

NEW YORK STATE
DEPARTMENT OF HEALTH (DOH)
ENVIRONMENTAL JUSTICE INTERAGENCY TASKFORCE
DRAFT ACTION AGENDA

I. General Recommendations and Agency Actions

Recommendation 1: 1) Provide for Increased Community Representation and Access to Decision Making Processes

Action Agenda

- NYSDOH has databases for many health outcomes and produces data tables for geographic areas such as the county, New York City, or New York State as a whole. The health data for these outcomes are collected from throughout the state through uniform collection systems such as birth and death certificates or hospital reporting (e.g., cancer registry, Statewide Planning and Research Cooperative System [SPARCS]), etc.). Health data are available on NYSDOH's web site at <http://www.health.state.ny.us/statistics/>
- NYSDOH has a public access environmental public health tracking web site (http://www.health.state.ny.us/statistics/environmental/public_health_tracking/) that includes data on health outcomes relevant to environmental justice concerns. NYSDOH is developing a tool to allow users to query health outcome and environmental data to create maps, charts and tables. Available health outcomes will include asthma hospitalizations, birth defects and heart attack hospitalizations, and data will be available at the county level. NYSDOH plans to add more environmental and health outcome data, to further customize and cross-tabulate data, and to offer maps and data displays for smaller geographic areas. NYSDOH plans to improve its public website to provide easier access to information relating to environmental justice.
- Availability of health outcome data for smaller areas such as ZIP codes or ZIP code groupings is important for the review health outcome data for permits under NYSDEC's Commissioner's Policy 29 and for some environmental surveillance activities. Currently, data for asthma hospitalizations and four types of cancer are available on NYSDOH's web site. NYSDOH is in the process of making more health data available in tables for ZIP codes or ZIP code groupings and posting these data tables on NYSDOH's public web site for use by agencies, advocacy groups, businesses, residents, etc. NYSDOH will give priority to data sets for health outcomes with disparities in environmental justice areas (e.g., elevated blood lead levels, low birth weight) in making decisions about the next data sets to be developed for release by ZIP codes or ZIP code groupings.
- In addition, NYSDOH recently developed a web-based tool that identifies hospitalization rates by ZIP code level for conditions generally considered preventable with access to good primary care. The conditions fall into four areas: circulatory, diabetes-related, respiratory, and acute conditions. The Prevention Quality Indicator website is available at: https://apps.nyhealth.gov/statistics/prevention/quality_indicators/start.map

- NYSDOH is reviewing its over 100 committees, councils, working groups, advisory groups, etc. to identify those for which it may be appropriate to include representation from the affected community.

Recommendation 3: Create a New York State Environmental Justice Database and Map

Action Agenda

- NYSDOH Center for Environmental Health is working with NYSDEC to incorporate the review of health data into environmental permitting of major projects under NYSDEC's Commissioner's Policy 29. NYSDOH is making some health data available on NYSDOH's public web site in tables for ZIP codes or ZIP code groupings; ZIP codes can be combined to correspond to the community of concern for an environmental permit or to a particular environmental justice community. There is a statewide recommendation for NYSDOH, NYSDEC, and other agencies to develop an environmental justice database and map, which will incorporate demographic, environmental, and other data to define environmental justice communities. NYSDOH will recommend ways that health data can be integrated into the system. With such a system, a profile for an environmental justice community could be created that would include information on demographics, facilities, transportation, housing, disease rates, etc.

