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POLICY BRIEF

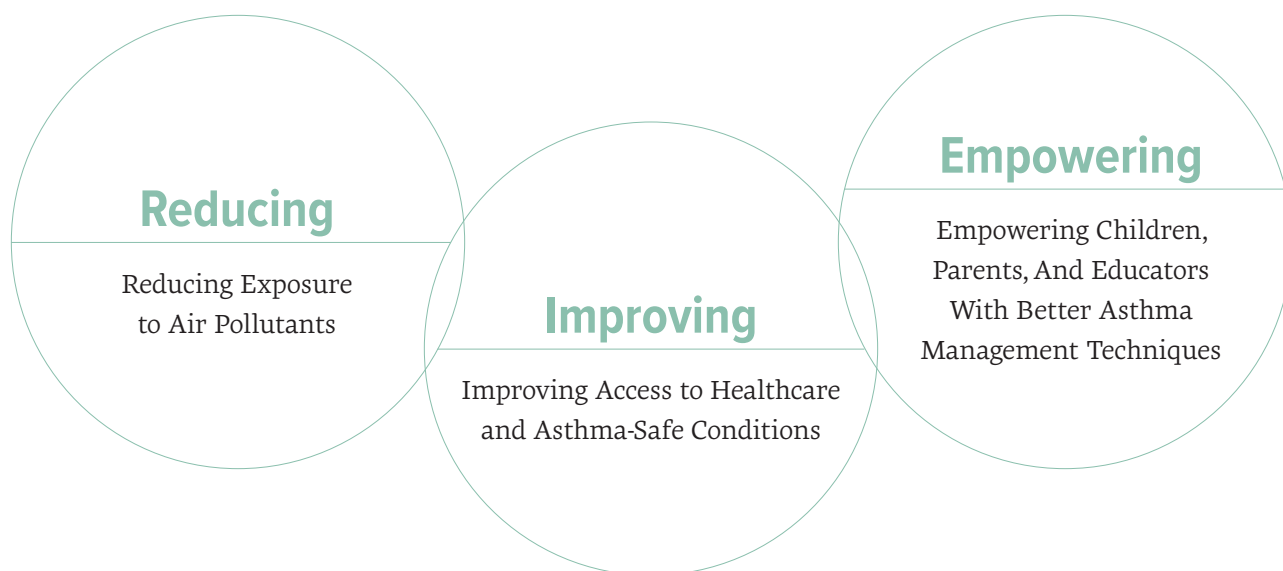
Recommendations for Reducing Asthma in New York State

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Introduction

Asthma is an incurable respiratory condition characterized by wheezing, coughing, shortness of breath, and chest tightness, which can greatly disrupt one's everyday life. In 2019, 1,419,951 New Yorkers were living with asthma, and this number has likely grown since then. People of color are over three times more likely to be exposed to polluted air than their white counterparts. Poor air quality can worsen pre-existing health conditions, and even short-term exposure to air pollution is linked to cardiovascular disease and asthma. Thus, targeted, state-level interventions that take community input and environmental justice into consideration are critical for abating the drivers of asthma in the U.S. In this memo, Data for Progress lays out a set of policy recommendations for abating asthma in New York state, focusing on the following:



Policy Recommendations

Reducing Exposure to Air Pollutants

Exposure to air pollution (which can exacerbate asthma) is disproportionately distributed in the U.S., which adds to the unequal burden of asthma in low-income communities of color. Fine particulate matter (smaller than 2.5 micrometers in diameter), also known as PM_{2.5}, is especially concerning as it can greatly damage the lungs. The largest sources of particulate matter air pollution in the U.S. are electric power generation; industry, commercial, and residential establishments; and road transportation. New York City and Long Island have some of the dirtiest electric power generation in the country, producing 0.06-0.07 pounds of PM_{2.5} for every megawatt-hour produced.

- **POLICY RECOMMENDATION #1: Reducing Emissions in the Electricity Sector**

To tackle the PM_{2.5} emissions from electric power generation and strengthen residential clean energy utility transitions, the state of New York must:

1. Reduce consumption and usage;
2. Rapidly transition to renewable sources of energy;
3. Incentivize behavioral changes that reduce usage during peak demand hours, since peak usage requires the usage of “peaker plants” which are often old and highly polluting;
4. Revise air pollution permitting structures to account for historical impacts of environmental injustice on highly polluted neighborhoods;
5. Launch community action campaigns to increase awareness about the option to switch to renewables;
6. Host workshops to provide accessible technology and training to help community members switch their electricity source to renewables; and
7. Provide subsidies to incentivize the switch to clean energy portfolios.

