for the comparison is a percentile, except for public health indicators where rates are compared. For a few indicators, where the numbers are too small for percentiles to be relevant, the indicator for the entire county is shown, if available. For example, combined sewer overflows (CSOs) are only located in 20 municipalities. Therefore, rather than using a percentile, the Community Summary Report indicates their presence by displaying “CSO” in the County Comparison column.

A common definition of a percentile is a number where a certain percentage of scores fall below that number. For example, if there were 100 municipalities in a county and your municipality has a percentile of 80 for an indicator, this means that your municipality is higher than 80 municipalities, and 19 municipalities are higher than your municipality for that indicator.

Public health indicators are provided as a percent or an age-adjusted rate and, when compared to the relevant county, are labeled as “Above,” “No Difference,” “Below,” or “Suppressed”, using 95% confidence intervals. A rate tells how frequently the health outcome occurred in a defined population over a defined time interval. An age-adjusted rate enables comparisons between populations which have different age structures. To determine if a rate is significantly different from the state rate or if any difference may be due solely to chance, a 95% confidence interval was calculated to assess the magnitude and stability of the rate. The 95% confidence interval (calculated as 1.96 times the standard error of a statistic) indicates the range of values within which the statistic would fall 95% of the time if the statistic was calculated from an infinite number of samples of the same size drawn from the same base population. The confidence interval represents the range of probable true values for a statistic. In general, as a population or sample size increases, the confidence interval gets smaller. Estimates with smaller confidence intervals are referred to as more “precise.” Less precise estimates, such as those calculated from small numbers, will have wider confidence intervals.

#### **8<sup>th</sup> Column | State** (green)

Similar to the county comparison columns, the State columns highlighted in green compare the report municipality to New Jersey overall. The first green column presents the numeric results for the indicator for the whole State.

#### **9<sup>th</sup> Column | State Comparison** (green)

The second State column compares the municipality to all municipalities in the State. As discussed above, under the 7<sup>th</sup> Column explanation, the number used for the comparison is a percentile, except for public health indicators where it compares rates. Other explanations included above, such as addressing situations where the use of percentile is impractical, also apply for the State comparisons.

When the state percentile is 80% or above, or the health indicator is statistically significantly above the state average, they are shown in **red** text. For the indicators not provided as percentile or rate, if they are present, they are also shown in **red**. Highlighting these comparisons in **red** highlights areas in need of closer attention.

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*Note: Many municipalities do not have Combined Sewer Overflows or Brownfield Development Areas so the **Context and Turning Data into Action** pages for these indicators are only included if the municipality has a Combined Sewer Overflow or a Brownfield Development Area. However, **Context and Turning Data into Action** pages pertaining to the Private Wells, Major Air Sources, and Scrap Metal Facilities indicators were included for all municipalities regardless of whether the municipality has data for these indicators (blank spaces appear where measures and maps are normally provided).*

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## Healthy Community Planning Report

## Limitations

Healthy Community Planning New Jersey (HCP-NJ) was developed by the NJ Departments of Health (NJDOH) and Environmental Protection (NJDEP) staff working in partnership as part of the New Jersey Environmental Public Health Tracking (NJ EPHT) project, with funding in part from the Centers for Disease Control and Prevention. The indicators selected are environmental health issues of concern to NJ communities. The reports do not include all possible environmental health indicators, and do not include indicators for non-environmental health issues.

The process for collecting, analyzing, visualizing, and publishing HCP-NJ takes time, which means HCP-NJ data will never be entirely up to date. Where possible, HCP-NJ provides links to online sources which may provide more up to date data.

HCP-NJ is not meant to replace or supersede the use of other federal, state, or local tools or underlying data. Different tools and datasets use different methods and timeframes for collecting data. Using multiple data sets and tools can enhance a community's overall assessment.

HCP-NJ indicators are aggregate measures which cannot be interpreted as being causally related to any individual's health outcomes. HCP-NJ indicators do not show disease causation. While some indicators assess known primary risk factors for specific health outcomes (for example, older housing is a proxy for the likelihood of having lead-based paint, which is an established risk factor for elevated blood lead levels in children); other indicators assess one of many risk factors for a health outcome (for example, asthma episodes can be triggered by air pollution but also by tobacco smoke, dust mites, allergens, pets, mold, and wood smoke). HCP-NJ is designed to serve as a screening tool to provide communities with a starting point to determine which potential areas might need for a closer look or detailed analysis.



# Community Data Summary: NORTH BRUNSWICK TWP



Issue	Indicator	Units	Time Period	NORTH BRUNSWICK TWP		County Comparison*	NEW JERSEY	State Comparison*
					MIDDLESEX			
Demographics	Population	Total Population	2016 to 2020	41,569	825,015		8,885,418	
	Poverty	% Under 2 times Poverty	2016 to 2020	15.6	18.9	48	22.1	51
	Minority	% Minority	2016 to 2020	67.6	58.0	76	45.3	92
	Health Insurance	% with no Insurance	2016 to 2020	5.5	6.8	52	7.6	62
Environment	Air Cancer Risk	Risk per Million	2017	172	175	36	155	69
	Air Non Cancer	Combined Hazard Index	2017	2.4	2.5	40	2.2	65
	Air Quality Index (AQI)	Days AQI above 100 (3 yr Avg)	2018 to 2020	4.1	4.1	68	3.2	73
	Community Drinking Water	Number of MCL, TT and AL exceedances(3 yr)	2019 to 2021	0	5	0	30	0
	Private Wells	% of Private Wells above Primary Standard	2002 to 2018	SUPPRESSED	17.0	SUPPRESSED	14.5	SUPPRESSED
	Ground Water/Soil	% Area Restricted Use	2022	2.8	6.4	33	3.9	71
	Surface Water Quality	% Designated Uses Not Supported	2016	85.0	86.2	40	72	65
	Flooding (Urban Land Cover)	% Urban Land Use Area Flooded	2021	0.6	9.5	4	12.1	6
Sites	Air Permit Sources	Sites per Sq Mile	2022	1.60	1.24	40	1.05	79
	Combined Sewer Overflow	Number per Town	2019	0	16	0	212	0
	Brownfield Development Areas	Number per Town	2019	0	5	0	39	0
	Contaminated Sites	Sites per Sq Mile	2022	3.87	3.09	48	3.85	70
	Scrap Metal Facilities	Sites per Sq Mile	2022	0.00	0.09	20	0.07	57
Built Environment	Age of Housing	% Pre1950	2016 to 2020	6.4	16.3	16	25.2	8
	Radon	% tests > 4 pCi/L	1985 to 2015	20.0	9.0	88	12.3	66
	Open Space (OS)	Pop. >1/4 mi. from OS per acre of OS	2022	11.9	1126.0	56	525.2	66
	Traffic	% Population 1000 ft heavy traffic	2018	23.7	17.1	84	9.3	87
Public Health**	Low Birth Weight	% All Births < 5 lb, 8 oz	2016 to 2020	9.1	8.1	NO DIFFERENCE	7.9	ABOVE
	Childhood Blood Lead	% Children tested > 5 µg/dL	2019 (SFY)	SUPPRESSED	2.0	SUPPRESSED	2.3	SUPPRESSED
	Asthma (ED)	Age Adjusted Rate per 10,000	2016 to 2019	47.7	39.4	ABOVE	55.7	BELOW
	Heart Attack (AMI) (IP)	Age Adjusted Rate per 10,000	2016 to 2019	13.8	16.0	NO DIFFERENCE	16.3	BELOW
	Heart Disease Deaths	Age Adjusted Death Rate per 100,000	2015 to 2019	132.6	148.8	NO DIFFERENCE	163.7	BELOW
	COPD (ED)	Age Adjusted Rate per 10,000	2016 to 2019	16.3	14.6	NO DIFFERENCE	24.6	BELOW
	Stroke (IP)	Age Adjusted Rate per 10,000	2016 to 2019	18.8	23.1	NO DIFFERENCE	19.8	NO DIFFERENCE
	All Cancer Deaths	Age Adjusted Death Rate per 100,000	2015 to 2019	128.9	134.4	NO DIFFERENCE	144.6	NO DIFFERENCE
	Lung Cancer Deaths	Age Adjusted Death Rate per 100,000	2015 to 2019	23.1	28.4	NO DIFFERENCE	31.9	BELOW
	Smoking	% of Adults	2018	13.2	13.6	NO DIFFERENCE	15.4	BELOW
	Obesity	% of Adults	2018	26.4	26.0	ABOVE	28.2	BELOW
	Heat Related Illness (ED)	Age Adjusted Rate per 10,000	2016 to 2019	SUPPRESSED	0.5	SUPPRESSED	0.9	SUPPRESSED

\*All comparisons are percentile, except Public health indicators are based on 95% Confidence Interval

\*\* (ED) are based on Emergency Department Hospitalization data. (IP) are based on In Patient Hospitalization data



# About the Town

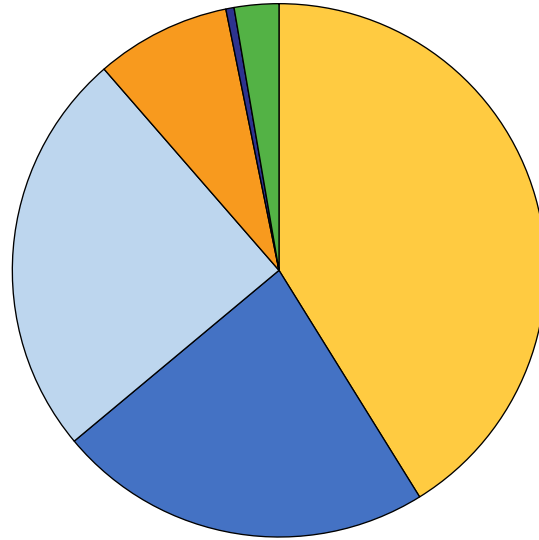
# MIDDLESEX COUNTY North Brunswick Township

## Demographics (2016-2020)

Population	41,569
Births (2020 SHAD)	509
Deaths (2020 SHAD)	292
<5 years old	5 %
>65 years old	13 %
Poverty	8 %
Single parent households	27 %
Disabled	7 %
Unemployment	5 %
No Health Insurance	5 %
College+ Education	46 %
High school education	20 %

Households	14,424
Housing Units per Square Mile	1,227
Homeowners	53 %
Renters	42 %
Persons per Household	3
No Vehicle	6 %
Vacancy	4 %
Public Transportation	6 %

## Percent Race



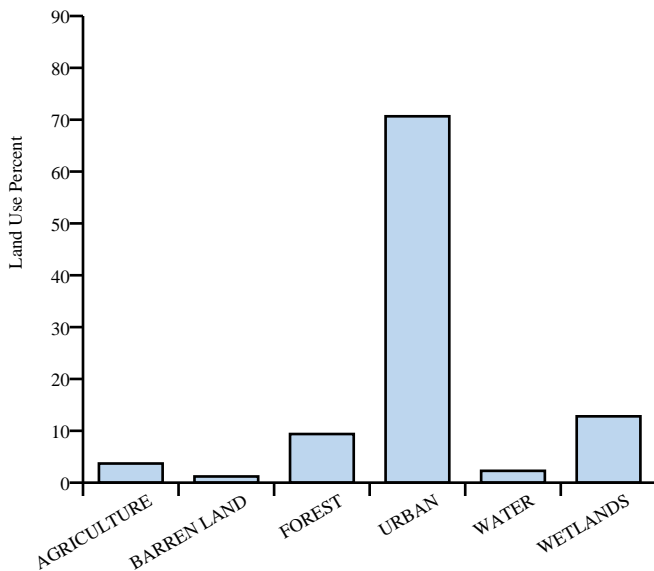
- White 41.2 %
- Asian 24.7 %
- 2 or more races 2.7 %
- Black 22.8 %
- Other 8.2 %
- American Indian 0.5 %

**19 %**  
Hispanic  
or Latino

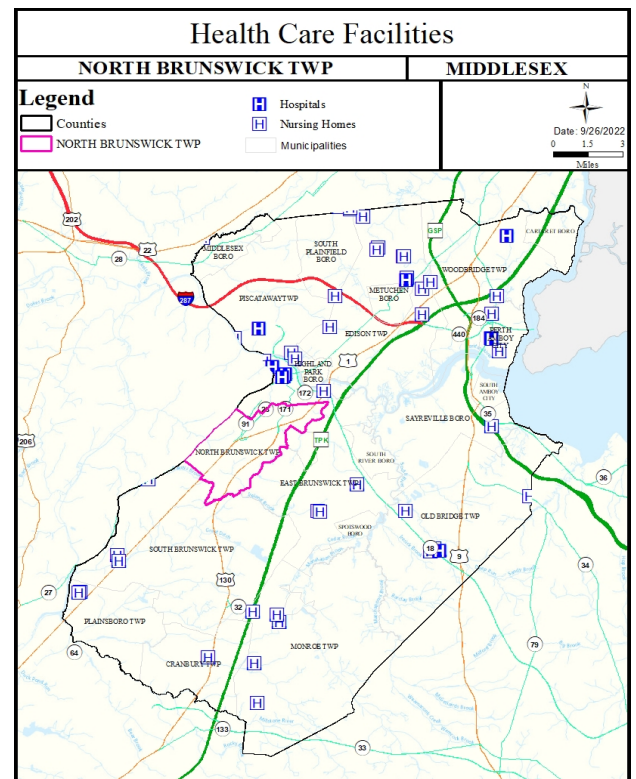
**34 %**  
Foreign  
Born

**6 %**  
Limited  
English  
Proficiency

## Land Use Percent (2015)



**12.3 Square Miles**







# Air Cancer and Noncancer Risks

# MIDDLESEX COUNTY North Brunswick Township

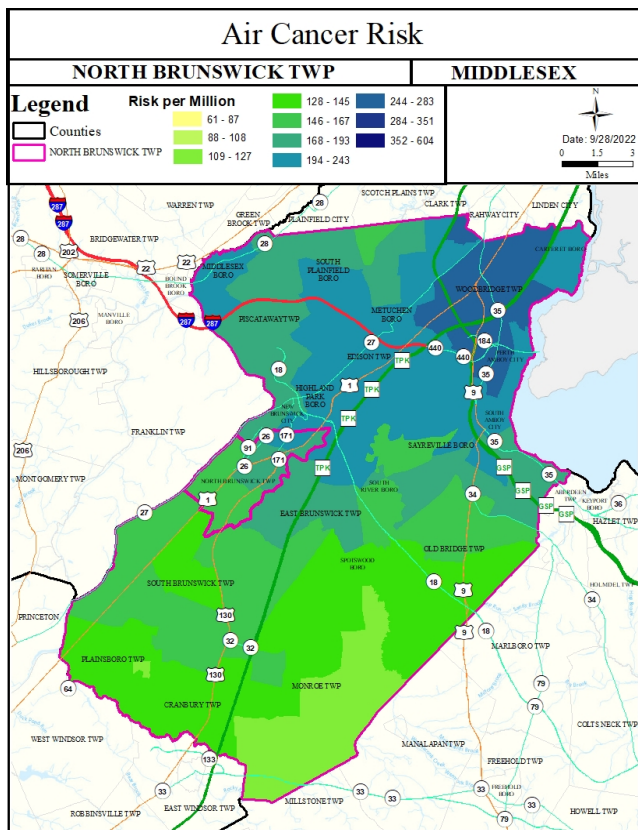
## Air Toxic Risks

AirToxScreen (formally the National-Scale Air Toxics Assessment or NATA) is the U.S. Environmental Protection Agency's (USEPA) ongoing evaluation of air toxics considered most harmful to human health, providing estimates of the respiratory risks due to outdoor exposure to those air toxics. The 2017 AirToxScreen provides the most recent exposure risk estimates for 180 air toxics regulated under the Clean Air Act. In New Jersey, total emissions of air toxics are declining. However, despite these improvements, some areas have elevated risks.

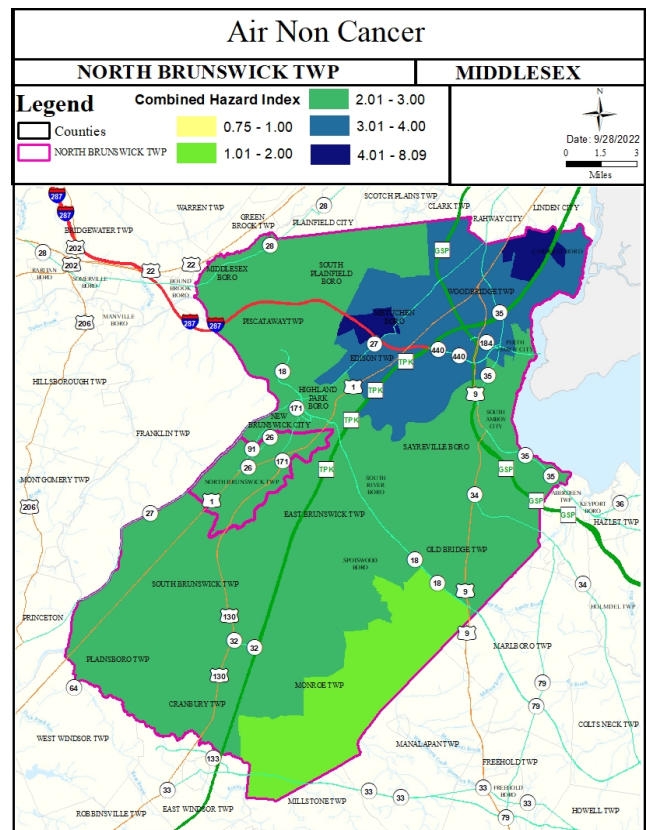
Air toxics are broadly grouped into two categories according to their health effects: carcinogens or noncarcinogens. Carcinogens are chemicals that have been shown to cause cancer, either in people or animals. A potential cancer risk less than or equal to 10 in a million is considered negligible. Ten in 1 million, means 10 in 1 million people would develop cancer if they breathe air containing the same amount of the same air toxic for 70 years. Noncarcinogens can affect development, reproduction, respiration, and liver, kidney, or another organ function. For noncancer estimates, AirToxScreen uses a Hazard Index (HI). An HI of 1 or lower means the air toxic is unlikely to cause adverse noncancer health effects over a lifetime of exposure. However, an HI greater than 1 does not necessarily mean adverse effects are likely. NJDEP evaluates this on a case-by-case basis.