Recommendation 5: Develop Environmental Justice and Sustainability Provisions in Permitting

Action Agenda

- NYSDOH's Center for Environmental Health (CEH) worked with NYSDEC to incorporate the review of health data into environmental permitting of major projects under NYSDEC's Commissioner's Policy 29. CEH will work with NYSDEC as it identifies other initiatives for which review of health data would be useful and will assist in developing methods for incorporating health data into these additional NYSDEC activities.
- One option is to develop a role for review of health data by NYSDOH in NYSDEC's review of new permit applications, especially in environmental justice or overburdened communities. Suggested options include a requirement by NYSDEC for a Health Impact Statement, which would be a supplement to the Environmental Impact Statement, for all new projects that could pose an increased public health risk and conducting health profiles in environmental justice communities and making this information accessible to the community and permit applicants.
- The review of health outcome data under NYSDEC's Commissioner's Policy 29 has recently been implemented, and NYSDOH and NYSDEC staff and applicants are gaining experience with the process. The method for display and review of health outcome data was developed with careful consideration by the Health Outcome Data Workgroup, which was composed of individuals with technical knowledge and experience in environmental health, toxicology, epidemiology, risk assessment and environmental sciences. Working with NYSDEC's Office of Environmental Justice, the workgroup reported on its progress to the NYSDEC Environmental Justice Advisory Group. The workgroup's report describes a

method to produce displays of health outcome data for a community of concern and to compare these data with health outcome data for multiple comparison areas. The workgroup emphasized that the data displays describe the health status of a community at one point in time, but the data displays provide no information about the causes of any increase or decrease in rates of disease between the community of concern and the comparison areas. The report also recommends ways that NYSDEC can consider the health outcome data review in the permitting process. The process used to obtain technical input into the development of the methodology could be a model for similar future initiatives.

Documents available include the final Health Outcome Data report at:
http://www.dec.ny.gov/docs/permits_ej_operations_pdf/hodreport.pdf.

A guidance document can be found at:
http://www.health.state.ny.us/environmental/investigations/environmental_justice/.

Recommendation 7: Prioritize Enforcement Actions and Pollution-Reduction Programs and Resources in Environmental Justice Communities

Action Agenda

- Although NYSDOH does not have responsibility for enforcement actions, NYSDOH works actively with NYSDEC on issues of concern in environmental justice communities in many program areas, for example, in the Brownfields and Superfund programs and on development of air guideline concentrations and soil cleanup objectives.
- Many NYSDOH programs target areas with increased health risks, and these areas overlap with environmental justice communities. For example, NYSDOH is working closely with statewide partners under the New York State Asthma Plan- especially in areas where asthma hospital discharge rates are highest, many of which are environmental justice communities- on initiatives such as the 11 regional asthma coalitions; the Healthy Neighborhoods Program; and health studies on the association between asthma and various air contaminants and on factors contributing to asthma in the school and home environments. Examples of other NYSDOH programs that target at-risk areas and have a strong presence in environmental justice communities include the Childhood Lead Poisoning Prevention Program, many food and nutrition programs, and children's health programs.

Recommendation 9: Provide Environmental Justice Training for Agency Staff

Action Agenda

- To raise awareness of agency staff in the area of environmental justice principles and concerns, NYSDOH will implement the agency staff training on environmental justice that is being developed by GOER and NYSDEC.

II. Draft Specific Recommendations and Agency Actions

Brownfields and Other Sites

Stakeholder Recommendation

- NYSDEC and NYSDOH should provide more detailed information on suspected and known Brownfield and Superfund site contamination and history on their websites.
- NYSDEC and NYSDOH should conduct thorough brownfield investigations of selected areas, like the brownfield study that was conducted in Camden, New Jersey.
- Who can residents contact to discuss abandoned properties in their area and to find out if the properties are being investigated and/or listed?
- NYSDOH should conduct mandatory health testing for families living near Brownfield sites. NYSDOH should focus on health disparities between residents living near Brownfields and those living away from these sites.
- Conduct health assessments related to toxic exposures.