- **POLICY RECOMMENDATION #2: Expanding and Electrifying Public and Private Transit**

Reducing transportation emissions by creating better transportation infrastructure has proven highly effective. Bus rapid transit systems can reduce CO emissions by 40 percent, and PM emissions by 6.7 percent. Further, investing in bike infrastructure can prevent thousands of air pollution and crash-related deaths and increase mobility within cities. Additionally, road transportation emissions can be cut by speeding up the switch to electric vehicles. Therefore, New York must:

1. Make public transportation free, starting with low-income communities and then expanding to all residents;
2. Invest in expanding bus rapid transit infrastructure, including bus lanes and actuated traffic signals;
3. Improve bike infrastructure, such as bike shares, protected bike lanes, parking racks, and specialized traffic signals; and
4. Offer electric vehicle incentives, including:
 - *Public charger benefits;*
 - *High-occupancy vehicle lane access;*
 - *License fee reductions;*
 - *Free parking;*
 - *Emissions test exemptions; and*
 - *Electricity discounts.*

- **POLICY RECOMMENDATION #3: Improving Indoor Air Quality**

Better ventilation can lead to better indoor air quality. HEPA filters are linked to significantly lowered asthma rates, but need to be cleaned approximately every three months in order to remain effective. In response to the coronavirus pandemic, New York has recently started suggesting that businesses regularly inspect filters. Further, some air purifiers significantly reduce the frequency of asthma-medication usage and nasal symptoms. To improve indoor air quality, New York state must:

1. Codify and enforce COVID-era HEPA filter inspection guidelines;
2. Subsidize costs of new filters, cleaning materials, and janitorial training for New York public schools;
3. Subsidize costs for purchasing, installing, and maintaining ozone-free air purifiers in each classroom;
4. Ban the sale and usage of “ozone generating” air purifiers; and
5. Bridge the information gap on allergen-reduction benefits by funding studies in diverse cohorts.

Policy Recommendations

Improving Access to Healthcare and Asthma-Safe Conditions

Improving physical access to healthcare by increasing public and affordable transport access, building new healthcare facilities in rural and under-resourced communities, and increasing access to home care are all avenues that New York should consider exploring.

- **POLICY RECOMMENDATION #4: Bolstering Asthma Care in Public Schools**

Offering free asthma testing in schools can ensure early detection of this chronic illness, which in turn can help stave off lifelong side effects. Free testing for vision, hearing, and speech conditions is already commonplace in most U.S. schools, and thus schools can apply these existent testing mechanisms to asthma. By using the Guide for Asthma Management in Schools as a framework, New York state can facilitate new school requirements to ensure that schools:

1. Establish asthma-medication policy and provide guidelines and resources that help make the policy enforceable;
2. Have emergency protocols for asthma; and
3. Improve asthma-medication stocking and authority to administer in schools.

- **POLICY RECOMMENDATION #5: Eliminating Asthma-Treatment Inequity**

There are an array of challenges preventing many suffering from asthma from properly treating and managing this condition. At present, inhaled corticosteroids are the preferred method of treatment for asthma via asthma inhalers. Inhalers are a highly effective method for controlling asthma, but access to asthma medications is unequally spread. Asthma-medication access in schools varies by socioeconomic status (SES), with high SES schools having more asthma resources than low SES and low English proficiency schools. Additionally, studies have shown that asthma medications may have varying levels of efficacy on different racial groups, and asthma drugs may be less effective for some people of color (POCs) than their white counterparts. Lastly, physical barriers to healthcare, including lack of transport and proximity to healthcare facilities, can lead to numerous issues in the near and long term for asthma patients.

To eliminate the asthma-treatment inequity and improve access to healthcare and asthma-safe conditions, New York must:

1. Go beyond “suggested guidelines” and follow suit of the states that have enforceable laws or regulations to stock schools and large public spaces with albuterol and epinephrine;
2. Fund ongoing research on the true efficacy of current asthma medication for people of color, and if necessary, support research and development of new drugs designed for diverse populations;
3. Expand the CDC’s EXHALE efforts and develop an informational guide detailing what EXHALE can look like in New York specifically;
4. Subsidize asthma-related healthcare costs (including inhalers, nebulizers, air purifiers) for New York residents;
5. Establish long-term funding for green infrastructure programs.

Policy Recommendations

Empowering Children, Parents, And Educators With Better Asthma Management Techniques

Even when physical access to healthcare exists for those seeking asthma treatment, education can remain an obstacle to dealing with this condition. Misuse or misadministration of asthma medication, a misunderstanding of when to seek help versus self-medicate, and/or a lack of understanding as to where and how to seek treatment can all result from a lack of asthma-management education. Additionally, a lack of asthma-management resources in public schools can prove problematic for asthmatic students.

- **POLICY RECOMMENDATION #6: Empowering the Community With Asthma-Management Techniques**

In order to empower children, parents, and educators with better asthma-management techniques, New York should:

6. Establish a Minority Coordinating Council on Asthmatic Affairs or similar advisory body to increase minority representation in asthma-mitigation efforts and funding recommendations brought forth by the council;
7. Pass the Green New Deal for Public Schools Act;
8. Standardize statewide, baseline asthma-mitigation protocols in New York public schools that ensure adherence to New York’s [Asthma Action Plan](#) — including improving ventilation and asthma-medication availability in schools; and
9. Increase funding for New York public schools to develop targeted asthma-mitigation efforts, including: improving communication between schools and doctors, guaranteeing funding for teacher training for medical emergencies like asthma, and improving funding for nursing offices and school health-related services.

Conclusion

It is challenging to quantify the emotional, physical, and fiscal costs of living with asthma on U.S. families, but it is a harsh reality that many Americans have to face on a daily basis. Clean air is a right, not a privilege, and by implementing comprehensive, targeted asthma-reduction and mitigation policies, New York can be a leader in improving public health, mitigating climate change, and advancing environmental justice for its communities and U.S. communities at large.