NJDEP's methods for estimating risk using the AirToxScreen are somewhat different from the USEPA's, therefore risk results presented here are different from those found on the USEPA's website.

**AirToxScreen Cancer Risk**



**AirToxScreen Noncancer Risk**



This map shows the cancer risk estimates for North Brunswick Township in Middlesex County. Overall, North Brunswick Township has a mean cancer risk of 172 in a million.

This map shows the noncancer risk for North Brunswick Township in Middlesex County. Overall the noncancer risk is 2.4.



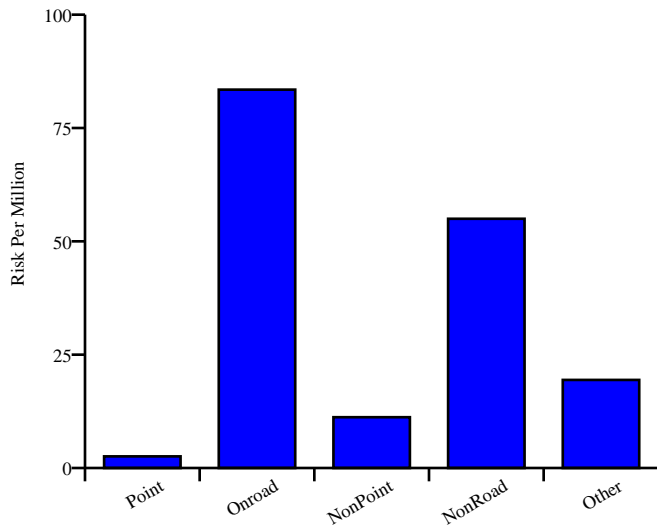
## How Do Air Toxics Get Released Into the Air?

Understanding the various sources of air toxic emissions is the first step to learning how to reduce those emissions. Generally, sources of air pollution are categorized as follows:

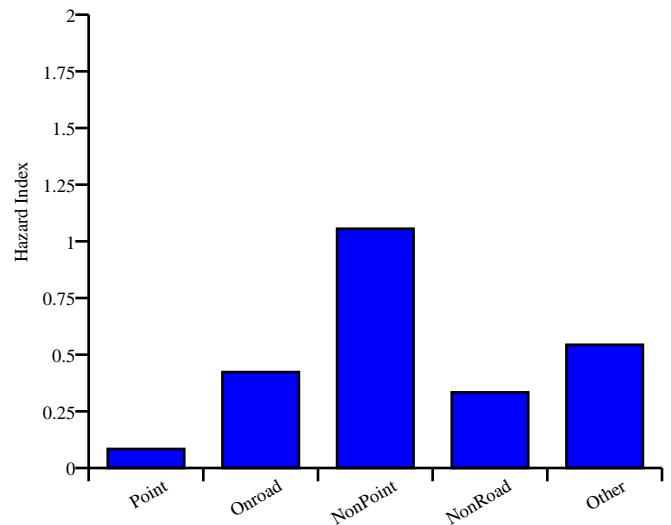
- **Point** stationary sources include large facilities that emit a significant amount of air pollution during manufacturing, power generation, heating, incineration, or other activities. This category also includes smaller facilities required to report their emissions under the federal Toxic Release Inventory program and New Jersey's Community Right To Know program.
- **Nonpoint/area** stationary sources are smaller sources of air pollution which by themselves may not emit very much, but their added emissions account for a significant portion of the total emissions of air toxics. Examples of nonpoint sources include consumer products such as personal care household products; adhesives and sealants; automotive products; coatings such as paints; residential, institutional, and commercial heating; pesticides; gasoline stations; and dry cleaners.
- **On-road** mobile sources are vehicles registered for use on roads and highways, including cars, trucks, buses, and motorcycles.
- **Non-road** mobile sources include aircraft, trains, lawnmowers, boats, dirt bikes, construction vehicles, farm equipment, and more.
- **Other** combines background, secondary, biogenic, and fire sources estimated by AirToxScreen.

The charts below show your municipality's contribution to total cancer and noncancer risk from the sources of air toxic emissions tracked in AirToxScreen. This information should help you better understand risks from air toxic sources and highlight potential opportunities to reduce those emissions.

### Source Contribution to Cancer Risk



### Source Contribution to Non Cancer Risk





## What is the Air Quality Index?

The Air Quality Index (AQI) is a system for communicating daily air quality to the public, warning them when air pollutant levels in their area are unhealthy and could affect their health. Think of the AQI as a yardstick that runs from 0 to 500. The higher the AQI value, the greater the level of air pollution and the greater the health concern. Since an AQI value of 100 generally corresponds to the national ambient air quality standard for a pollutant, AQI values below 100 are considered safe. AQI values above 100 are considered unhealthy -- at first for certain sensitive groups of people, then for everyone as AQI values get higher.

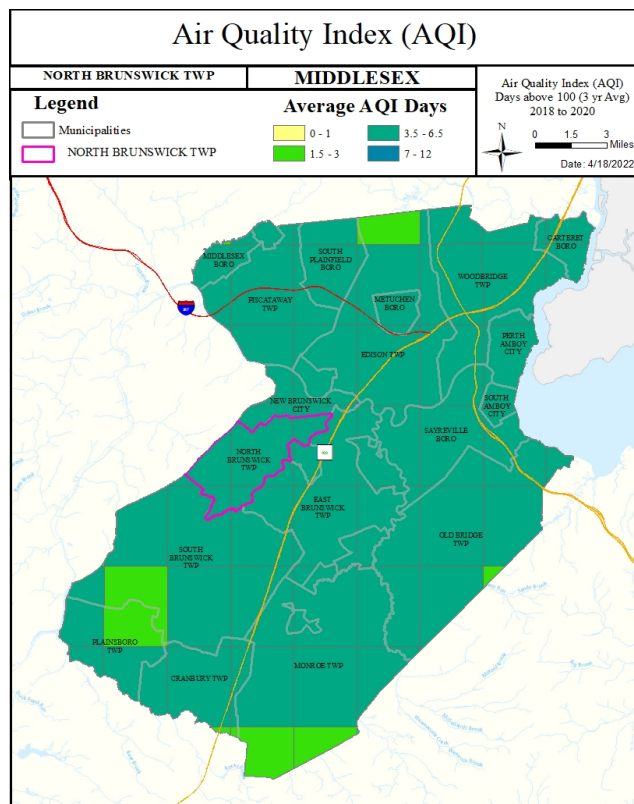
## Why is Air Quality Important?

Every cell in the human body needs oxygen to survive, and that oxygen comes from the air we breathe. We normally breath in and out anywhere from 12 to 15 times per minute, with that number increasing when we're active. If the air we breathe is polluted, we are also breathing in harmful chemicals, particles, and toxins that can affect our health. Air pollutants can cause health effects ranging from coughing and shortness of breath to worsening chronic conditions such as asthma, emphysema, and bronchitis. Air pollution has also been linked to heart attacks, strokes, and low birth weight. While air pollution affects everyone, certain people are more susceptible to its effects. Sensitive populations include people with existing lung or heart issues, young children, and older adults.

## What Air Pollutants are measured?

The AQI tracks five of the major air pollutants that have established National Ambient Air Quality Standards (NAAQS) in place to protect public health: ground-level ozone; particle pollution (also known as particulate matter); carbon monoxide; sulfur dioxide; and nitrogen dioxide.

The NAAQS are set at levels designed to protect human health, and public welfare such as damage to or contribute to [regional haze](#).



**The Community Data Summary page and the map above show annual average days the AQI was greater than 100 over 2018-2020 which generally corresponds to ground level ozone above standard.**

New Jersey's air quality has improved significantly over the last 50 years. The State now meets all but one of the NAAQS. New Jersey and its neighboring states continue to exceed the ground-level ozone standard. Ground-level ozone is a summertime pollution problem, as it forms when pollutants from cars, power plants and other sources react in the presence of sunlight.

While the state meets the NAAQS for particulate matter (PM), these tiny airborne specks of dust or droplets remain a health concern since they are small enough to be inhaled directly into your lungs. Toxins and carcinogens can attach to the particulates that get breathed in. PM can occur naturally in the air from forest fires and dust storms or come from man-made sources from the burning of fossil fuels.



### Ideas for Taking Action

#### Residents

- Use paints, solvents, and cleaning products with little or no volatile organic compounds (VOCs), preferably water-based products.
- Avoid spray paints, most of which are solvent-based. Very fine spray can also become airborne.
- Plan major painting, stripping, and refinishing projects for spring and fall to avoid summer heat and sun, which react with vapors to create ground-level ozone pollution.
- Unplug electronic devices (e.g., TVs and computers) when not in use to save energy.
- Do not idle your vehicle or other equipment.
- Consider the alternative energy options available to you.

#### Local Government and Community Groups

- Use HCP-NJ data to focus your local planning efforts.
- Check out NJDEP's [What's in My Community?](#) to better understand the permitted air sources in your community.
- Get certified through [Sustainable Jersey](#), a nonprofit organization that provides tools and financial incentives to become sustainable.
- Conduct an energy audit and find out how you can improve energy use in your town through the [Board of Public Utility's Local Government Energy Audit \(LGEA\) Program](#).

### Get More Air Quality Information For Your Community

Each day, you can check the Air Quality Index (AQI) in your area to plan safe and healthy outdoor physical activity for you and your family. To get air quality alerts sent directly to your mobile device or email, sign up for [Enviroflash](#).

One in 12 children under the age of 18 has asthma, and outdoor air pollution can trigger asthma attacks. New Jersey's Air Quality Flag Program alerts communities to local air quality forecasts so they can take actions to protect children, especially those with asthma. To learn how your school and community can participate, visit <https://dep.nj.gov/njaqflagprogram/>.

### What are some things the State is Doing?

- NJDEP regulates VOCs in household products under [N.J.A.C. 7:27-23](#) (Architectural Coatings) and [N.J.A.C. 7:27-24](#) (Consumer Products). Air Toxics are regulated under [N.J.A.C. 7:27-17](#).
- NJDEP manages air quality through ambient air monitoring, source inventories, emission reduction plans, rules, permits, stack and vehicle testing, air quality modeling and risk assessment, inspections, and enforcement. Visit [Division of Air Quality](#) for details on these and related activities.
- New Jersey has a growing network of public charging stations and encourages people to consider an electric vehicle when it's time for their next vehicle lease or purchase. Visit [www.drivegreen.nj.gov](http://www.drivegreen.nj.gov) to learn more.
- New Jersey has one of the most ambitious Renewable Portfolio Standards in the country, requiring that 35% of the energy sold in the State comes from qualifying energy sources by 2025 and 50% by 2030.



### Learn more about air quality:

- [Current air quality](#)
- [New Jersey 2020 Air Quality Report](#)
- [New Jersey Air Toxics Program](#)



## What is Community Drinking Water?

A community water system is a public water system that supplies water year-round to the same population (at least 25 people at their primary residences or at least 15 residences that are primary residences). According to Federal law, community water systems must test to ensure their water meets regulated standards. They are also required to notify customers if the level of any monitored contaminant exceeds these standards.

## Why is Community Drinking Water Quality Important?

Drinking water contaminants can come from naturally occurring chemicals and minerals, land uses such as fertilizer and pesticides, or manufacturing processes. Contaminants can also leach into the treated water as it passes through the distribution system. Contaminated drinking water can lead to gastrointestinal illness, reproductive problems, and neurological disorders

The USEPA and NJ sets [standards](#) for contaminant levels allowed in public drinking water to protect public health. Maximum contaminant levels (MCL) are the maximum permissible levels allowed for certain contaminants. If there is a confirmed contaminant above the MCL, the water supplier must address the problem by changing to another water source or improving water treatment.

Treatment techniques (TT) are minimum levels of treatment that result in contaminate removal. TTs are established as a standard for several contaminants that are not readily measurable in water, such as viruses.

Action Levels (AL) are the concentration of lead and copper in public drinking water that, if exceeded, require the water supplier to adjust corrosion control, monitor source water, replace lead service lines and undertake a public education/notification.

Community water systems are required to publish yearly consumer confidence reports on their website.

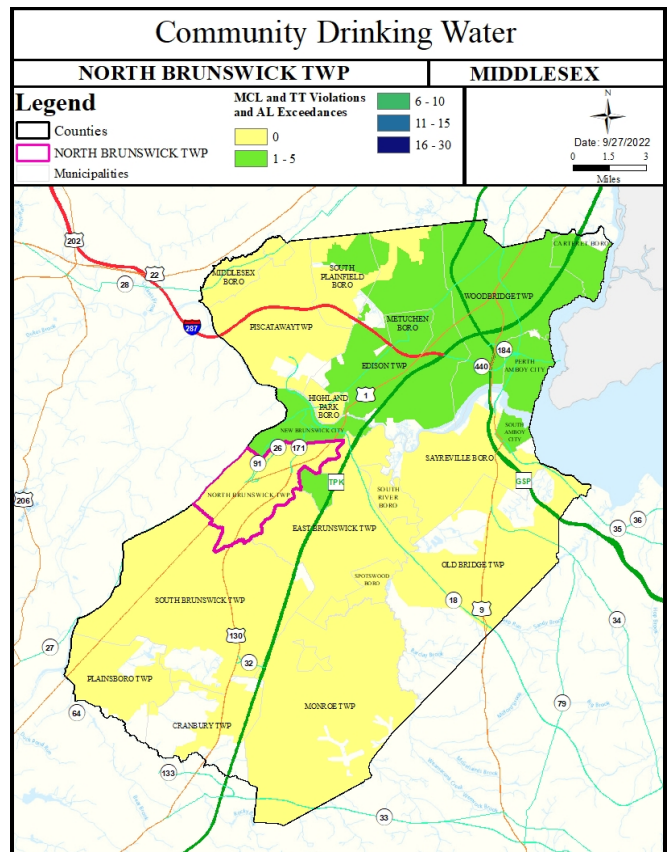
The Community Data Summary page, and table and map below provide information on the water system in your town with the greatest number of MCL, TT, or AL Violations during 2019 – 2021:

**No MCL, TT, or AL Drinking Water Violations**

[Information on types of drinking water violations](#)

*Note: The violations list above may not be the complete list, and some violations may have been addressed. For the most up to date information for all water systems serving this community please visit the links below:*

NJ1215001





## Ideas for Taking Action

### Residents

- Know your water quality. Your water supplier is required by law to test and ensure that your water does not exceed Maximum Contaminant Levels (MCLs), Treatment Techniques (TTs), or Action Levels (ALs). Look up the test results on [New Jersey Drinking Water Watch](#) or contact your water supplier to obtain the most recent test results.
- Learn [what it means](#) when your water supplier issues a Boil Water Advisory.
- Public water systems must provide annual Consumer Confidence Reports to their customers and post them on their websites. Those reports provide information on the quality of local drinking water.

### Local Government and Community Groups

- Conduct community-wide outreach to teach your residents how to access and understand information on their water quality.
- Help your residents understand how to properly [select, install, and maintain water filters](#) if needed.
- Adopt local ordinances to ensure entire lead service lines are replaced, not just the water system's portion.
- Adopt [management](#) and [funding](#) strategies to protect drinking water sources in your community.

## What Are Some Things the State Is Doing?

### NJ Department of Environmental Protection

- Administers the regulations, programs and activities under the Federal Safe Drinking Water Act and the New Jersey Safe Drinking Water Act.
- Inspects public water systems and evaluates their monitoring reports for compliance with standards. Noncompliance with an MCL can result in a violation.
- Works with water systems to ensure that they notify the public and return to compliance.



- The [New Jersey Water Bank](#) provides low-cost financing to public water systems to design and construct infrastructure projects that help to protect, maintain, and improve water quality.

### NJ Department of Health

- The [Drinking Water and Public Health Project](#) is a joint NJDEP/NJDOH initiative that provides information to the public and works together with regulators to provide clean, safe drinking water to New Jersey residents.



### Learn more about Community Drinking Water:

- [Lead in Drinking Water](#)
- [PFAS in Drinking Water](#)
- [Safe Drinking Water Standards FAQ](#)



# Private Wells

## Private Wells and the PWTA

About 13% of New Jersey’s drinking water comes from private wells. The [NJ Private Well Testing Act \(PWTA\)](#) requires buyers and sellers of properties with potable private wells to test for certain water quality parameters and review the results prior to closing. Landlords are also required to test well water once every 5 years and provide each tenant with a copy of the results. The data generated by PWTA are provided to the homeowners and NJDEP by the laboratory performing the analyses. The NJDEP notifies local health agencies when a well in their jurisdiction is tested under the PWTA. About 25% of New Jersey’s drinking water wells have been tested. Per the NJ Safe Drinking Water Act, all newly constructed private wells are tested once for the presence of regulated contaminants.

## Water Quality Testing Under PWTA

The PWTA requires private well owners to test for the different [water quality parameters](#). The benchmark for each parameter is the NJ drinking water standard, as set forth in the NJ Safe Drinking Water Act. Standards are established for contaminants that have either an immediate or long-term effect on human health. The following PWTA parameter results are included in this report:

- **Arsenic** is almost always naturally occurring from arsenic-bearing minerals in many of the bedrock aquifers of Northern and Central New Jersey, but testing is required statewide. Arsenic may increase the risk of lung, bladder, or skin cancer.
- **E. Coliform**, infectious microorganisms found in human and animal feces, can cause nausea, vomiting and diarrhea.
- **Gross Alpha** is a surrogate for radium, due to the high cost of radium testing. Radionuclides, such as radium, uranium, and radon come from the decay of natural rock. Radium can increase the risk of bone or sinus cancer; uranium can affect kidney function; and radon can cause lung cancer.
- **Mercury** can come from septic tanks, landfills, industrial facilities, hazardous waste sites, or can occur naturally. Mercury exposure may result in nervous system or kidney damage.