Action Agenda

- Information on Superfund sites in New York State can be accessed at the Environmental Public Health Tracking (EPHT) web page at the NYSDOH web site (http://www.health.state.ny.us/statistics/environmental/public_health_tracking/). The user can link to information on Superfund sites from the U.S. Environmental Protection Agency and public health assessments and health consultations through the U.S. Agency for Toxic Substances and Disease Registry. The user can also access NYSDEC's Environmental Site Remediation Database Search for information on Brownfields.
- NYSDOH works closely with NYSDEC on investigations of Brownfields and contaminated sites. The NYSDOH makes recommendations for data collection to evaluate existing or potential community exposures, remedial measures to preclude future exposures and, as necessary, develop and carry out community health studies. Following the U.S. Agency for Toxic Substances and Disease Registry guidelines for health assessments and health consultations, the NYSDOH can also provide evaluations of potential exposures and health outcomes and make health response and remedial recommendations. NYSDOH will collaborate with NYSDEC on any NYSDEC programs relating to Brownfields, including programs that may be developed targeting environmental justice communities.
- Residents living near Brownfield or other sites that have health concerns or seek additional information about a site can call NYSDOH's toll-free Environmental Health Information Line at 1-800-458-1158. A staff person from NYSDOH's Center for Environmental Health will contact the individual(s) to discuss the site-related health issue or concern. Depending on the concern, the staff person may also direct the resident to additional sources of information in other programs such as NYSDOH's cancer, chronic disease, or toxic substances assessment programs or the U.S. Agency for Toxic Substances and Disease Registry. The CEH staff person can also discuss available information about the site that has been assembled by NYSDEC from various sources, including the local health unit.

- Residents who wish to discuss a specific site in their area, or who have questions about whether a site has been listed, can contact the NYSDEC regional office for their area (<http://www.dec.ny.gov/about/50230.html>), the environmental health staff at the county or local health department, or the NYSDOH toll free number listed above.
- Mandatory health testing for families living near all Brownfield sites is problematic. In deciding what actions should be considered at a site, data describing exposure or potential exposure is needed. The potential for exposure varies greatly among Brownfield sites and other contaminated sites such as state superfund sites. If there is no or very little exposure or potential for exposure at a site, health testing or health studies looking for responses to exposures will not be useful. The Health Department considers whether or not health testing or health studies would be useful at a site based on, but not limited to, how much exposure has occurred, how many people have been exposed, and whether it is feasible to look for a health outcome that might be related to the exposure. If the chemical can be measured in biological media and if information is available about what would be expected results in people, the Department can consider biological monitoring.
- The Health Department has information on some health outcomes for counties and some ZIP codes on its web site and is continuing to add additional information. This information can be used by communities, whether or not they have been exposed, to describe their health status.
- Large scale health testing of populations living near Brownfields or a health study of people living near Brownfields and those not living near Brownfields would not be practical and the results could not conclusively show that the health effects found were caused by living near the Brownfields. Other important contributing factors to diseases such as cancer, respiratory disease, heart disease, etc., include nutrition, heredity, environment, lifestyle, and access to health care.
- NYSDOH conducts a variety of types of health assessments related to exposures to contaminants. The type of health assessment conducted depends on the potential for exposure. NYSDOH works closely with NYSDEC in assessing levels of contaminants in environmental samples. In determining whether a health assessment would be appropriate in a particular situation (and what type of health assessment would be appropriate), NYSDOH addresses questions such as: How may exposure have occurred? How many people may have been exposed? Is it feasible to identify a health outcome that may have resulted from exposure? NYSDOH also works with the community to identify their concerns and to provide information on potential exposures and health effects. Examples of previous health assessments include a follow-up of birth defects, low birth weight, and cancer in a community impacted from solvents detected in private wells and indoor air during an investigation of a former industrial site, and a follow-up of the same health outcomes in a community impacted by contamination of a public water supply well with MTBE (a gasoline additive).
- In addition, NYSDOH works with the U.S. Agency for Toxic Substances and Disease Registry on public health assessments (PHAs), which are documents that examine

hazardous substances, health outcomes, and community concerns at hazardous waste sites to determine whether people could be harmed from coming into contact with those substances. The public health assessment also lists actions that need to be taken to protect public health. NYSDOH or the U.S. Agency for Toxic Substances and Disease Registry has written a public health assessment for federal superfund sites in NYS, and NYSDOH has also written a public health assessment for some state superfund, Brownfield or other contaminated sites. Public health assessments for New York are available at the U.S. Agency for Toxic Substances and Disease Registry website: <http://www.atsdr.cdc.gov/hac/PHA/HCPHA.asp?State=NY>.

Community Gardens

Stakeholder Recommendation

- Provide information to community garden groups related to testing of soil for contaminants such as metals and other toxics.
- Create a program that provides community gardens with a low-cost mechanism for soil testing.
- Develop standards needed to conduct health-based testing of existing community gardens and urban farms. Develop recommendations for soil safety based on levels of toxic substances scientifically proven to be safe for children, pregnant women and other at-risk populations, rather than healthy adults.

Action Agenda

- NYSDOH, in collaboration with the NYS Department of Agriculture and Markets Community Garden Program, will develop a brochure or fact sheet on soil testing. The topics that could be covered include: potential sources of chemicals in soil, factors to consider when deciding whether to test soil, sample collection and analyses, interpretation of results (including typical levels of chemicals in soil), and practical ways to reduce exposure to chemicals in soils. The fact sheet will be posted on NYSDOH's public web site, and CEH will explore the availability of funding for printing and distribution of hard copies. Additional future actions may include:
 1. In collaboration with NYS Department of Agriculture and Markets and other stakeholders, exploring opportunities to assist community garden groups with identifying accessible and viable State-owned sites, soil testing and developing interpretive guidance, and guidance on practical measures to reduce exposure to soil contaminants.
 2. In collaboration with the NYS Department of Agriculture and Markets Community Garden Program, exploring the possibility of developing a tool kit or series of informational materials for community gardens that cover the topics listed above in more detail, possibly focusing on individual contaminants, and possibly identifying resources for community gardeners in different local areas.

- NYSDOH, in collaboration with the NYS Department of Agriculture and Markets and NYSDEC, will explore options and opportunities to address the requests related to soil testing of community gardens.
- In 2003, amendments to the Environmental Conservation Law directed NYSDOH and NYSDEC to develop soil cleanup objectives. The soil cleanup objectives, which are contaminant-specific soil concentrations that are protective of public health and the environment, are included in DEC's Environmental Remediation Programs regulations (6 NYCRR Part 375). There are different soil cleanup objectives for different land use categories, and the land use categories include gardens and farms. DEC uses the soil cleanup objectives in making decisions about contaminated sites; the soil cleanup objectives and other information in the Technical Support Document can be used to assist in making decisions for other situations such as community gardens, urban farms and residential uses. A Technical Support Document (<http://www.dec.ny.gov/chemical/34189.html>) provides comprehensive information on how the soil cleanup objectives were developed and outlines an approach for developing soil cleanup objectives for chemicals for which no soil cleanup objective was developed. NYSDOH can provide assistance to interested parties/stakeholders in applying the soil cleanup objectives and in applying the approach set forth in the Technical Support Document for developing additional soil comparison values, as necessary.

Subsistence Fishing

Stakeholder Recommendation

- Ensure that subsistence fishing is supported with environmental health information. Widely disseminate fish advisory information and information about contaminants in fish to environmental justice communities using innovative notification mechanisms that account for cultural and language diversity.
- Signs should be posted in areas where people fish in spite of the advisories.

Action Agenda

- Through its long-standing fish advisory program, NYSDOH has provided anglers and others who eat NYS sportfish with advice on how to reduce their exposures to chemical contaminants in sportfish. However, based on the results of angler surveys, we know that some anglers are not aware of the advisories and/or do not choose to follow them. Our research suggests that this also varies by ethnicity and income. About 69% of Caucasian anglers said they were aware of Hudson River fish advisories, but only 22% of African-Americans and 13% of Latinos were aware. And only about a third of people in the lowest income bracket reported knowing about the advisories.