- **Nitrates** come from the breakdown of human and animal wastes and from chemical fertilizers. These can decrease the blood’s ability to carry oxygen to organs throughout the body, especially in infants.
- **Volatile organic compounds (VOCs)** can come from septic tanks, gas stations, landfills, and dry cleaning, industrial and hazardous waste facilities. VOCs may affect the liver, kidney, nervous system,

The NJDEP added testing requirements for 1,2,3-Trichloropropane (1,2,3-TCP), a powerful carcinogenic VOC, in 2019, and Per- and Polyfluoroalkyl (PFAS), man-made chemicals used in non-stick coatings and firefighting foams, in 2021. Test results for these compounds are not included in this report.

Less than 10 wells tested for this municipality. The table below provides details for specific parameters.

### PWTA results 2002-2018 in North Brunswick Township

Parameter	Percent of Exceedances
Arsenic	Less than 10 wells sampled
Fecal_Coliform	Less than 10 wells sampled
Gross_Alpha	Less than 10 wells sampled
Mercury	Testing is not required under PWTA
Nitrate	Less than 10 wells sampled
VOC	Less than 10 wells sampled

**Note: Municipalities that do not have private drinking water wells will not have PWTA data. Results are not reported where less than 10 wells were sampled. Additional data and maps can be found at [PWTA Map](#).**

## Ideas for Taking Action

### Residents

- Regularly test your well to identify the [presence of potentially harmful contaminants](#).
- Use a [NJDEP certified lab](#) to perform well water testing. Well testing is required to sell or rent a property in New Jersey.
- If testing results identify a chemical contaminant, install a filter, distiller, or softener. If the issue is microbiological, install UV light or a chlorinator.
- [NJ Housing and Mortgage Finance Agency's Potable Water Loan Fund](#) offers no-interest second mortgage loans up to \$10,000 for single-family residences with wells that don't meet primary drinking water standards.

### Local Government and Community Groups

- Regulate private wells post-construction to notify homeowners if well testing results exceed standards. Some local ordinances require the installation of appropriate treatment equipment if [primary drinking water standards](#) are not met in private wells.
- Educate private well owners on the importance of testing, and promote clean-up and maintenance of contaminated well water.
- Local health authorities may notify neighboring homes or businesses of potential contamination. This "neighbor notification process" has identified wider areas of ground water contamination.

## What are Some Things the State is Doing?

### NJ Department of Environmental Protection

- Provides local health departments with PWTA results, assesses the quality of the state's ground and private well water, and periodically publishes [summary maps](#) of the test results to educate New Jersey residents about potential well water contaminants.



- The [Spill Compensation Fund \(Spill Fund\)](#) aids residents that incur damages resulting from the discharge of hazardous substances due to human action.

### NJ Department of Health

- The [Drinking Water and Public Health Project](#) provides information to the public and works together with regulators to provide clean, safe drinking water to New Jersey residents.



1 of 9

About 1 in 9 Americans get their drinking water from a private well.



1 of 5

About 1 in 5 sampled private wells had contaminants at levels that could affect health.

### Learn more about Private Wells:

- [Private Wells Fact Sheet](#)
- [Private Well Testing Act FAQs](#)
- [Additional Private Well Testing Act Resources](#)





# Groundwater or Soil

# MIDDLESEX COUNTY North Brunswick Township

## Groundwater and Soil Restricted Uses

Past or current accidents, spills, leaks, or improper disposal and handling or other discharges of hazardous materials and wastes have contaminated ground water and land around the State. When a site no longer poses a threat to public health, but it does not meet ground water or soil standards, restrictions are placed on use of the site and the area is identified in one of three ways:

A Classification exception area (CEA) is a notification of a [Ground Water Quality Standards](#) (N.J.A.C. 7:9C) exceedance and restricts use of the ground water in an area until the standards are achieved. A CEA is based on existing ground water quality data and modeling to determine the extent and duration the contamination will remain above the standards. The NJDEP ends the CEA after successful remediation.

A Currently Known Extent (CKE) is like a CEA as it depicts an area where contamination in ground water exceed applicable [Ground Water Quality Standards](#). CKEs approximate the extent of ground water contamination using potable wells sample results conducted during the initial stages of an [Immediate Environmental Concern \(IEC\)](#) investigation.

A Deed Notice is a notification added to a property's title when NJDEP's residential/unrestricted [Soil Remediation Standards](#) (N.J.A.C. 7:26D) are exceeded. A Deed Notice specifies the location and contaminant concentrations, and outlines ways to control, maintain, or monitor the remaining contamination. The notice is intended to inform those with an interest in the property of the remaining contamination and related use restrictions.

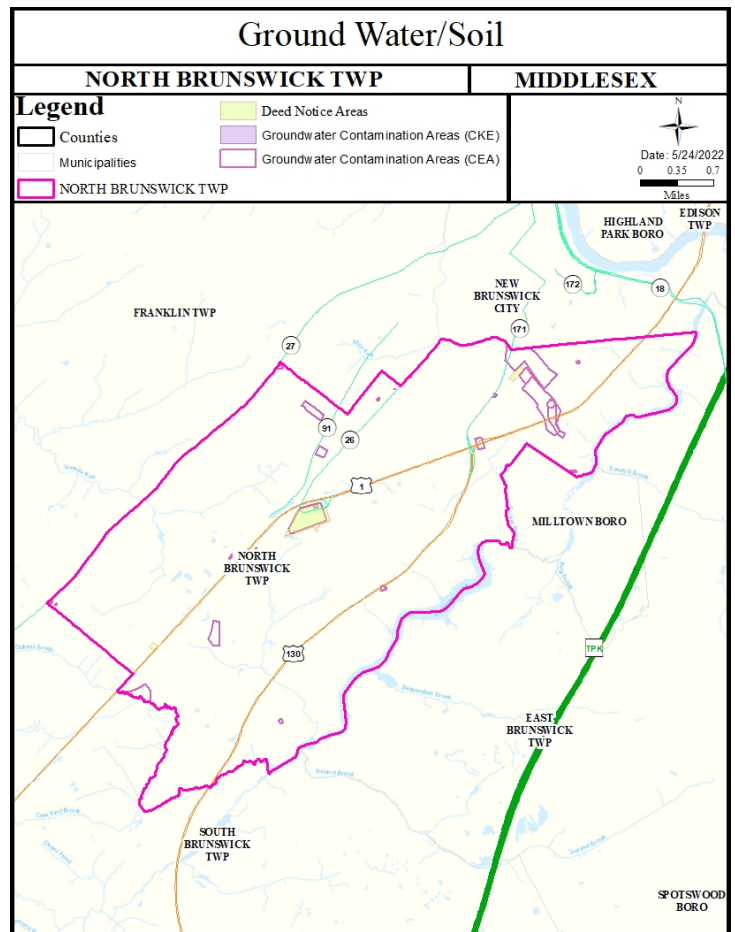
A soil or ground water Remedial Action Permit is issued by the NJDEP to ensure a remedial action remains protective. Remedial actions involving a Deed Notice and/or CEA require institutional and, if necessary, engineering controls when contamination remains above applicable standards. Examples of engineering controls include installation of a system to treat ground water contamination or an asphalt cap that can prevent contact with contaminated soil.

## Restrictions on Use in Your Community

Understanding the contamination in these areas helps to avoid public health issues. Limitations on the use of land, for example, through placement of an asphalt cap, prevents contact with contaminated soil. The establishment of a CEA or CKE allows the NJDEP, water purveyors, and local officials to make informed decisions about ground water use in these areas.

Below is a map of this municipality's CEAs, CKEs and Deed Notices. Visit NJDEP's [GeoWeb Site Remediation Profile](#) for the most up to date details on these sites.

You can obtain a list CEAs and Deed Notices using NJDEP's [Data Miner](#) or by submitting an [OPRA](#) request to NJDEP.



## Ideas for Taking Action

### Residents

- Learn how to safely [manage](#) household hazardous materials, such as antifreeze and batteries, to avoid contaminating ground water or soil.
- If you have an underground fuel oil storage tank and suspect it's leaking, check out the New Jersey Department of Environmental Protection's (NJDEP) [Homeowner's Guide to the Unregulated Heating Oil Tank Program](#) (UHOT).
- Determine if your property has a [Deed Notice](#) associated with it for your protection. If your property has an institutional control, it should also have a Remedial Action Permit (RAP).
- If your property is located within a [Classification Exception Area \(CEA\)](#) or [Currently Known Extent \(CKE\)](#) for ground water contamination, a potable or irrigation well cannot be drilled on your property.
- Contact NJDEP's [Office of Community Relations](#) (OCR) for information about contaminated sites.

### Local Government and Community Groups

- Understand [your obligations](#) to clean up contaminated sites.
- Leverage funding opportunities to investigate and clean-up sites such as the [Hazardous Discharge Site Remediation Fund](#), [New Jersey Spill Compensation Fund](#), [Petroleum Underground Storage Tank Remediation, Upgrade and Closure Fund \(UST Fund\)](#), and [Technical Assistance Grants](#).
- Contact [New Jersey Department of Health \(NJDOH\)](#) for any health-related questions about potential environmental exposures to contaminated sites or any hazardous substance.
- Schedule household hazardous waste collection days in your community to help prevent soil or ground water contamination.

### Learn more about CEAs, CKEs and Deed Notices:

- Access [DEP's Data Miner](#) or submit an [OPRA](#) Request
- Access the [Site Remediation Profile](#)



## Some Things the State is Doing

- The [Site Remediation Reform Act \(SRRA\)](#) established the Licensed Site Remediation Professionals (LSRPs) Program. LSRPs oversee environmental investigations and cleanups to protect public health and safety and the environment.
- LSRPs certify that clean-up was completed in accordance with New Jersey's statutes and NJDEP's rules, and guidance.
- The NJDEP's Site Remediation and Waste Management Program (SRWMP) evaluates every clean-up overseen by an LSRP to determine compliance with remediation rules, standards, and timeframes.
- SRWMP issues RAPs for sites when contamination on site remains above applicable soil and ground water standards. The issuance of a RAP and the restrictions included in the RAP are considered a protective remedy.
- SRWMP uses public funds to clean-up contaminated sites if responsible party is unwilling or unable to perform the necessary actions. SRWMP may investigate to determine the nature and extent of the contamination. When necessary, the SRWMP implements receptor controls for sites with indoor air and potable well contamination.



# Surface Water Quality

# MIDDLESEX COUNTY North Brunswick Township

## Why is Surface Water Quality Important?

New Jersey's surface waters provide numerous functions, such as drinking water, recreation, boating, swimming, commercial fisheries, and tourism, all of which support the State's ecology and economy, and its residents' quality of life.

## How is Surface Water Quality Assessed?

New Jersey conducts a statewide surface water quality assessment every two years and publishes the results in [New Jersey's Integrated Water Quality Assessment Report](#). The Integrated Report provides information about New Jersey's water resources, current water quality conditions, and causes and sources of water quality impairment. This information informs and guides water quality monitoring, restoration, and protection efforts conducted at the state, regional, watershed, and local levels and allows Federal and State agencies to establish program and funding priorities.

Water quality trend analyses indicate that overall water quality has generally improved since the mid-1970s, particularly with respect to total phosphorus and total nitrogen. This improvement is most likely due to upgrades and regionalization of wastewater treatment plants, regulation of stormwater discharges, improved nutrient treatment required in New Jersey Pollution Discharge Elimination System (NJPDES) permits, implementation of [Section 319\(h\)](#) nonpoint source pollution control projects, and stewardship activities at the local level aimed at reducing nonpoint source of pollution. Stormwater runoff is the single biggest source of pollution impairing New Jersey's waterways.

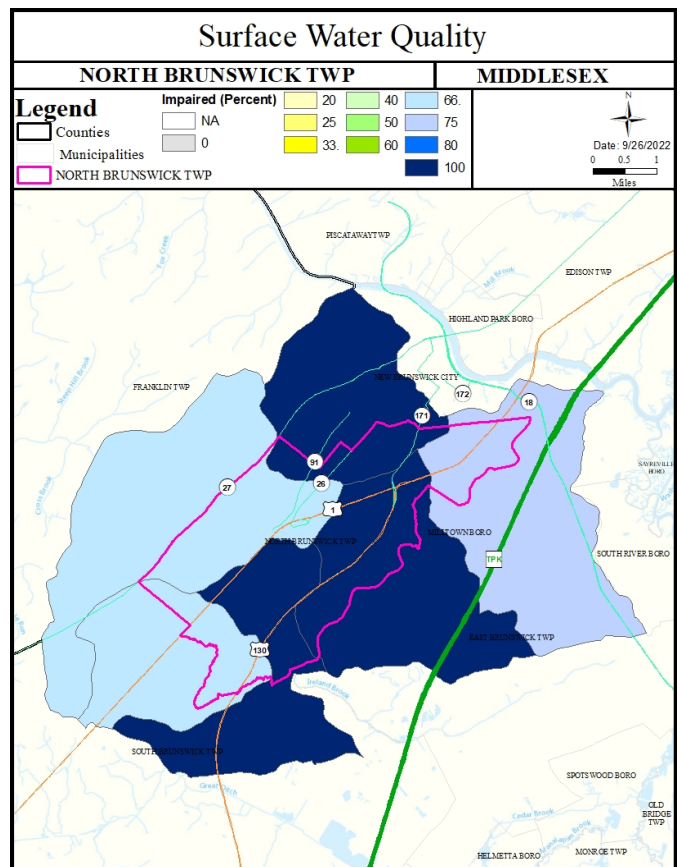
The analyses show increased levels of nitrate, total dissolved solids (TDS) and chlorides. Oxidation measures to reduce ammonia at waste treatment plants have resulted in increased nitrate concentrations over time. Runoff from urban and agricultural areas, including runoff of salt used to control ice on roadways, are the likely cause of increased TDS and chloride concentrations.

## What is a Designated Use?

New Jersey's [Surface Water Quality Standards \(SWQS\)](#) establish the designated uses of the State's surface waters, classify surface waters based on those uses, and specify the water quality criteria and other policies necessary to attain those uses. Designated uses include water supply for drinking, agriculture and industrial uses, fish consumption, shellfish resources, propagation of fish and wildlife, and recreation.

The table and map below show the designated use information for your municipality. For more detail on which areas support which uses see the Map Book for this municipality.

Designated_Use	Total_Uses	Uses_Assessed	Uses_Impaired
Aquatic-General	6.0	6.0	5.0
Aquatic-Trout			
Fish Consumption	6.0	3.0	3.0
Recreation	6.0	6.0	5.0
Shellfish			
Water Supply	6.0	5.0	4.0





## Ideas for Taking Action

### Residents

- Work with your NJDEP [AmeriCorps NJ Watershed Ambassadors](#) to raise awareness about water issues in your community.
- Replace hard surfaces with grass, trees, or shrubs to reduce storm water runoff.
- Join a community water monitoring group near you.
- Go to [Stream School](#) and learn the basics of stream ecology, biological monitoring, and assessment techniques for streams.
- Schedule a stream cleanup.
- Plant a rain garden or build a rain barrel.
- Report suspected [harmful algal blooms](#) and [illegal dumping](#) to the NJDEP.
- Encourage your schools to participate in the [Watershed Education and Urban Fishing Programs](#).

### Local Government and Community Groups

- Ensure compliance with your Municipal Separate Storm Sewer System (MS4) permit to reduce nonpoint source pollutants carried by stormwater.
- Form a Stormwater Utility or apply for a [water quality restoration grant](#) to fund nonpoint pollution infrastructure improvements.
- Locate impaired waterbodies in your area through the [Total Maximum Daily Load Look Up Tool](#) and take steps to address the impairments.
- [Learn](#) about Surface Water Quality Standards, stream classifications, and water quality criteria.
- Set up a [community water monitoring group](#) in your area if one doesn't already exist.
- Coordinate with your [Local Watershed Ambassador](#) to set up community cleanup or restoration events.

## What Are Some Things the State Is Doing?

### NJ Department of Environmental Protection

- Compiles readily available water quality data to determine compliance with the [surface water quality standards](#). The results of this biennial assessment process are reported in the [NJ Integrated Water Quality Assessment Report](#).
- Develops [Total Maximum Daily Loads](#) for waters that do not meet surface water quality standards.



- Develops and funds Watershed Restoration and Protection plans.
- Assesses coastal recreational bathing beach water quality and provides public notification.
- Provides a free statewide service that removes floatables like garbage and medical waste from tidal shorelines.
- Regulates discharge of treated and untreated effluent to surface waters with [NJPDES Discharge to Surface Water \(DSW\) permits](#); discharge of sanitary and industrial wastewater to ground water with the [NJPDES Discharge to Ground Water \(DGW\) permits](#); and stormwater runoff with [stormwater permits](#).
- Implement measures to reduce [Combined Sewer Overflow Control \(CSO\)](#) discharges.
- The [Water Bank](#) provides local government 0% interest rate loans to cover half the cost to construct nonpoint source management projects.
- The [Nonpoint Source Pollution \(NPS\) Management Program](#) works with other state agencies, local governments, and watershed associations to combine regulatory controls, non-regulatory strategies, watershed-based plans, restoration actions, and funding to address NPS pollution.

### Learn more about Surface Water Quality:

- [NJ Surface Water Quality Standards FAQ](#)
- [GIS Coverages for Water Quality Standards](#)
- [Total Maximum Daily Look Up Tool](#)
- [Fish Consumption Advisories](#)

## What is Urban Flooding?

Flooding occurs when water inundates land that's normally dry, which can happen due to storms, broken levees, increased river volume, clogged drainage systems, sea level rise, rapid melting of snow or ice, or the rapid accumulation of rain. Urban floods are exacerbated by increased impervious surfaces (such as roads and buildings) which prohibit water absorption. Urban floods can develop at varying speeds from a few days to just a few minutes and can vary in size impacting a few houses to entire river basins.

## Why is It Important to Understand Urban Flooding?

Flooding is New Jersey's most common natural disaster and can result in property loss, serious injury, and death. Urban floods can impair power generation and transmission causing problems for critical infrastructure such as water treatment plants and hospitals. Garbage, sewage, and other contaminants caught in flood waters increase the risk of waterborne illnesses. Water can seep into buildings, affect sewer pipes, and cause indoor mold growth. Severe flooding can damage roads impeding aid, emergency care, and access to food.

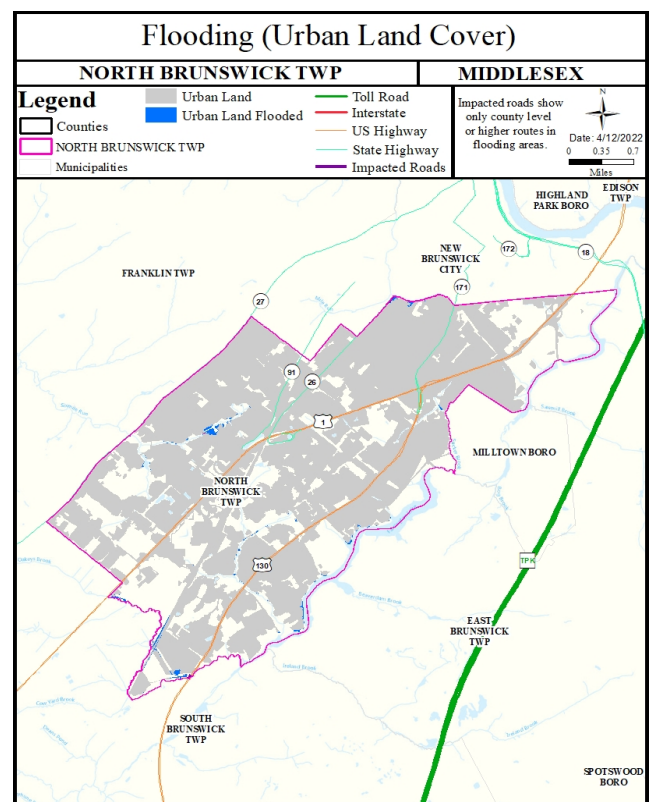
## What is a Flood Hazard Area?

A flood hazard area is the land and space above land that could be impacted by flooding. FEMA bases its flood hazard area on the 1% annual-chance event, commonly referred to as the 100-year flood. NJ typically regulates a slightly larger flood hazard area. A 100-year flood does not occur every 100 years, but instead has a 1% chance of occurring each year. FEMA also maps the 0.2% annual-chance floodplain, or the 500-year flood. While these maps do not fully account for climate change, they are a surrogate for climate resilience planning in non-tidally influenced areas. FEMA recently updated its 100-year flood hazard for tidal area to reflect climate-driven inland, riverine flooding and 5 feet of sea level rise. Combining these maps with mapped urban land use helps communities planning for climate change.

Urban areas are especially prone to worsening flooding because these areas lack healthy vegetation to absorb water and prevent erosion that floods can cause. The absence of vegetation adjacent to surface waters also reduces filtration of stormwater runoff and degrades water quality.

Unless properly managed, development within flood hazard areas exacerbates the intensity and frequency of flooding. Structures that are improperly built or rebuilt in flood hazard areas are subject to flood damage and threaten the health, safety, and welfare of users.

The [NJ Flood Hazard Area Control Act Rules](#) incorporate stringent standards for development in flood hazard areas and [riparian zones](#). NJDEP is currently updating these and other related rules as part of its [NJ Protecting Against Climate Threats \(NJPACT\) initiative](#). The [National Flood Insurance Program \(NFIP\)](#) requires compliance with the NJ Flood Hazard Area Control Act Rules.





## Ideas for Taking Action

### Residents

- [Educate yourself](#) on steps to reduce your flood risk such as purchasing flood insurance, elevating critical electrical equipment such as hot water heaters and AC units, and waterproofing your basement.
- Work with local environmental advocacy organizations to protect wetlands and sand dunes, which provide natural flood control.
- Sell eligible properties to the DEP's [Blue Acres program](#).

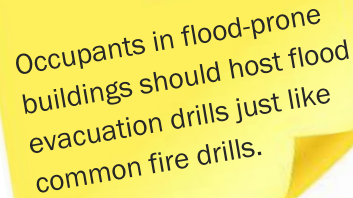
### Local Government and Community Groups

- Work with NJDEP's [Community Assistance Program](#) on a local ordinance to adopt new or revised flood maps or Flood Insurance Study, and legally enforce the National Flood Insurance Program (NFIP) requirements.
- Participate in the NFIP's [Community Rating System](#) to provide residents with up to a 45% premium reduction.
- Adopt a local [flood damage prevention ordinance](#) to regulate development in flood hazard areas.
- Publicize the availability of flood maps and educate your residents on how to read them to know the risks of living in floodplains.
- Advise your residents on how to increase their flood resilience, such as purchasing flood insurance, making an [emergency 'Go Kit'](#), and floodproofing.
- Increase awareness on how climate change will worsen local flooding issues and use the [Local Planning for Climate Change Toolkit](#) to increase your community's resilience to climate change.

## What Are Some Things the State Is Doing?

### NJ Department of Environmental Protection

- The [Watershed and Land Management Program](#) implements the [Flood Hazard Area Control Act Rules](#) that set standards for development in flood hazard areas and areas adjacent to surface waters.
- The [Bureau of Climate Resilience Planning](#) works through local and regional planning initiatives to educate and incorporate potential climate change and coastal hazard impacts. NJDEP encourages nature-based solutions such as [living shorelines](#) in coastal resiliency projects.



Occupants in flood-prone buildings should host flood evacuation drills just like common fire drills.

- The [Bureau of Flood Engineering](#) protects life and property from flooding by implementing federal and state flood control projects, developing flood hazard maps, and providing floodplain management assistance to local communities through the NFIP Community Assistance Program.
- The [Bureau of Climate Resilience Design and Engineering](#) advances [Rebuild by Design Projects](#) and assist communities to manage [regional stormwater infrastructure](#).
- The [Division of Coastal Engineering](#) works on projects to stabilize the shoreline, reduce damages from coastal storms and reduce flood impacts.
- The [Blue Acres program](#) works with communities to purchase flood-prone properties and restore the land to natural floodplain.
- DEP released the [New Jersey Climate Change Resilience Strategy](#) which incorporates the Coastal Resilience Plan.

**September is National Preparedness Month**

### Learn more about flooding:

- [Flood Hazard Control Act Technical Manual](#)
- [FEMA Flood Insurance](#)
- [NjFloodMapper](#)
- [Flooding \(EPA\)](#)
- [Ready.gov: Floods](#)



# Major and Minor Stationary Air Sources

# MIDDLESEX COUNTY North Brunswick Township

## What are Major and Minor Air Sources?

Stationary air sources are facilities or processes that emit significant amounts of air pollution during manufacturing, power generation, heating, incineration, or other activities. Examples of stationary air sources include power plants, refineries, municipal waste incinerators, waste transfer stations, storage and disposal facilities, facilities required to report their emissions under the Toxic Release Inventory program, and other sources that report their emissions under state and federal programs.

There are 20,000+ permitted facilities in the state of New Jersey, of which approximately 250 are considered major sources. These major sources have actual or potential emissions at or above the applicable threshold for any air pollutant. The remaining permitted facilities are considered minor sources, consisting of anything from gas stations and dry cleaners to facility boilers.

## Stationary Air Sources and Your Health

Stationary air sources can be a significant source of air pollution. If the air we breathe is polluted, we are also breathing in harmful chemicals, particles and toxins that can affect our health. Air pollution is linked to heart attacks, strokes, and low birth weight and contributes to respiratory diseases such as asthma, lung cancer, and chronic obstructive pulmonary disease (COPD), cardiovascular diseases and premature death. Stationary air sources can also be a source of nitrous oxides (NO<sub>x</sub>), one of the components needed to create ground level ozone. Ozone not only irritates the lungs but is also a significant health hazard.

To the right you'll find information about stationary air sources in your municipality. For permit, emissions, and enforcement information on these and other air sources, visit DEP's [Community Corner](#).

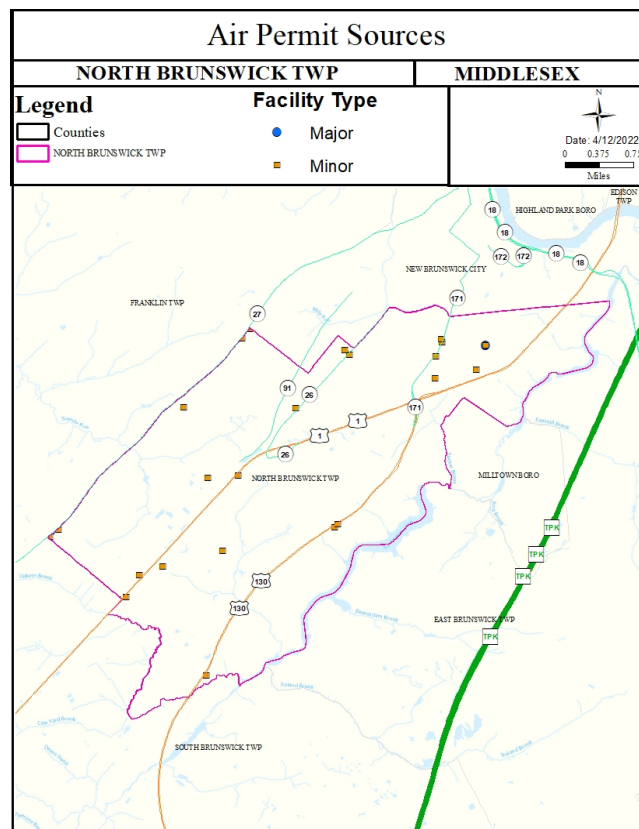
## Stationary Sources in Your Municipality

### Major Sources in Your Municipality

SITE_ID	FACILITY_NAME	ADDRESS
5540.0	DIVISION OF BRISTOL-MYERS SQUI	1 SQUIBB DR

### Top 10 (by Number) Minor Air Source Industry Types

FACILITY_DESC	Number_of_Sites
Gasoline Service Stations	7
Gasoline Stations	7
Pharmaceutical Preparations	3
Gasoline Stations with Convenience Stores	2
Other Gasoline Stations	1
Line-Haul Railroads	1
Funeral Services and Crematories	1
Paints, Varnishes, Lacquers, Enamels, and Allied P	1





# Major and Minor Stationary Air Sources

# Turning Data into Action

## Ideas for Taking Action

### Residents

- Use NJDEP's [What's in My Community?](#) to learn about permitted air sources in your neighborhood.
- Work with your local health department and/or environmental commission to evaluate local air pollutants and develop ideas for improving local air quality.
- Sign up for [EnviroFlash](#) to get air quality alerts sent to your email or mobile device.
- Take steps to reduce your energy use.
- Consider the alternative energy options available to you.

### Local Government and Community Groups

- Use HCP-NJ data to focus your local planning efforts.
- Check out NJDEP's [What's in My Community?](#) to better understand the permitted air sources in your community.
- Get certified through [Sustainable Jersey](#), a nonprofit organization that provides tools and financial incentives to become sustainable.
- Encourage and provide incentives for alternative energy use in your community.

Access What's in my Community by clicking the map below



## What are some things the State is doing?

- The NJDEP is responsible for permitting and monitoring existing and new stationary air sources to ensure they do not adversely affect air quality in your neighborhood or anywhere in the state.
- The NJDEP is required to collect, review, and report on emission statement data from major sources to track the State's progress toward meeting and maintaining the [National Ambient Air Quality Standards](#).
- Toxic release data is collected through NJDEP's [Release and Pollution Prevention Report](#) similar to the federal Toxic Chemical Release Inventory.
- The NJDEP inspects stationary air sources and takes enforcement when necessary.

## Air Quality Awareness Week

May 2 – 6, 2022

### Learn more about stationary air sources:

- [Bureau of Stationary Sources](#)
- [DEP's Division of Air Quality](#)





# Contaminated Sites

# MIDDLESEX COUNTY North Brunswick Township

## What are Contaminated Sites?

Past or current accidents, spills, leaks, or improper disposal and handling or other discharges of hazardous materials and wastes have contaminated land, ground water, surface water, and indoor and outdoor air throughout New Jersey.

In 2009, the [Site Remediation Reform Act \(SRRA\)](#) established a program for Licensed Site Remediation Professionals (LSRPs) to oversee environmental investigations and cleanups. An LSRP's highest priority is to protect public health, safety, and the environment.

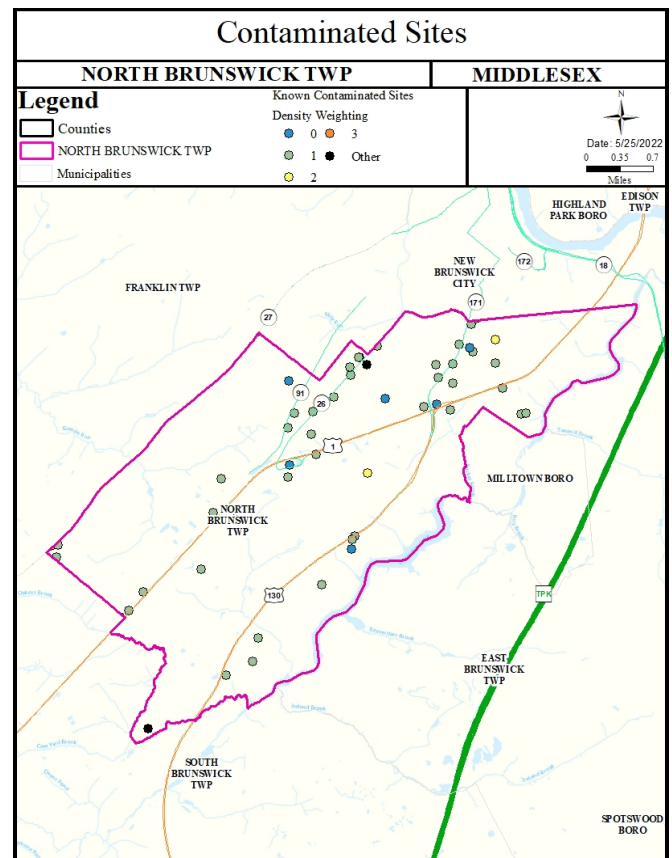
The NJDEP's role in the LSRP program is to inspect LSRP submittals to ensure remediation is completed in accordance with regulations and guidance, and within the remediation timeframes established in the SRRA.

Sites that are not in compliance with NJDEP's regulations or violate a remediation timeframe are subject to direct oversight. Direct oversight requires the remediating party to establish a remediation funding source in an amount equal to the total cost of the remediation, and involves NJDEP oversight of the remediation, a much more onerous process than sites remediated under LSRP oversight.

A [receptor evaluation](#) ensures that people and [ecological receptors](#) are protected from exposure to hazardous substances at or near contaminated sites. The remediating party conducts the receptor evaluation when a discharge is confirmed and continues to evaluate potential receptors throughout the remediation process. At several points during the remediation, the remediating party must submit the results of these evaluations to the NJDEP. One of the goals of the receptor evaluation is to identify [immediate environmental concern \(IEC\)](#) conditions, when contamination is detected above an applicable standard in a drinking water well or indoor air. Addressing IECs with NJDEP oversight is the remediating party's highest priority. If a remediating party is unable or unwilling, or is unknown, the NJDEP will address the IEC condition.

## Contaminated Sites in Your Municipality

New Jersey's Known Contaminated Sites (KCSL) includes confirmed soil or ground water contamination cases above the applicable standards weighted by level of concern. This includes sites where remediation is under way, required but not yet initiated, or complete. **KCSL sites are mapped below for this municipality.**



### Visit the tools below for the most up to date information on contaminated sites:

- DEP Data Miner report for sites in this municipality:  
[NORTH BRUNSWICK TWP](#)
- [NJDEP Data Miner](#) report category Site Remediation for related reports.
- The [KCSL report](#) for the most up to date information on all sites.
- DEP's [GeoWeb Site Remediation Profile](#) interactive mapping.



### Ideas for Taking Action

#### Residents

- Learn how to safely [manage](#) household hazardous materials such as antifreeze and batteries to avoid contaminating ground water or soil.
- If you have an underground fuel oil storage tank and suspect it's leaking, check out the [Homeowner's Guide to the Unregulated Heating Oil Tank Program](#) (UHOT).
- Review NJDEP's [Known Contaminated Site Report](#) to learn about contaminated sites in your area.
- Contact NJDEP's [Office of Community Relations](#) for information about contaminated sites and associated corrective measures.

#### Local Government and Community Groups

- Understand [your obligations](#) to clean up contaminated sites.
- Leverage funding opportunities to investigate and clean-up contaminated sites such as the [Hazardous Discharge Site Remediation Fund](#), [New Jersey Spill Compensation Fund](#), [Petroleum Underground Storage Tank Remediation, Upgrade and Closure Fund \(UST Fund\)](#), and [Technical Assistance Grants](#).
- Financial assistance may also be available through the [New Jersey Environmental Infrastructure Trust](#), or New Jersey Economic Development Authority Programs such as the [Brownfields Impact Fund](#).
- Consider enacting a [municipal soil and fill ordinance](#) to prevent creating new contaminated sites with "Dirty Dirt" and illegal dumping of fill in your community.
- Contact the [New Jersey Department of Health \(NJDOH\)](#) for health-related questions about potential environmental exposures to contaminated sites or any hazardous substance.