To address this need, NYSDOH staff seeks to work with community-based partners to raise awareness about fish advisories, increase understanding about the key messages and change fish-eating practices to reduce exposures to contaminants. One such effort is the recently funded Hudson River Fish Advisory Outreach Project, a multi-year, \$3-million program.

The program includes mini-grants to support local partnerships. NYSDOH staff held a series of stakeholder meetings at a variety of locations along the Hudson River to encourage dialogue around successful strategies at the community level to increase the number of anglers who follow the advisories. The grants program is aimed at identifying innovative outreach ideas that are based on local knowledge of community culture. More information about this project is found on the web at:

http://nyhealth.gov/environmental/outdoors/fish/udson_river/advisory_outreach_project/.

Additionally, CEH will explore ways to improve fish advisory outreach in other parts of the State. Proposed activities to consider include:

1. Applying successful Hudson River Project Outreach methods to other parts of the state, particularly in environmental justice communities.
 2. Conducting fish advisory outreach where mercury is the main contaminant of concern in consultation with NYSDEC (targeting rural and low-income areas).
 3. Increasing the distribution network for existing outreach materials to include more minority and community-based organizations in under-served rural and urban areas.
 4. Offering increased assistance to Native American tribe/nation fish advisory development and outreach (see below).
- Posting signs can be an effective component of fish advisories outreach. Through a focus group process, NYSDOH developed signs for the Hudson River in both English and Spanish, which are posted along the River corridor. CEH staff continues to work with community groups to identify additional locations for posting. NYSDOH also works with local health departments and advocacy groups to develop and/or post signs for other fishing access areas around the state. The New York City Department of Health and Mental Hygiene (NYCDHMH) developed and posted signs in New York City parks. Individuals with questions about fish advisory outreach in their local areas can call NYSDOH's toll-free Environmental Health Information Line at 1-800-458-1158.

Haudenosaunee

Stakeholder Recommendation

- Develop a Haudenosaunee fish advisory for the waters of aboriginal Haudenosaunee territory based on the Haudenosaunee Environmental Protection Process. The advisory could be used to encourage the use of fish in our diet by making known to people where a clean source of fish can be found, decreasing the incidence of obesity and diabetes in the communities. This recommendation will be made final only with agreement from the Haudenosaunee people.
- The creation of a Fish Advisory Atlas by using a GIS System to map existing state and provincial fish advisories across Haudenosaunee aboriginal territory. The atlas should be

published online for use by Haudenosaunee who want to use the atlas to find clean sources of fish, with support for annual updates by each political body.

- A campaign to increase safe fish consumption at the community level and celebrate the role of fish in our lives.

Action Agenda

- NYSDOH proposes to open a dialogue and establish working relationships with representatives of Haudenosaunee and individual tribe/nations for the following activities:
 1. Offer increased assistance in developing Haudenosaunee and/or individual tribe/nation fish advisories and improving fish advisory outreach, while recognizing their right to determine their own advisories.
 2. Collaborate with Haudenosaunee and/or tribes/nations and DEC to compile and evaluate relevant fish contamination data and/or generate additional fish contamination data for waters fished by Haudenosaunee people and people from other tribes/nations, as needed.
 3. Offer assistance to Haudenosaunee and/or individual tribes/nations in developing and producing their own fish advisory outreach materials/programs that will be responsive to their own cultural and language diversity and could be used to encourage consumption of fish with reduced contaminant levels and thus promote the health and cultural benefits of fish consumption. This outreach program could include a variety of outreach materials (e.g., maps) and tools (e.g., websites), as needed.