#### Learn more about contaminated sites:

- [Known Contaminated Site Report](#)
- [Site Remediation Basics](#)



### What are some things the State is doing

- The [Site Remediation Reform Act \(SRRA\)](#) established the Licensed Site Remediation Professionals (LSRP) program. LSRPs oversee environmental investigations and cleanups to protect public health and safety and the environment.
- LSRPs certify that a clean-up was completed in accordance with New Jersey's statutes and NJDEP's rules and standards.
- The NJDEP's Site Remediation and Waste Program (SRWMP) evaluates every clean-up overseen by a LSRP to ensure compliance with remediation rules, standards, and timeframes.
- SRWMP issues a Remedial Action Permit (RAP) when contamination on site remains above applicable soil and ground water standards. The issuance of a RAP and the restrictions included in the RAP are considered a protective remedy.
- The [Office of Brownfield and Community Revitalization](#) serves as the focal point for NJDEP's brownfield program, charged with coordinating remediation and reuse efforts at specific brownfield sites and piloting innovative approaches to expedite the revitalization process.
- NJDOH uses funds from the Centers for Disease Control's [Agency for Toxic Substances and Disease Registry](#) to evaluate potential public health impacts from hazardous substances. Community groups can request an evaluation of environmental data or health education about potential exposures to hazardous substances.

## Why are Scrap Metal Facilities Important?

Scrap metal facilities, sometimes referred to as scrap yards, buy left over metals from various sources to sort by type, compact, and sell for reuse or recycling. Sources of scrap metal include structural steel, electrical equipment, commercial salvage operations, electronic waste, and car parts. The most frequently recycled metals are aluminum, brass, copper, iron, lead, nickel, steel, and zinc.



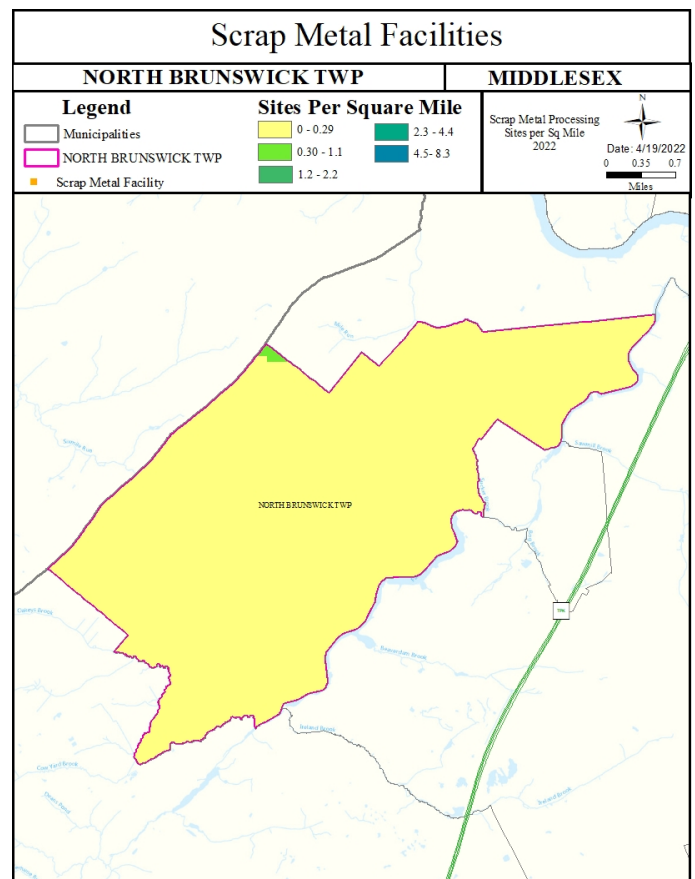
While scrap metal recycling has environmental benefits, such as reducing greenhouse gas emissions and saving energy and natural resources, improperly managed scrap metal facilities can cause health and environmental concerns. Compacting activities can emit hazardous air pollutants. Hazardous materials such as oils and lead-acid battery contents can contaminate water sources and soils, both on site and through unmanaged stormwater runoff. Some appliances and motor vehicle air conditioners use refrigerants containing chlorofluorocarbon or hydrochlorofluorocarbon that contribute to climate change if vented into the atmosphere.

The extent of environmental impacts from these facilities depends on a variety of factors, including the type of outdoor activities, the amount of impervious surface, the types of ground cover, and whether any best management practices are implemented. In addition to the activities at the facility, truck and rail traffic bringing material in and out creates air pollutant and, along with the noise and dust associated with operations, can be a nuisance to the community.

## Scrap Metal Facilities and Your Municipality

Below are the known scrap metal facilities in this municipality:

**No scrap yards**





## Ideas for Taking Action

### Residents

- Work with your local government on truck routing to ensure safe streets.
- Contact your local health department to report rodent or dust issues, or excessive noise.

**Report information about illegal dumping to NJDEP using our [web-based app](#) or at:**



### Local Government and Community Organizations

- Adopt a [local ordinance](#) requiring scrap metal facilities to conduct and document monthly visual inspections to ensure that best management practices identified in the NJDEP industrial stormwater permit are implemented.
- Ensure local scrap metal facilities are compliant with Spill Prevention Control and Countermeasures rule [requirements](#).
- Ensure local scrap metal facilities form a pollution prevention team responsible for developing and implementing a Stormwater Pollution Prevention Plan, as required by in their vehicle recycling or scrap metal [general permit](#).
- Work with your local planning board and the County to use HCP-NJ Traffic and Scrap Metal Facility data to revise truck routes to reduce diesel emissions exposure. Plan truck routes that have the least impact on residents and avoid especially sensitive areas like schools, day cares, and public recreational open space.



*Protecting New Jersey's surface and ground waters from pollution caused by improperly treated wastewater, residuals, and stormwater.*

## Some Things Being done by the State

### NJ Department of Environmental Protection

- Issues permits to regulate the discharge of stormwater from facilities involved in the [recycling of scrap materials](#) and [used vehicle parts](#).
- Issues air permits for emissions from scrap metal facilities that require a dust control plan to minimize visible emissions and particulate/dust from the material handling source operations.
- Issues Compliance Advisories such as this one for [Scrap Metal Facilities](#) and this one about [Mercury Switches in End of Life Vehicles](#) to help facilities understand regulatory requirements.

### Learn more about Scrap Yards:

- [NJDEP Stormwater Index](#)
- [Tips for reducing waste production](#)
- [USEPA Scrap Recycling BMPs](#)
- [USEPA Scrap Metal Merchants](#)
- [USEPA Reduce, Reuse, Recycle](#)

## What is Radon?

Radon is a radioactive gas that comes from the breakdown of naturally occurring uranium in soil and rock. It is invisible, odorless, and tasteless, and can only be detected by specialized tests. Radon enters homes through openings that are in contact with the ground, such as cracks in the foundation, small openings around pipes, and sump pits.

## Why is Radon Important?



**RADON IS**  
Invisible • Odorless • Tasteless

**RADON IS**  
The 2nd Leading Cause of Lung Cancer in the United States

**RADON IS**  
The Leading Cause of Lung Cancer for Non-Smokers

Responsible for up to 22,000 Deaths per Year

**TAKE ACTION!  
TEST YOUR HOME!**

Homeowners can test for Radon themselves or hire a New Jersey Certified Radon Measurement Company

Test Kits are available from Hardware Stores, Local Health Departments or Certified Businesses

**MITIGATE YOUR HOME!**

The New Jersey Department of Environmental Protection recommends you mitigate your home if your test results indicate radon levels of 4 pCi/L or more



The Radon Potential Map above classifies municipalities as having high, moderate, or low potential for indoor radon based on the percentage of homes with radon concentrations greater than or equal to 4 picocuries/liter (pCi/L). Tier assignments for each municipality are:

- Tier 1: High potential – at least 25 homes tested with 25% or more having radon concentrations greater than or equal to 4 pCi/L
- Tier 2: Moderate potential – at least 25 homes tested with 5 to 24% having radon concentrations greater than or equal to 4 pCi/L
- Tier 3: Low potential – at least 25 homes tested with less than 5% having radon concentrations greater than or equal to 4 pCi/L

Regardless of the Tier designation, the NJDEP recommends that all homeowners test for radon. Radon concentrations can vary widely within a tier location, depending upon the geology and amount of uranium in the soil. Homes in low or moderate radon potential areas can have elevated radon concentrations. Both the NJDEP and the USEPA recommend that residents take action to mitigate their homes if test results indicate radon levels of 4.0 pCi/L or higher.

## Radon Testing in Your Municipality

45.1 % OF HOMES TESTED

20.0 % OF HOMES TESTED  $\geq$  4 pCi/L (picocuries per liter)



## Radon

## Turning Data into Action

### Ideas for Taking Action

#### Residents

- Use a home test kit or hire a [NJDEP-certified business](#) to test your home for radon.
- Mitigate your home if your radon test results are 4 picocuries per liter (pCi/L) or higher.
- Stop smoking if you have radon in your home. Radon causes lung cancer in both non-smokers and smokers, but the risks are greatest if you smoke.

#### Local Government and Community Groups

- Conduct radon education and awareness in your community. Contact the NJDEP's [Radon Program](#) for communication materials.
- Work with [schools](#) to develop a radon action plan.
- Provide or assist residents in getting radon test kits.
- Collaborate with the [New Jersey Chapter of the American Lung Association](#) to promote smoking cessation.
- Create incentive programs for landlords and small businesses to mitigate high radon residences.

### What Are Some Things the State Is Doing?

#### NJ Department of Environmental Protection

- Conducts outreach activities to educate the public on the risks of radon and home testing and mitigation.
- Adopted rules requiring the certification of [all businesses and individuals conducting radon testing and mitigation](#) in New Jersey to ensure high quality radon services.
- Provides [small grants](#) to municipalities and counties to purchase radon test kits to hand out free to residents.

#### NJ Department of Community Affairs

- The New Jersey Uniform Construction Code (UCC) requires that all homes and schools built in [Tier 1 \(high radon potential\) municipalities](#) include radon-resistant construction features.



#### Learn more about Radon:

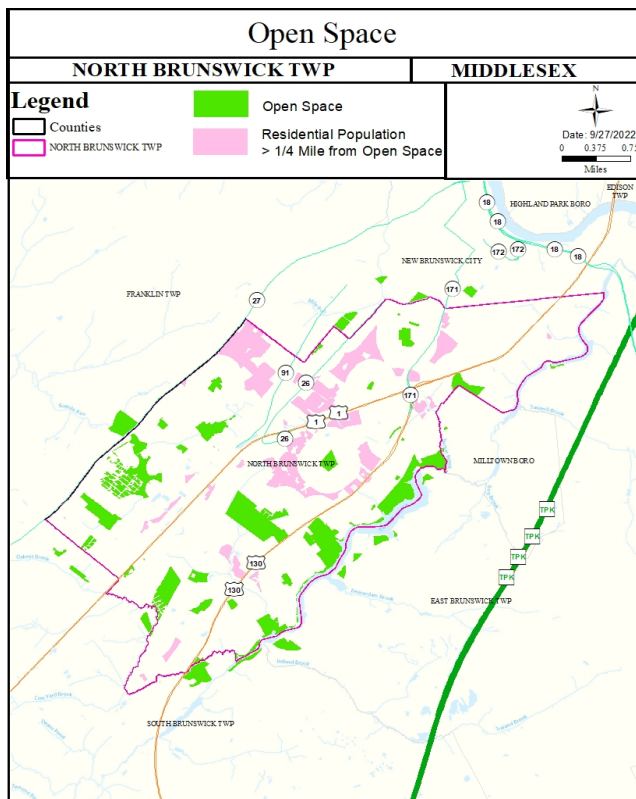
- [NJDEP's Radon Program](#)
- [New Jersey Radon Tier Assignment Report](#)
- [New Jersey Radon Hazard Subcode](#)
- [NJ Quitline](#)
- [USEPA Radon Information](#)
- [CDC Radon Information](#)

## What is Open Space and Why is it Important?

New Jersey's open space provides environmental, social, and economic benefits, including protecting water resources; preserving biodiversity and wildlife habitats; creating greenways; enhancing urban centers; and supporting recreational opportunities. Open space preservation also helps maintain New Jersey's farmland, protect rural landscapes, and sustain the state's tourism industry. Publicly available open space promotes walking, biking, and other outdoor activities. According to the CDC, people who are physically active live longer and have lower risks for heart disease, stroke, type 2 diabetes, depression, and some cancers.

## Does My Community Have Enough Open Space?

Local governments are encouraged to provide nearby park and recreational opportunities for their residents. The Community Data Summary page and map below shows the residents living greater than a ¼ mile (roughly a ten-minute walk) from that open space for your community.



## How is the State Doing?

New Jersey is the most densely populated state in the nation with a population forecasted to continue to grow. With this growth comes pressure for more development. Despite these trends, government agencies and nonprofit land trusts have preserved 34% of New Jersey's land (including farmland), an amount almost equal to the State's almost 33% of developed land.

Additionally, there are developed areas of our State that experience recurring flooding and damage from storms. Some of these areas can also be turned into valuable open space, providing public access to waterways and reducing future flooding.

In 2018, the NJDEP completed its most recent [Statewide Comprehensive Outdoor Recreation Plan](#), which emphasizes the preservation of land for water resource protection, public recreation, and natural and historic resource preservation. It includes the priority ranking systems used by the NJDEP for both its own acquisitions and for funding awarded for local and nonprofit land acquisition and park development projects.

Many local governments have open space taxes to acquire, develop, and maintain land for recreation and conservation. Visit the [Recreational Open Space Inventory \(ROSI\) database](#) for details on the municipal, county and nonprofit parkland encumbered by the NJDEP's Green Acres Program.



## Ideas for Taking Action

### Residents

- Visit [publicly available open space](#) near you.
- Work with your [local government](#) to acquire open space and develop outdoor recreation facilities.
- If you own undeveloped land, consider selling it to the NJDEP's [Green Acres Program](#) to preserve environmentally sensitive open space, water resources, and other natural, recreational, and historic resources.

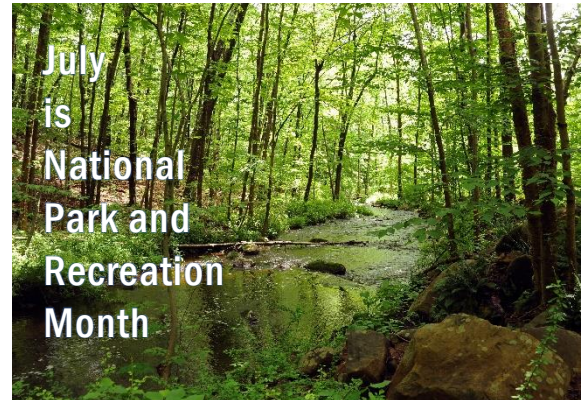
### Local Government and Community Groups

- Help residents understand the benefits of open space and consider how to improve or develop open space in your community for active and passive recreation.
- Local governments that enact an open space tax and plan for [open space and recreation areas](#) may be eligible for larger State grants.
- Apply to the NJDEP's [Green Acres Program](#) for matching grants and low-interest loans to acquire open space and develop outdoor recreation facilities.
- Adopt a [Complete Streets](#) resolution or ordinance to build and maintain sidewalks, crosswalks, bike racks, and bike paths at and on routes between parks, schools and areas where people live. Complete Streets also helps control the traffic speeds on roads where people walk through road design and lower speed limits.
- Maintain and promote existing open space and recreation areas to ensure their continued safe use and enjoyment.

## What Are Some Things the State Is Doing?

### NJ Department of Environmental Protection

- [Green Acres](#) is NJDEP's real estate agent, acquiring land from willing sellers to protect environmentally sensitive open space, water resources and other significant natural, recreational, and historic areas.



Green Acres also provides funding to municipalities, counties, and nonprofit land trusts to acquire open space and develop outdoor recreational facilities.

- The [New Jersey Recreational Trails Program](#) established New Jersey's trails plan and provides grants to develop, maintain, and restore trails and trail-related facilities.
- The [Blue Acres Program](#) works with property owners who want to sell homes and land damaged by, or prone to damage caused by, storms or storm-related flooding, or that may buffer or protect other lands from such damage.
- The [New Jersey Natural Lands Trust](#) preserves land in its natural state for public enjoyment. The Trust manages its properties to conserve elements of natural diversity, such as habitat for rare plant and animal species and rare ecological communities.

### Learn more about Open Space:

- [USEPA's Green Streets and Community Open Space](#)
- [NJ Conservation Blueprint](#)
- [NJDEP Local Government and Nonprofit Acquisition Policies](#)
- [USPA's Smart Growth Grants and Other Funding](#)
- [CDC's Access to Parks and Schools and Your Health](#)



## Traffic and Air Quality

In New Jersey, emissions from cars and light-duty trucks account for approximately 30% of the total volatile organic compounds and oxides of nitrogen emissions that contribute to the ground-level ozone formation. Ozone is the only National Ambient Air Quality Standard that New Jersey does not meet. The transportation sector accounts for 42% of the State's net greenhouse gas emissions, making it the largest contributor to climate change. To meet its clean air, energy and climate goals, New Jersey recognizes the need to electrify almost this entire sector by 2050.



## Are some people more affected than others?

Children's immune and respiratory systems are still developing, and they breathe up to 50 percent more air per pound of body weight than adults. Breathing in diesel exhaust can cause or exacerbate respiratory problems such as asthma, the leading cause of serious chronic illness and school absenteeism among children. The elderly and individuals with pre-existing heart or lung conditions are also more vulnerable to health problems from particulate matter.

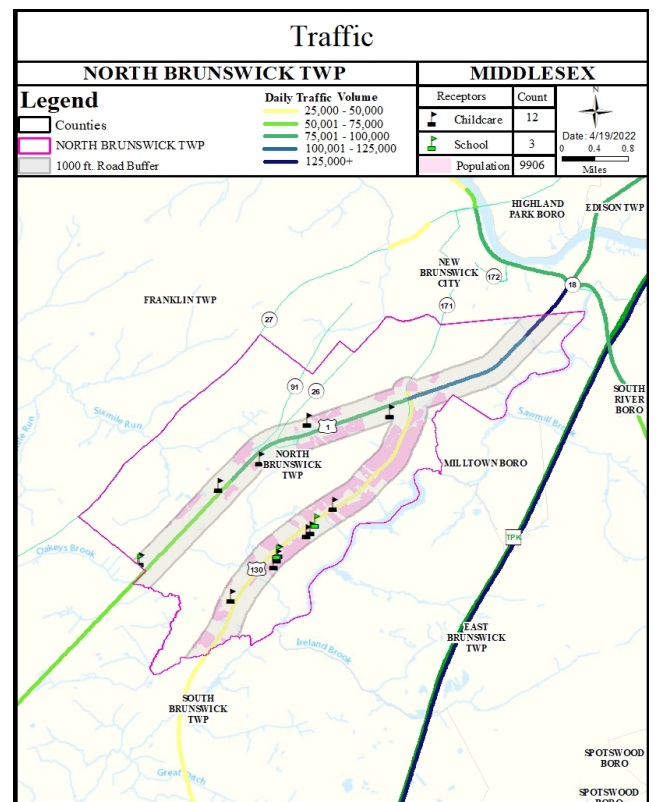
The Community Data Summary page and the map below show where your community has residents, schools, and day cares within 1,000 feet of busy roadways.

## How Do Diesel Emissions Impact Health?

Diesel exhaust is extremely harmful to public health, releasing fine particles and gases into the air. Because of its size, diesel exhaust is inhalable into the deepest parts of the lungs where it can enter the bloodstream. It also can accumulate in lungs over time, obstructing oxygen transfer to the blood and causing many health problems.

Fine particle matter from diesel exhaust is linked directly to asthma; acute and chronic respiratory symptoms such as shortness of breath and painful breathing; cancer; and premature deaths.

In urban areas, diesel exhaust may contribute as much as 70% of the cancer risk from toxic air pollution, which makes diesel emissions more harmful than all other toxic air contaminants combined. While diesel emission concentrations are typically higher in urban areas, diesel exhaust is a widespread problem. Levels are higher near major roadways.





## Ideas for Taking Action

### Residents

- Purchase the most energy-efficient vehicle possible that meets your family's needs.
- Choose a cleaner commute by biking, walking, carpooling, or using public transportation.
- Do not idle your vehicle or other equipment.
- Inflate tires properly. Cars with soft tires use up to 5% more energy and are a safety hazard.
- Keep vehicles properly maintained to maximize operating efficiency. The average well-maintained car emits 33 pounds of pollution every 100 miles. Cars that are not in compliance with state vehicle emission standards can emit approximately five times that amount.
- Make sure your vehicle's gas cap fits properly to limit the gas that evaporates from the tank.
- Develop good driving habits by combining trips, obeying the speed limit, and avoiding jackrabbit starts and stops.

### Local Government and Community Groups

- Use HCP-NJ traffic data to better plan truck routes in your community to reduce diesel emissions exposure. Plan truck routes that have the least impact on your residents and avoid especially sensitive areas like schools, day cares, and public recreational open space.
- Use HCP-NJ traffic data when planning new development to keep schools and day care centers at least 1,000 feet from heavy traffic areas.
- Get certified through [Sustainable Jersey](#), a nonprofit organization that provides tools and financial incentives to help towns become more sustainable.
- Call the NJDEP's 24-hour, toll-free hotline at (877) 927-6337 (WARN DEP) or your local police department to report idling violations (**please do not call 911**).
- [Order No-Idling Zone signs](#) for buildings, parking lots or anywhere that idling is a problem.
- Consider installing Electric Vehicle (EV) charging stations in your community and assess your community's fleet to determine where EVs could replace gasoline- and diesel-fueled vehicles.



**DRIVE CHANGE**  
DRIVE ELECTRIC

## What are Some Things the State is doing?

### NJ Department of Environmental Protection

- The [Bureau of Mobile Sources](#) implements programs to reduce air pollution from fossil-fueled mobile sources, spearheads the State's transition to electric mobility, and encourage travel choices that minimize emissions. They also oversee the State's Vehicle Inspection and Maintenance (I/M) emissions testing program and enforce the State's anti-idling law.
- [Drive Green New Jersey](#) educates the public about EVs and highlights incentives for EV purchases and infrastructure.
- The "[It Pay\\$ to Plug In](#)" [EV charging grant program](#) provides funding for charging infrastructure throughout the State.
- The first strategy in the State's [Energy Master Plan](#) focuses on reducing energy consumption and emissions from the transportation sector. To that end, it supports the deployment of 330,000 light-duty EVs on the road by 2025.

### NJ Department of Transportation

- [NJ Safe Routes to School](#) enables and encourages children, including those with disabilities, to walk and bike to school by facilitating projects that improve safety and air quality, and reduce traffic and fuel consumption.
- Complete Streets policies promote safety for pedestrians, bicyclists, and other users on New Jersey roadways, incorporating Green Street and stormwater infrastructure. NJDOT provides many [Complete Streets Resources](#) for communities.

## Learn more about Traffic and Air Pollution

- [Local Government EV Resources](#)
- [Charge Up Your Town](#)
- [Diesel School Buses and Children's Health](#)
- [Green Streets](#)



# Low Birth Weight and Preterm Birth

## MIDDLESEX COUNTY North Brunswick Twp

### Why are Low Birth Weight and Preterm Birth Important?

Low birth weight (LBW) is defined as an infant born weighing less than 5 lbs., 8 oz. (2,500 grams). The most frequent causes of LBW are premature/preterm birth (being born before 37 weeks of pregnancy) and fetal growth restriction. Being born early means a baby has less time to grow and gain weight inside the mother’s womb. LBW infants are at greater risk of dying in the first month of life, may require intensive care at birth, and are at higher risk of developmental disabilities and chronic illnesses throughout their lives.

### Who is at Risk?

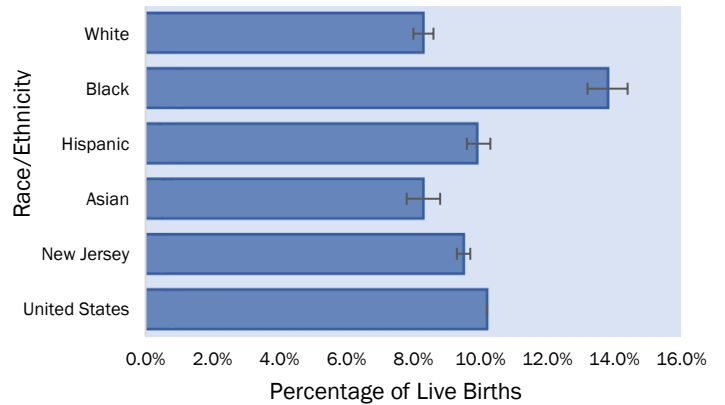
Because many premature babies are born with low birth weight, many risk factors for preterm labor and premature birth are the same as for having a low birth weight baby.



Some of the known risk factors include:

- **Race:** Black women are more likely to give birth early (see graph for New Jersey data).
- **Age:** Being younger than 17 or older than 35 makes a woman more likely than other women to give birth early.
- **Multiple births:** The most common complication of being pregnant with multiples is premature birth.
- **Mother's health:** Babies of mothers who are exposed to illicit drugs, alcohol, opioids, and smoking are more likely to be born with low birth weights. Mothers of lower socioeconomic status are also more likely to have poorer pregnancy nutrition, inadequate prenatal care, and pregnancy complications - all factors that can contribute to low birth weight and preterm labor.
- **Environment:** Exposure to indoor or outdoor air pollution or contaminated drinking water are considered environmental risk factors.

### Preterm Birth by Mother’s Race/Ethnicity, New Jersey, 2019



### How is My Municipality Doing?

- 9.1% low birth weight infants (2016-2020).
- 10.3% preterm (premature) births (2016-2020).

Detailed data on low birth weight and prematurity can be generated using the NJSHAD [Low Birth Weight](#) and [Preterm Birth](#) query builders. Users can filter data by:

- Mother’s residence (county, municipality);
- Year of birth;
- Mother’s age;
- Mother’s race and/or ethnicity;
- Other maternal characteristics, for example, education, or tobacco or alcohol use during pregnancy;
- Infant characteristics, for example, sex, multiple births, gestational age, Apgar score (a health assessment conducted shortly after birth); and
- Health utilization characteristics, for example, prenatal care onset, number of prenatal visits.



**In New Jersey:** Black infants are **approximately 2X more likely** to be born with low birth weights than White infants.



# Low Birth Weight and Preterm Birth

# Turning Data into Action

## Ideas for Taking Action

### Residents

- Make every effort to quit smoking.
- Work with a health care provider to control diseases such as high blood pressure or diabetes.
- Get preconception health care and start prenatal care early.
- Discuss concerns during pregnancy with your doctor and seek medical attention for any [warning signs or symptoms of preterm labor](#).
- Take a daily multivitamin containing 400 micrograms of folic acid before and throughout pregnancy.

### Local Government and Community Groups

- Encourage women of childbearing age to reach out to [Community Health Workers](#) who perform outreach and enroll women and their families in appropriate care and provide personalized support.

## What Are Some Things the State Is Doing?

### Office of the Governor

[Nurture NJ](#) focuses on improving collaboration and programming between departments, agencies, and stakeholders to achieve its goal of making New Jersey the safest place in the country to give birth and raise a baby.

### NJ Department of Health

The Division of Family Health Services' [Healthy Women Healthy Families \(HWHF\) Program](#) uses Community Health Workers to link women of reproductive age to local programs and services to help with a safe and healthy pregnancy.

### NJ Department of Children and Families

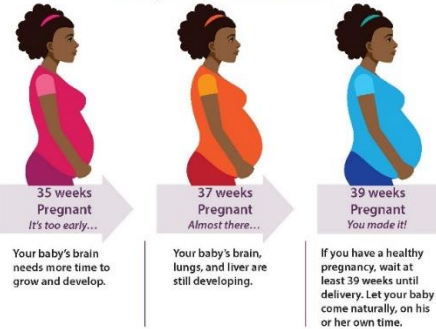
The [NJ Maternal Infant and Early Childhood Home Visiting Program](#) uses nurses and trained parent educators to provide parenting support through frequent in-home visits to pregnant women and families with young children.

## January 23 is Maternal Health Awareness Day in New Jersey



### Your Baby Grows Throughout Your Entire Pregnancy

You may feel ready to meet your baby, but your baby may not be ready to meet the world. Important developments happen throughout pregnancy, including in the final months and weeks.



For more information, visit: [www.cdc.gov/reproductivehealth/maternalinfanthealth/pretermbirth.htm](http://www.cdc.gov/reproductivehealth/maternalinfanthealth/pretermbirth.htm)



## NOVEMBER is PREMATURITY Awareness Month

### Learn more about NJ resources for women of reproductive age:

- **NJ Department of Health:**
  - [Early Intervention Services in NJ -- Frequently Asked Questions](#)
  - [Healthy Women Healthy Families](#)
  - [Neonatal Abstinence Syndrome \(NAS\)](#)
- **NJ Parent Link**
- **NJ Department of Children and Families:**
  - [Home Visitation Programs](#)
  - [FAQs for Pregnant Women and Families](#)

## Why Be Concerned About Lead?

Lead is a heavy metal that has been widely used in industrial processes and consumer products. Young children are very sensitive to the harmful effects of lead since they absorb more lead into their bodies than adults and are more susceptible to its effects on brain development. Even low levels of lead in blood may affect a child's ability to pay attention, decrease academic achievement, and can cause behavioral problems. Health impacts can include kidney damage, anemia, and reductions in birth weight.

Lead poisoning is preventable. The key is keeping children from coming into contact with lead. Lead sources include:

- Paint found in homes and buildings built pre-1978,
- Imported consumer products such as cosmetics, spices, cultural home remedies, pottery, and toys,
- Take-home lead from hobbies and occupations
- Lead lined drinking water service lines, plumbing and fixtures, and
- Lead contaminated soil and air.

## Old Paint Is a Source of Lead Exposure

If a home or a residential building was built before 1978, there is a good chance it contains lead-based paint. Lead from paint, including lead-contaminated dust, is the most common causes of lead poisoning.

Lead paint is still present in millions of homes and apartments, sometimes under layers of newer paint. If the paint is intact, the lead paint is usually not a problem. Deteriorating lead-based paint with peeling or chipping is a hazard and needs immediate attention.

Homeowners and landlords can use NJDEP's [Potential Lead Exposure Mapping](#) (PLEM) tool to determine the age of NJ housing.



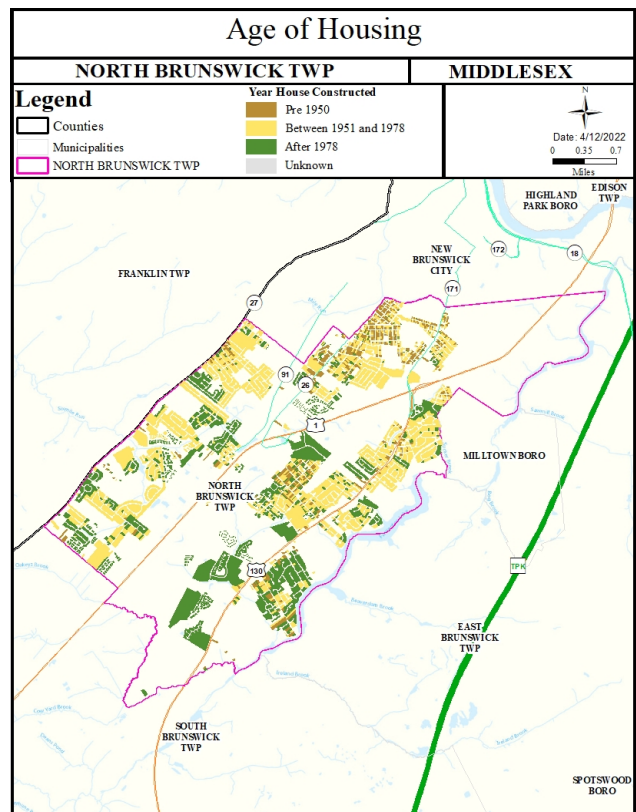
## How Is My Municipality Doing?

In New Jersey, all children must be tested at both 1 and 2 years of age. Children 3 years or older must be tested at least once before their 6th birthday, if not already tested.

20.6% of children < 6 years tested in July 2018 - June 2019

1.7% of children < 6 years tested in July 2018 - June 2019 with blood lead levels above 5 ug/dl

\*\*The data are not available for municipalities with populations less than 35,000 residents.





## Ideas for Taking Action

### Residents

- Test your child at both 12 and 24 months of age, and at any age if you suspect exposure to a known or suspected source of lead. Local health departments offer blood lead screening for uninsured families.
- Learn about [sources of lead and easy ways to prevent exposure](#).
- Test your home for lead (paint, [water](#), and soil) to keep your family safe in your [home](#) and [yard](#).
- Learn [how to prepare and serve foods](#) that can limit your family's absorption of lead.

### Local Government and Community Groups

- Educate healthcare providers to follow lead screening schedules and provide prevention information.
- Focus prevention and outreach activities on childcare centers, WIC clinics, houses of worship, and local businesses.
- Use the [Potential Lead Exposure Mapping \(PLEM\)](#) tool to educate homeowners and landlords about potential lead-based paints in NJ homes built before 1978.
- Create incentive programs for landlords to remediate.
- Require lead-safe renovators to provide licensing evidence before performing their work.
- Create local ordinances to require that all rentals are lead tested upon tenant turnover.
- Provide, or assist residents in acquiring, lead in drinking water test kits.

## What is State Government Doing?

### NJ Department of Health:

- Collects childhood blood lead laboratory testing results.
- Notifies local health departments regarding children with elevated blood lead results.
- [Certifies lead training providers, lead training agencies, and lead training instructors and managers.](#)

### NJ Department of Education:

- Requires public schools to test for lead in drinking water and post results on School District websites.
- Requires corrective action if water standards are exceeded.

### NJ Department of Children and Families:

- Requires licensed childcare facilities to be certified as lead hazard free.
- Requires testing for lead in drinking water in childcare facilities.



## National Lead Poisoning Prevention Week

Last Week of October

[More info](#)

### NJ Department of Environmental Protection:

- Regulates lead in public drinking water by requiring public water systems to:
  - Manage water chemistry so lead does not leach from water pipes,
  - Monitor drinking water at customer taps in locations with the highest risk for the leaching of lead, and
  - Notify customers when the concentration in more than 10 percent of samples collected during any monitoring period is greater than 15 parts per billion (Action Level).
- Provides funding for public water systems to replace lead or lead containing service lines.
- Requires that residential and nonresidential contaminated soil cleanups meet lead standards.

### NJ Department of Community Affairs:

- Maintains a list of companies certified to perform lead hazard evaluation or abatement in New Jersey.
- Provides information to tenants about their [rights related to lead](#).

### NJ Department of Human Services:

- Hosts the Inter-Agency Task Force for the Prevention of Lead Poisoning.

### Learn more about Childhood Blood Lead:

- [Lead exposure prevention, testing, and access to educational resources](#)
- [Lead in drinking water](#)
- [Information for tenants on regulations for lead-safe maintenance](#)
- [NJ certified lead abatement and lead evaluation contractors](#)

### What is Asthma?

Asthma is a condition that makes it difficult to breathe. It usually begins with exposure to a “trigger” (such as pollen, mold, air pollution) that causes the airways to react. During an asthma attack, the lung airways tighten and fill with fluid. The resulting effects are chest tightness, wheezing, breathlessness, and coughing. There is no cure for asthma, but you can manage it through proper medication and avoiding things that trigger your asthma.