Childhood Lead Poisoning Prevention

Stakeholder Recommendation

- Increase primary prevention work, instead of waiting for notice that a child has been poisoned.
- Immediately target NYSDOH-identified “high risk” areas for lead-abatement preventive measures.
- NYS should establish a goal of Zero Lead Poisoning and prioritize efforts by the U.S. Centers for Disease Control and Prevention (CDC), NYSDOH, and others to eliminate childhood lead poisoning by 2010.
- Increase enforcement efforts for lead-abatement in cases where a child has been poisoned. The effort should focus on working with families on securing funding when needed.

Action Agenda

- NYSDOH focuses on primary prevention of childhood lead poisoning through an ongoing primary prevention pilot project begun in 2007 in eight jurisdictions with the zip codes

having high incidences of lead poisoning in NYS. These jurisdictions are implementing local prevention activities in targeted housing within those zip codes. These target jurisdictions account for 80% of children with blood lead levels above 10 micrograms of lead per deciliter of blood-CDC's level of concern- in New York State. In 2008, activities were enhanced in the original eight jurisdictions, and NYSDOH is working with local health officials to expand the program to an additional six counties. This program is currently being evaluated to determine the practices and policies that are most effective in each community.

- An executive summary of a document entitled "Early Lessons Learned: New York State's Primary Prevention of Childhood Lead Poisoning Pilot Project" has recently been released. This report details how the eight pilot jurisdictions are employing different approaches to conduct primary prevention-related activities. This information will assist 'other' jurisdictions to develop effective prevention activities.
- In addition, the Governor's 2009-10 Executive Budget proposes an additional \$2.5 million in funding for the program to support enhancement and expansion of the Childhood Lead Poisoning Primary Prevention Program, including changes to make the previous pilot program permanent, to mandate participation of targeted counties/municipalities, to strengthen requirements for local program plans, and to expand the program to additional high-incidence target neighborhoods.
- In 2004, NYSDOH developed a "Strategic Plan to Eliminate Lead Poisoning by 2010." The elements of the plan have been incorporated into ongoing program activities at the state and local levels. The Strategic Plan is an integral part of NYSDOH activities funded by New York's Lead Poisoning Prevention grant from the CDC.
- A proposed revision to the NYS regulations (Subpart 67-1) lowers the blood lead action level for conducting an environmental investigation from 20 micrograms per deciliter to 15 micrograms per deciliter. The proposed regulation was printed in the State Register for public comment and should be finalized and in effect in early 2009. Enforcement activities are undertaken routinely when a property owner fails to comply with a notice and demand letter from the local health department to correct conditions conducive to lead poisoning. While health department staff does not typically administer funding for housing remediation, as part of the on-site investigation, health department staff would attempt to direct the property owner to potential sources of funding for the correction of the hazard. Department of Housing and Community Renewal does fund a variety of housing development projects, many of which contain provisions for remediating lead paint hazards. Health department staff will continue to enforce the requirement to correct the lead hazards and will continue to work with other agencies to identify possible funding sources for the correction of these hazards.

Lead Policy Formation

Stakeholder Recommendation

- Enhance the interagency effort led by NYSDOH to prevent lead poisoning in cooperation with the Department of Housing and Community Renewal (DHCR), NYSDEC, the NYS Department of Labor, and others.
- NYS should attempt to quantify the general cost savings achieved through the elimination of lead poisoning, including medical and socioeconomic costs. This information would encourage mainstream prioritization of the issue by elected officials and the public.
- Identify existing reliable studies showing the broad negative impacts of lead poisoning, including physiological and sociologic affects, and use the studies to educate public officials.