### Why is Asthma Important?

One in 13 Americans has asthma. The CDC National Center for Health Statistics reported that in 2020, 8.4% of adults and 5.8% of children had asthma. In 2018, there were 5.8 million office visits for asthma and 1.6 million emergency department visits for asthma. In 2020, 4,145 people died from asthma. Since there is no cure for asthma, it is a health burden that stays with people for their whole lives, resulting in many direct and indirect social and economic costs. The CDC estimates that asthma costs the U.S. economy more than \$80 billion annually in medical expenses, days missed from work and school, and deaths.

### Who is At Risk?

In New Jersey, more than 600,000 adults and 167,000 children currently have asthma. Asthma affects all races, ages, and genders. The CDC reports that risk is increased in the following areas:

- **Family history:** If you have a parent with asthma, you are three to six times more likely to develop asthma than someone who does not have a parent with asthma.
- **Viral Illness:** A history of viral respiratory infections during infancy and childhood can increase your likelihood of developing chronic asthma.



- **Smoking:** Smokers have a high risk of asthma. Mothers who smoke while pregnant can increase their baby's risk of asthma. Additionally, people exposed to secondhand smoke are more likely to have asthma.
- **Allergies:** Having an allergic condition, such as eczema or hay fever, is a risk factor for developing asthma.
- **Obesity:** Children and adults who are overweight or obese are at a greater risk of asthma.
- **Air Pollution:** Exposure to the ground-level ozone raises the risk for asthma. Those who grew up or live in urban areas have a higher risk for asthma.

### How is My Municipality Doing?

Age-adjusted Rate Emergency Department Visits for Asthma per 10,000 People (2016-2019): 47.7

**NOTE:** Emergency Department visits underestimate the number of individuals with asthma since these data do not include physician office visits, school nurse records, or other primary care visits for asthma.



Source: Asthma Impact on the Nation, CDC

## Ideas for Taking Action

- Know and avoid [asthma triggers](#):
  - Common indoor triggers: dust and dust mites; food allergies; furry and feathered animals; illnesses like colds and flu; cockroaches and mice; strong odors; asthma-causing agents in the workplace; tobacco and wood smoke
  - Common outdoor triggers: exercise; pollen from trees, grass, and flowers; weather and air pollution
  - For more information, see USEPA's [Asthma Triggers: Gain Control](#)
- Asthma-proof your home
- Create an [Asthma Action Plan](#)
- Limit or avoid exercise or strenuous work outside when air quality is poor. Check [AirNow.gov](#) for current air quality info for your area.

## Local Government and Community Groups

- Encourage schools to become [Asthma-Friendly](#).
- Promote [best practices](#) for cleaning and pest management in schools and childcare centers.
- Encourage school, bus companies and parents to take the [No-Idling Pledge](#).

## What Are Some Things the State Is Doing?

### NJ Department of Health

- Maintains information, data, and statistics on asthma in New Jersey. Resources for people with asthma are available from several state agencies and their partners.
- [Healthy New Jersey 2030](#) is the State's Health Improvement Plan and contains NJDOH's health promotion and disease prevention agenda for the decade.

### NJ Department of Environmental Protection

- Manages air quality using ambient air monitoring, source inventories, emission reduction plans, rules, permits, stack and vehicle testing, air quality modeling and risk assessment, inspections, and enforcement. Visit NJDEP's [Division of Air Quality](#) for more details on these and other air quality related activities.



## Asthma Awareness Toolkit

You can use the items in CDC's [Asthma Awareness Month Toolkit](#) to take control of and raise awareness about asthma.

## Learn more about Asthma:

- NJDOH's [Asthma in New Jersey](#) links to asthma resources, data, and statistics, including Asthma Profiles by County
- NJDOH's [Resources for Asthma Sufferers](#) provides information and services for New Jerseyans who suffer from asthma and cannot afford medication or treatment
- NJDOH's [Work-Related Asthma Guidance for Workers](#)
- NJDEP's [Integrated Pest Management for NJ Schools](#)
- USEPA's [Asthma and Outdoor Air Pollution](#)
- USEPA's [Asthma Triggers: Gain Control](#)





# Heart Attack and Heart Disease Deaths

# MIDDLESEX COUNTY North Brunswick Township

## Description

A heart attack occurs because of coronary heart disease, which is the narrowing of the coronary arteries that supply blood to the heart muscle. When the blood supply to part of the heart is interrupted or blocked, the heart muscle is deprived of oxygen. This can result in chest pain, shortness of breath, nausea, palpitations, sweating, and anxiety.

## Why are Heart Attack and Heart Disease Deaths Important?

Currently, more than 1 in 3 adults live with some type of cardiovascular disease. In 2020, heart disease was the leading cause of death in New Jersey and in the United States. Heart disease and stroke, along with other cardiovascular disease, are among the most widespread and costly health problems facing the nation today. These diseases result in serious illness and disability, decrease quality of life, and cause hundreds of billions of dollars in economic loss every year. They are among the most preventable health problems.

## What is Known

When the heart muscle is starved for oxygen and nutrients, it is called ischemia. When damage or death of part of the heart muscle occurs because of ischemia, it is called a heart attack or myocardial infarction (MI). About every 40 seconds, someone in the United States has a heart attack.

According to the American Heart Association, the leading controllable risk factors for heart disease and stroke are high blood pressure, high cholesterol, cigarette smoking, diabetes, unhealthy diet, physical inactivity, and being overweight. Over time, these risk factors cause changes in the heart and blood vessels that can lead to heart attacks, heart failure, and strokes. Air pollution has also been linked to higher occurrence of heart attacks and strokes. It is critical to address risk factors early in life to prevent these devastating events and other potential complications of chronic cardiovascular disease.

## Who is At Risk?

People who have:

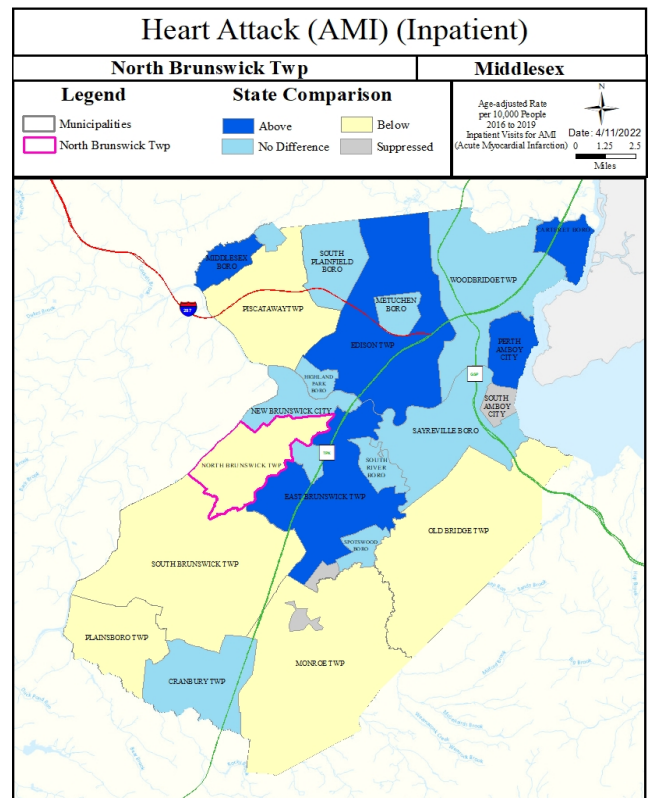
- High blood pressure,
- High blood cholesterol,
- Diabetes,
- Exposure to cigarette smoke (first- or secondhand),
- Poor diet/lack of physical activity/obesity,
- Excessive alcohol consumption, and/or
- Family history of cardiovascular disease.

## How is My Municipality Doing?

Heart Attacks Age-Adjusted Rate per 10,000 (2016-2019): 13.8

Heart Disease Deaths Age-Adjusted Rate per 100,000 (2016-2019): 132.6

## Heart Attacks – Age-adjusted rate per 10,000 residents 2016-2019





## Heart Attack and Heart Disease Deaths

## Turning Data into Action

### Ideas for Taking Action

#### Residents

- Know the [warning signs of a heart attack](#).
- Learn how to address key risk factors for heart disease such as high blood pressure, high cholesterol, and diabetes.
- Adopt healthy lifestyle choices such as healthy eating, physical activity, healthy weight, and limiting alcohol consumption.
- Avoid tobacco use and exposure to secondhand smoke.
- Limit or avoid exercise or strenuous work outside when air quality is poor. Check [AirNow.gov](#) for current air quality info for your area.

#### Local Government and Community Groups

- Use CDC's [toolkit](#) to create a "heart healthy" community.
- Encourage your community's health care providers to participate in the National [Million Hearts®](#) campaign and provide free blood pressure checks and [high blood pressure resources](#) during Hypertension Awareness Month each May.
- Promote access to parks and recreational spaces.
- Educate residents about the association between heart attacks and poor air quality.

### What Are Some Things the State Is Doing?

#### NJ Department of Health

Recognizing that heart disease is a significant public health issue, NJDOH established the [New Jersey Heart Disease and Stroke Prevention Program \(NJHDSPP\)](#). NJHDSPP produces models to help New Jersey-based healthcare organizations meet nationally recognized best practices and standards to prevent and treat heart disease and stroke.

#### NJ Department of Environmental Protection

Manages air quality with ambient air monitoring, source inventories, emission reduction plans, rules, permits, stack and vehicle testing, air quality modeling and risk assessment, inspections, and enforcement. Visit NJDEP's [Division of Air Quality](#) for more details on these and related activities.

**February is American Heart Month,**  
a time when all people can focus on their cardiovascular health.



**A national initiative  
to prevent 1 million heart attacks  
and strokes in 5 years**

#### Easy places to check your blood pressure



Pharmacy



Doctor's office



At home with a home monitoring device

#### Learn more about Heart Attack and Heart Disease Deaths:

- NJDOH's [State Health Assessment Data](#) provides information about heart disease-related indicators such as heart attack hospitalizations, heart disease deaths, high blood pressure, blood cholesterol, physical activity, and obesity
- [Hypertension](#) (CDC)
- [NJ Quitline](#)
- [NJDEP Air Monitoring](#)
- CDC's educational materials:
  - Being Active: [What's Your Move?](#)
  - Blood Pressure: [Make Control Your Goal](#)



### What is COPD?

Chronic obstructive pulmonary disease (COPD) is a chronic inflammatory lung disease that causes obstructed airflow from the lungs. Symptoms include difficulty breathing, cough, mucus (sputum) production and wheezing. COPD is caused by long-term exposure to irritating gases or particulate matter, most often from cigarette smoke.

Emphysema and chronic bronchitis are the two most common conditions that contribute to COPD. Chronic bronchitis is inflammation of the lining of the bronchial tubes, which carry air to and from the air sacs of the lungs. It's characterized by daily cough and mucus production. Emphysema is a condition in which the alveoli at the end of the smallest air passages of the lungs are destroyed by exposure to cigarette smoke, other irritating gases, and particulate matter.

### Why is COPD Important?

People with COPD are at an increased risk of developing heart disease, lung cancer, and a variety of other conditions, and may have trouble walking or climbing stairs, going to work, and getting out to engage in social activities.

Chronic lower respiratory disease, primarily COPD, is one of the leading causes of death in the United States. In 2018, 16.4 million Americans (6.6% of adults) reported a diagnosis of COPD.

You may be at an increased risk if you are older than 40 years, have symptoms of COPD, have a history of smoking, or have been exposed to environmental or occupational pollutants.

### What is Known

Tobacco use is the primary cause of COPD in the United States, but air pollutants at home (such as secondhand smoke and some heating fuels) and at work (such as dusts, gases, and fumes), as well as a genetic predisposition, also can cause COPD.

### Who is At Risk?

- Smoking is the main risk factor for COPD. Up to 75 percent of people who have COPD smoke or formally smoked.
- Long-term exposures to lung irritants such as secondhand smoke, air pollution, chemical fumes, and dusts from the environment or workplace are a risk factor for COPD.
- People with asthma are more likely to develop COPD.
- Most people who have COPD are at least 40 years old when symptoms begin. COPD is more common in women.
- People who have a family history of COPD are more likely to develop the disease, particularly if they smoke.

### How is My Municipality Doing?

Age-adjusted Rate Emergency Department Visits for COPD per 10,000 People (2016-2019): 16.3

#### COPD Costs (U.S.)

Costs attributable to COPD were ~ \$32.1 billion in 2010 with a projected increase to \$49.0 billion by 2020.



Source: Centers for Disease Control and Prevention (CDC)



# Chronic Obstructive Pulmonary Disease (COPD)

## Turning Data into Action

### Ideas for Taking Action

#### Residents

- If you smoke, stop! Quitting smoking is the single most important thing a smoker can do to live a longer and healthier life.
- If you don't smoke, don't start. Smoking can cause COPD, lung cancer, heart disease, and other cancers.
- Avoid exposure to secondhand smoke. Make your home smoke-free and advocate for a smoke-free work environment.
- Limit or avoid exercise or strenuous work outside when air quality is poor. Check [AirNow.gov](http://AirNow.gov) for current air quality info for your area.

#### Local Government and Community Groups

- Take action to decrease air pollution in your community by advocating and investing in clean energy and transportation.
- Advocate for smoking prevention and cessation programs in your community.

### How to Reduce Risk

Although there is no cure for COPD, treatment exists that can prevent worsening of the disease. Daily COPD medications can manage symptoms. Avoid tobacco smoke, home and workplace air pollutants, and respiratory infections to prevent developing COPD. Early detection of COPD might change its course and progress. A simple test, called spirometry can measure pulmonary (lung) function and detect COPD in individuals with breathing problems.

### What Are Some Things the State Is Doing?

#### NJ Department of Health

Visit the NJ EPHT web portal for summary information about the [number and rates of hospitalizations and emergency department visits due to COPD](#) in New Jersey.

#### NJ Department of Environmental Protection

Manages air quality with ambient air monitoring, inventories of sources, emission reduction plans, rules, permits, stack testing, air quality modeling and risk assessment, vehicle testing, inspections, and enforcement. Visit NJDEP's [Division of Air Quality](#) for details on these and other air quality related activities.

WOMEN SMOKERS IN CERTAIN AGE GROUPS ARE MORE THAN **38 TIMES** AS LIKELY TO DEVELOP COPD, COMPARED WITH WOMEN WHO HAVE NEVER SMOKED.

November is National COPD Awareness Month.

#### Learn more about COPD:

- CDC's [What is COPD?](#)
- [COPD National Action Plan](#)
- NJ COPD data – click on [“Data Views”](#)
- [COPD Among Adults in New Jersey](#)
- [COPD – Breathe Better](#)
- NJ Adult Cigarette Smoking data – click on [“Data Views”](#)
- [NJ data on outdoor particulate matter](#)
- [Public Health Strategic Framework for COPD Prevention](#)

### Description

Stroke is a sudden medical emergency which occurs when blood flow to an area in the brain is cut off, depriving brain cells of needed oxygen and glucose. If a stroke is not caught quickly, permanent brain damage, long-term disability, or death can occur. Strokes can be caused by clots that block the flow of blood to the brain's cells, or by a blood vessel in the brain breaking or rupturing. Signs of stroke include:

- Sudden numbness or weakness in the face, arm, or leg, especially on one side of the body,
- Sudden confusion, trouble speaking, or difficulty understanding speech,
- Sudden trouble seeing in one or both eyes,
- Sudden trouble walking, dizziness, loss of balance, or lack of coordination, and/or
- Sudden severe headache with no known cause.

### What is Known

Stroke is the fourth leading cause of death in New Jersey and fifth in the U.S. It is third leading cause of death among women, as well as Asians. It is the fourth leading cause of death among men, as well as among Blacks and Hispanics. It is the fifth leading cause of death among Whites.

## STROKE BY THE NUMBERS

Every  
**40 seconds**  
someone  
has a  
stroke



**55,000**  
About 55,000 more  
women than men  
have a stroke each year



**1 in 4** strokes  
are in people  
who have had  
a previous stroke

**#5** Cause of  
death  
in the USA



**80% OF ALL STROKES  
CAN BE PREVENTED**



Source: American Heart Association/American Stroke Association

### Who Is at Risk?

In New Jersey, stroke causes about 3,500 deaths each year. The age-adjusted death rate due to stroke is steadily declining. Black adults have the highest age-adjusted death rate due to stroke. Major risk factors include high blood pressure, high cholesterol, diabetes, poor diet, obesity, and tobacco use.

**Age-adjusted Death Rate due to Stroke in 2019**



### How is My Municipality Doing?

Age-adjusted rate for inpatient hospitalizations for stroke per 10,000 people (2016-2019): 18.8



## Ideas for Taking Action

### Residents

- Stroke is treatable. Getting **F.A.S.T.** treatment is important to prevent death and disability from stroke. Learn the [signs of stroke](#) and call 911 right away if you think someone might be having a stroke.
  - ☑ **F** - Face: Ask the person to smile. Does one side of the face droop?
  - ☑ **A** - Arms: Ask the person to raise both arms. Does one arm drift downward?
  - ☑ **S** - Speech: Ask the person to repeat a simple phrase. Is their speech slurred or strange?
  - ☑ **T** - Time: If you see any of these signs, call **911** right away.
- Stroke is preventable. You may be able to prevent stroke or lower your chances of having a stroke. Steps you can take include preventing or controlling high blood pressure, being physically active, controlling blood sugar, eating healthy, losing weight, managing cholesterol, and quitting smoking.

### Local Government and Community Groups

- Encourage healthy living by developing and promoting access to parks and recreational spaces.
- Enforce [New Jersey's ban on sale of tobacco](#) to people under 21 years of age.
- Promoting outdoor smoke free ordinances, smoke free multi-unit housing, and worksite wellness. Visit the [Tobacco-Free for a Healthy New Jersey](#) for resources.

## What Are Some Things the State Is Doing?

### NJ Department of Health

Recognizing that stroke is a significant public health issue, the NJ Department of Health (DOH) established the [New Jersey Heart Disease and Stroke Prevention Program \(NJHDSPP\)](#). NJHDSPP produces models to help New Jersey-based healthcare organizations meet nationally recognized best practices and standards to prevent and treat heart disease and stroke.



UNDERSTANDING **STROKE** RISK IN WOMEN

**ARE YOU AT RISK?**



In the United States, **1 in 5** women will have a stroke.

Each year, stroke kills **2x as many** women as breast cancer.

**Not all women are equally affected by stroke.**  
African-American women are more likely than other groups of women to have a stroke, mainly because of having high blood pressure, being overweight or obese, and having diabetes.

### Learn more about Stroke:

- NJDOH's [Heart Disease and Stroke Prevention Program](#)
- [American Heart Association/American Stroke Association](#)
- [CDC Stroke Resources](#)
- [NJ Quitline](#)

### Description

Cancer starts from the uncontrolled division of abnormal cells in the body. As the abnormal cells continue to divide, they can invade nearby tissues or spread to other parts of the body through the blood and lymph systems. Cancer, which unfortunately is common, consists of a group of over 100 diseases with different causes and risk factors. In general, many cancers may be related to a combination of risk factors including heredity and lifestyle factors such as smoking, diet, exposure to sunlight, and alcohol consumption.

### Why is Cancer Important?

In 2019, cancer was the second leading cause of death in New Jersey and in the United States. One in three women and one in two men will be diagnosed with cancer at some point during their lifetime. Prevention, screening, and treatment options are available for most types of cancer and advancements in each have increased survival times and decreased death rates due to cancer.

### What is Known

Cancer may be caused by a variety of factors acting alone or together, usually over a long-time period. Multiple factors both inside and outside the body contribute to the development of cancer. Some risk factors for cancer can be avoided or controlled. People can choose to modify lifestyle risk factors by avoiding exposure to tobacco, alcohol, and sunlight, and by increasing physical activity and modifying their diet. Other factors, such as a person's age or family history of cancer are not possible to modify. It is important to note having a risk factor does not mean that cancer will develop.

### Who is At Risk?

No one is immune from getting cancer. Although scientific studies have identified specific factors which increase the risk for cancer, people without any risk factors can still develop cancer and people with many risk factors may not develop cancer. Common cancer risk factors include:

- Older age - the risk of developing cancer increases with age,
- Tobacco use,
- Alcohol consumption,
- Certain environmental exposures such as radiation,
- Genetics and family history, and/or
- Exposure to human papillomavirus (HPV) infection

### Cancer Death Rates for Your Municipality

Age-Adjusted Cancer Death Rate Per 100,000 People (2015-2019):

All Cancer Deaths: 128.9  
All Lung Cancer Deaths: 23.1



## Ideas for Taking Action

### Residents

There are many ways to reduce your cancer risk. Following these guidelines will not only reduce your cancer risk, but improve your overall health:

- **Stop smoking.** If you smoke, quit. If you don't smoke, don't start. Smoking causes several types of cancer. Quitting now will reduce your risk of cancer in the future.
- **Avoid excessive sun exposure.** Harmful ultraviolet (UV) rays from the sun can increase your risk of skin cancer. Limit your sun exposure by wearing protective clothing and applying a broad-spectrum (UVA/UVB) water-resistant sunscreen with a sun protection factor (SPF) of 30 or higher.
- **Eat a healthy diet.** Choose a diet rich in fruits and vegetables. Select whole grains and lean proteins.
- **Exercise.** Regular exercise is linked to a lower cancer risk. Aim for at least 30 minutes of exercise most days of the week.
- **Maintain a healthy weight.** Being [overweight or obese](#) may increase your risk of cancer. Work to achieve and maintain a healthy weight through a combination of a healthy diet and regular exercise.
- **Schedule cancer screening exams.** Talk to your doctor about what types of cancer screening exams are best for you based on your risk factors.
- **Ask your doctor about immunizations against diseases which increase your risk of cancer.** Immunizations can help prevent hepatitis B and human papillomavirus (HPV), which both increase the risk of cancer.
- **Reduce exposure to hazardous substances.** [Take steps](#) in your home by testing for radon, choosing less toxic cleaning products, and implementing integrated pesticide management practices.

### Local Government and Community Groups

- **Restrict the use of tobacco products** by [preventing the sale of tobacco](#) to people under 21 years of age.
- **Promote outdoor [smoke-free ordinances](#),** smoke free multi-unit housing, and worksite wellness.
- **Encourage [radon testing in homes](#).** Radon is the #2 cause of lung cancer after smoking and is estimated to cause over 20,000 U.S. death each year.



[Calendar of Cancer Awareness Months](#)

## What Are Some Things the State Is Doing?

### NJ Department of Health

- [Cancer Resources in New Jersey](#)
- [Free Cancer Screening for Low Income Residents](#)

### Learn more about Cancer:

- [National Cancer Society's](#) Community Actions for a Healthful Life,
- NJDOH's [Cancer Data](#)
- NJDOH's [NJ State Cancer Registry](#)
- NJDOH's [Cancer Registry Reports](#)
- NJDOH's [Cancer Epidemiology Services](#)
- NJDOH's [Office of Tobacco Control & Prevention](#)
- [Tobacco-free for a Healthy New Jersey](#)
- [National Cancer Institute](#)





# Smoking

## MIDDLESEX COUNTY North Brunswick Twp

### Why is Smoking Important to Address?

Smoking is the leading preventable cause of death in the U.S., and harms nearly every organ of the body. Tobacco use contributes to multiple types of cancer, asthma attacks, heart disease, stroke, respiratory diseases, and other diseases. According to the CDC, cigarette smoking causes more than 480,000 deaths each year in the United States, including more than 41,000 deaths from secondhand smoke exposure.

### What Are the Known Risks of Smoking?

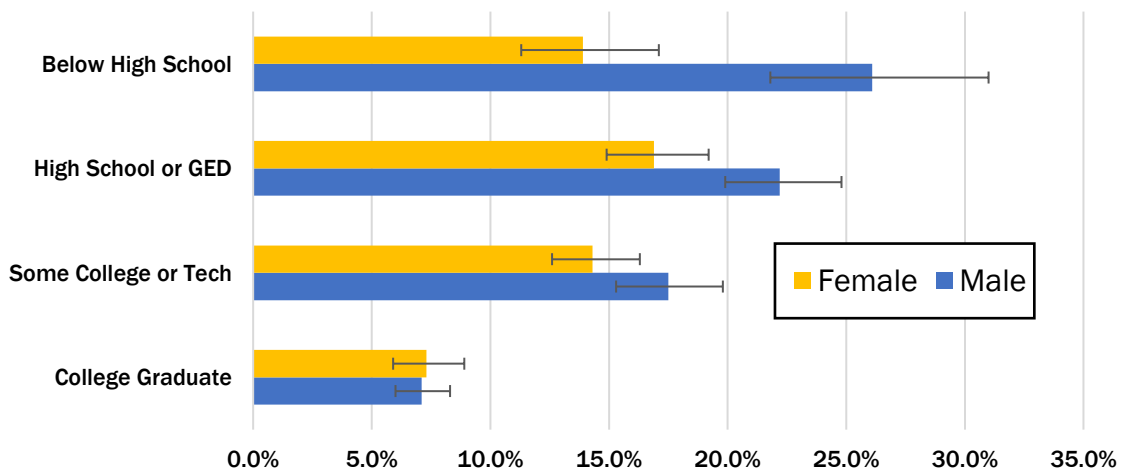
- Smokers are at greater risk for diseases that affect the heart and blood vessels.
- Smoking can cause lung disease by damaging airways and lungs.
- Smoking can cause cancer almost anywhere in your body.
- Smoking can make it harder for a woman to become pregnant and can affect her baby's health before and after birth.

Although New Jersey's smoking rates have decreased, more than one million New Jersey adults continue to smoke. Males and people with fewer years of formal education report higher percentage of tobacco use. In 2018, the age-adjusted smoking prevalence among New Jersey adults was 13.5% compared to the national prevalence of 16.1%. Current smoking prevalence in New Jersey also varies by race and ethnicity. The prevalence is 15.1% among Whites, 13.7% among Blacks, 13.9% among Hispanics, and 7.2% among Asians.

### How is My Municipality Doing?

It is estimated that 13.2% of adults were current smokers in 2018.

**Percent Current Smoker by Education and Gender  
New Jersey, 2015-2017**



## Ideas for Taking Action

### Residents

Tobacco use is the leading cause of preventable death in the United States. Every year, tobacco claims more lives than AIDS, alcohol, drug abuse, car crashes, murders, suicides, and fires combined.

- Commit to stop smoking. Quitting is tough, but it can be done. Quitting now will reduce your risk of cancer in the future. Smoking is linked to multiple types of cancer, not just lung cancer, and to multiple other diseases.
- If you don't smoke, don't start.
- Schedule cancer screening exams. Talk to your doctor about what types of cancer screening exams are best for you based on your risk factors.

### Local Government and Community Groups

- Enforce NJ's [ban on the sale of tobacco](#) to people under 21.
- Promote outdoor [smoke-free ordinances](#), smoke-free multi-unit housing, and worksite wellness. Visit the [Tobacco-Free for a Healthy New Jersey](#) website for resources.

## What Are Some Things the State Is Doing?

In 2017, New Jersey raised the legal age for purchasing tobacco products and electronic cigarettes to 21.

[NJ Quitline](#) is a free, bilingual, and confidential telephone-based tobacco cessation counseling service supported by NJDOH.



TOBACCO FREE FOR A HEALTHY NJ  
**QUIT CENTERS**

There are Quit Centers in the following 12 New Jersey counties: Atlantic, Cape May, Cumberland, Essex, Hudson, Mercer, Middlesex, Monmouth, Ocean, Passaic, Salem, and Union. More info, <https://www.tobaccofreeNJ.com/quit-smoking>.



Learn more about e-cigarettes at [Don't Get Vaped In](#)

## November is National Lung Cancer Awareness Month.

### Learn more about Smoking:

- NJDOH's [Office of Tobacco Control, Nutrition and Fitness](#)
- NJDOH's [Get Help Quitting](#)
- CDC's Infographic [Extinguishing the Tobacco Epidemic in New Jersey](#)
- [Coalition for a Healthy NJ](#)
- CDC's resources for quitting smoking, including the video [Tips from Former Smokers](#)

### Description

Obesity means having too much body fat. Body mass index (BMI) is a weight to height calculation that is commonly used to classify obesity in adults. Adults with a BMI equal to or greater than 25 are considered overweight, while those with a BMI equal to or greater than 30 are defined as obese.

[CDC's BMI calculator for adults](#)

[CDC's BMI calculator for teens and children](#)

### Why is Addressing Obesity Important?

An elevated BMI in adults is a major risk factor for cardiovascular diseases (mainly heart disease and stroke), diabetes, musculoskeletal disorders (especially osteoarthritis – a highly disabling degenerative disease of the joints), and some cancers (including endometrial, breast, ovarian, liver, gallbladder, kidney, and colon).

Childhood obesity is associated with a higher chance of adult obesity, premature death, and disability in adulthood. Obese children can also experience breathing difficulties, increased risk of fractures, hypertension, early markers of cardiovascular disease, insulin resistance, and psychological effects.

### What is Known

Over the past 20 years, there has been a dramatic increase in obesity in the United States and rates remain high. More than one-third of U.S. adults and approximately 17% of children and adolescents aged 2-19 years are obese.

### How Can You Reduce Your Risk?

People who are physically active and eat nutritious foods are at a decreased risk of being overweight and obese.



### How is My Municipality Doing?

It is estimated that 26.4% of adults were obese in 2018.

### Medical Complications of Adult Obesity



Source: Adapted from Yale University Rudd Center for Food Policy & Obesity

## Ideas for Taking Action

### Residents

- Talk to your doctor about your weight and work together to decide what steps to take to reach your goal.
- Achieving and maintaining a healthy weight is not about short-term dietary changes. It is about a lifestyle that includes healthy eating, regular physical activity, and balancing the number of calories you consume with the number of calories your body uses.
- Learn about [Rethink Your Drink](#), a CDC-recommended approach to cutting calories from beverages.
- Become more educated about your body and how to nourish it; set realistic weight management goals; and consider joining a support group or extra-curricular activity to assist with your goals.
- Find weight loss resources that fit your lifestyle such as commercial weight loss programs, books, websites, support groups, or a physician-supervised weight-loss approach.

### Local Government and Community Groups

- Work to [increase access to healthier food](#) at grocery stores, small stores, farmers markets, bodegas, and mobile food retailers.
- [Provide and promote places for physical activity](#) with a focus on walking, and design streets and community spaces to meet this goal.
- Explore [urban farming](#) opportunities in your community.

### Body Mass Indicator (BMI) Calculator

- ▶ [Adults, 20 years old and older](#)
- ▶ [Children and teens, 2 through 19 years old](#)



## What Are Some Things the State Is Doing?

### NJ Department of Health

NJDOH's [Nutrition and Fitness Program](#) works with communities to develop, implement, and evaluate interventions to increase physical activity, decrease television viewing, and increase breastfeeding initiation and duration.

### Learn more about Obesity:

- [The State of Childhood Obesity in New Jersey](#)
- CDC's [New Jersey State Nutrition, Physical Activity and Obesity Profile](#)
- CDC's [Child & Teen Healthy Weight and Obesity Resources](#)
- NJDOH's [School Health, Nutrition, and Physical Activity](#)
- [USDA Food and Nutrition Service](#)

### Description

Heat-related illnesses (HRI), like heat exhaustion or heat stroke, happen when the body is not able to properly cool itself. While the body normally cools itself by sweating, during extreme heat, this might not be enough. In these cases, a person's body temperature rises faster than it can cool itself down. This can cause damage to the brain and other vital organs.

### Why is Heat Overexposure Dangerous?

Excessive exposure to heat for prolonged periods can lead to heat exhaustion or heat stroke. Heat stroke occurs when the body's temperature rises quickly. It can rapidly lead to dehydration and even death.

Signs of heat illness include hot, dry skin or cold, clammy skin; confusion, hallucinations, and disorientation; loss of consciousness or unresponsive; nausea or vomiting; difficulty breathing; a rapid, strong pulse; general weakness; and dizziness. Individuals should call 911 or go to the nearest emergency department (ED) if they are experiencing any of these symptoms.

### What is Known

Extreme heat events are predicted to increase in both intensity and duration due to climate change. According to the [2020 New Jersey Scientific Report on Climate Change](#), New Jersey has experienced a statistically significant increase in its average annual temperature by 3.5 °F (1.9 °C) over the past century, warming faster than the rest of the Northeast region. Greenhouse gas (GHG) emissions models show that future annual temperatures could be as much as 10° F (5.6° C) warmer than the historical record.

Heat stress is of special concern for vulnerable urban populations. The term "urban heat island or UHI" describes a combination of dense construction, lack of green space, and the heat generated from traffic congestion. UHI can affect communities by increasing summertime peak energy demand, air conditioning costs, air pollution and GHG emissions, and heat-related illness and mortality.



### Who is At Risk?

Young children, senior citizens, outside workers, and individuals taking certain medications are most susceptible to dehydration, heat exhaustion, or heat stroke.

### How is My Municipality Doing?

Age-adjusted rate of heat-related ED Visits per 10,000 people (2016-2019): SUPPRESSED

### Heat Index Values Leading to Illness or Death

Relative Humidity (%)	NWS Heat Index															
	Temperature (°F)															
	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

  Caution    
   Extreme Caution    
   Danger    
   Extreme Danger

Source: [National Oceanographic and Atmospheric Administration \(NOAA\)](#).

The Heat Index is a measure of how hot it really feels when relative humidity is factored in with the actual air temperature. To find the Heat Index temperature, look at the Heat Index Chart above. As an example, if the air temperature is 96 °F and the relative humidity is 65%, the heat index—how hot it feels—is 121 °F.



## Ideas for Taking Action

### Residents

- During periods of extreme heat:
  - Stay cool and hydrated.
  - Whenever possible, stay in an air-conditioned room or building, such as a public library, shopping mall, or cooling center.
  - Visit your municipal or county website for an updated list of cooling centers in your community.
  - Know the daily [heat index](#) for your area. Caution is advised when the heat index is above 80 °F.
  - Check on elderly family members and neighbors, as well as family pets
  - Limit outdoor activity to early morning or early evening hours.
  - Outdoor workers should avoid strenuous activity when possible, avoid caffeinated, sugary, or alcoholic beverages, drink water frequently, wear light and loose-fitting clothes, and stay out of direct sunlight as much as practical.
- [Download](#) US Department of Labor's free Heat Safety Tool app to calculate the heat index for worksites and determine the risk level for outdoor workers.

### Local Government and Community Groups

- Work to decrease urban heat island effects by planting trees and removing impervious surfaces.
- Communities that have a State-approved [Community Forestry Management Plan](#) can apply for grants to plant trees to reduce energy costs and cool urban neighborhoods.



## What Are Some Things the State Is Doing?

### NJ Department of Health

Collects heat-related illnesses (HRI) data from NJ's emergency departments and hospitals to track excessive HRI among New Jersey's residents. NJDOH uses this information to enhance public notification regarding extreme heat events via press releases and social media.

### NJ Department of Environmental Protection

NJDEP's [Urban and Community Forestry Program](#), in cooperation with the NJBPU's [Clean Energy Program](#), is planting thousands of shade trees in residential neighborhoods and low-rise mixed-use areas throughout New Jersey. This helps cool urban heat islands and reduce energy costs for New Jersey families.

### Learn more about Heat-Related Illness:

- NJDOH's heat-related [Hospitalizations and Emergency Department Data](#)
- [Climate Change](#)
- [CDC's Extreme Heat Guide](#)
- [CDC's Preventing Heat-Related Illness](#)
- [USEPA's Heat Island Effect Risks and Reduction Strategies](#)