Action Agenda

- NYSDOH chairs the New York State Childhood Lead Poisoning Prevention Advisory Council. The state agencies mentioned above are seated on the council, along with advisors from advocacy groups, the public, parents, and industry. Public meetings are held three times annually and are webcast live. In addition to the work with the Advisory Council, NYSDOH meets with these agencies to continue to look for specific areas in our programs where lead could be addressed. Some examples: 1) The Office of Child and Family Services and NYSDOH meet to coordinate lead issues relating to day care centers; 2) the Department of State and NYSDOH meet to coordinate training of codes enforcement officials concerning lead hazards and to address building code issues that may reduce the risks associated with lead; 3) DHCR and NYSDOH meet to address lead hazards as part of New York State's Consolidated Annual Performance Report related to safe and affordable housing.
- NYSDOH is working to finalize the Lead Advisory Council Annual Report, which is presented to the Governor and the Legislature. This document will be released shortly covering the year 2006-2008. In addition, on October 15, 2008, the U.S. Department of Housing and Urban Development (HUD) announced a total of \$131 million in funding for designated lead-hazard control-related activities with approximately \$20.1 million awarded to NYS contractors; HUD has approved New York State's Annual Action Plan for 2009. NYSDOH is working with DHCR on the Lead-based Paint portion of the 2008 Consolidated Annual Performance and Evaluation Report (CAPER). NYSDOH will continue to work with these and other agencies to combine efforts to address lead poisoning prevention.
- A white paper has been prepared on the long term costs of lead poisoning and has been incorporated into NYSDOH (Korfmacher, K. 2003. Long-term costs of lead poisoning: How Much Can New York Save by Stopping Lead?). Information from this study has been used in quantifying public costs. NYSDOH will continue to use this information when discussions are held relating to the impact of childhood lead poisoning.
- NYSDOH will continue the “Under 10 Lead Work Group” coordinated by NYSDOH’s Center for Community Health and staff of local health units such as county and city health departments. The work group is developing educational and outreach materials for parents,

health care providers, and public health officials. The focus of work group educational materials is to inform target groups of evidence from scientific studies that blood lead levels below the CDC's blood lead level of concern (10 mcg/dL) may have negative effects on cognitive development, particularly in young children. Also included in the educational materials is information on measures that can be taken to reduce lead exposure in children.

Lead Exposure

Stakeholder Recommendation

- Combine energy retrofit programs with lead abatement strategies since windows and doors, which may be replaced or modified during energy upgrades, also are areas of the home that may contain lead paint.
- Provide a Lead Safe work practice course to community groups.

Action Agenda

- Local health department staff makes homeowners and landlords aware of funds that may be available to assist in eliminating lead hazards identified through the Childhood Lead Poisoning Prevention Program. A program for improving energy efficiency of homes is one of the options considered.
- Courses on Lead Safe Work Practices are offered in many communities. More information can be obtained by contacting the Environmental Health Program of the local health department.

Public Participation and Communication

Stakeholder Recommendation

- NYSDOH should develop fact sheets and promotional material to inform families on how to reduce exposure to environmental contaminants (e.g., NYSDOH's fish consumption advisory developed for women, infants and children).
- Create informational material about air toxics to distribute to communities with concerns (e.g., Tonawanda, Erie County). Develop informational material for public review which specifically address the six priority mobile source air toxins; acetaldehyde, acrolein, benzene, 1,3-butadiene, diesel particulate matter and formaldehyde. Fact sheets should contain information about the levels of these pollutants in particular communities where transportation projects are proposed that could exacerbate pollutant levels.

Action Agenda

- NYSDOH has developed fact sheets to inform families how to reduce their exposure to chemicals in the environment (e.g., Get Ahead of Lead, Reducing environmental exposures: The Seven best kid friendly practices, NYSDOH fish consumption advisory, Insect Repellents, etc.). Fact sheets are available at NYSDOH's public web site: <http://www.health.state.ny.us/environmental/>. NYSDOH will continue to conduct these

activities and will explore the availability of funding for printing and distribution of materials.

- NYSDOH will work with NYSDEC and NYS Department of Transportation to explore the development of fact sheets for priority mobile source air toxics. Areas of discussion will include which pollutants should be the focus, how the fact sheets would be made available to the public, and what funding would be available for printing and distribution.

Infrastructure Costs to Environmental Justice Communities

Stakeholder Recommendation

- Incorporate financial costs considerations of home owners in environmental justice communities during the infrastructure improvement development process. For example, when planning to upgrade infrastructure, governmental entities should take into account the costs of connecting or re-connecting to the improved drinking water infrastructure and waste water infrastructure.

Action Agenda

- When improvements are made to drinking water systems or waste water systems, there are costs to homeowners. NYSDOH will look into whether state and local infrastructure financing programs, including eligibility criteria, can be modified to reduce the cost to environmental justice and disadvantaged populations by taking into account homeowner costs of connecting or re-connecting to the improved drinking water infrastructure and waste water infrastructure. One area of review will be the “Disadvantaged Community Program and Hardship” component of the current Drinking Water State Revolving Fund program.

Occupational Health

Stakeholder Recommendation

- Establish a comprehensive occupational health and safety program that emphasizes activities to prevent unsafe and unhealthy workplace conditions, including education and outreach programs. Minority workers are more likely to be exposed to unsafe conditions because of the kinds of jobs open to them.

Action Agenda

- Programs in NYSDOH’s Bureau of Occupational Health are geared toward preventing illness and injury among workers in New York State. Some programs target workers in occupations that are at high risk for illness, injury, or fatality; many of these workers are from environmental justice communities. For example, the Occupational Lung Disease Registry (OLDR) collects information on individuals with clinical evidence of occupational lung disease from physicians, health facilities, and clinical laboratories. From an analysis of these data, Bureau of Occupational Health identified occupations involving a high number of injuries and illnesses that disproportionately employ minority workers. The Bureau of Occupational Health is distributing the brochure “Is Your Asthma Work-related?” to NYS Community Health Centers and the Occupational Health Clinic Network in an effort to

reach these workers. The Bureau of Occupational Health is also identifying unions, community groups, and health centers in order to provide further distribution of outreach materials to workers in these occupations.

- The New York State Fatality Assessment and Control Evaluation (NY FACE) program is administered by the Bureau of Occupational Health under a cooperative agreement with the National Institute for Occupational Safety and Health (NIOSH). The goal of the NY FACE program is to prevent occupational fatalities in high risk populations in New York State. NY FACE specifically targets three high-risk populations: Hispanic, youth, and elderly workers. Program staff collects fatal injury data, investigates the fatal injuries involving the targeted population, develops injury prevention products, disseminates the products to the high-risk groups, and evaluates the effectiveness of the products. Many of the fact sheets developed by NY FACE have been translated into Spanish. Through this program, the Bureau of Occupational Health formed effective partnerships to target high-risk vulnerable populations for injury prevention. One example is the partnership with the New York State Youth Construction Initiative Program, which is funded by the federal Highway Administration through the NYS Department of Transportation. This program provides educational and job training opportunities for non-college bound 11th and 12th grade students and prepares them for entering construction and engineering industries after high school. The majority of these students are from inner-city low-income families, and many are from minority backgrounds. Bureau of Occupational Health staff, working with Youth Construction Initiative Program staff, developed and delivered a safety awareness training program to the students of Troy Youth Construction Initiative Program. The students learned about the importance of following construction safe work practices and the consequences of not following them. Bureau of Occupational Health staff also discussed workers' rights issues and procedures that the students may follow to address unsafe conditions in the workplace. According to the NYS Youth Construction Initiative Program staff, the impact of the safety training was long lasting, with the students discussing the training among them as well as with their parents. At the request of Youth Construction Initiative Program, Bureau of Occupational Health staff serve on the Youth Construction Initiative Program Advisory Board.

Health Disparities

Stakeholder Recommendation

- NYSDOH should form a task force or committee, including environmental justice advocates and NYSDEC, to address the health disparities identified in NYSDOH's 2007 report. Programs and initiatives should be developed to identify environmental factors that may contribute to those health disparities, and neighborhoods that are overburdened with those environmental factors should be targeted to reduce those burdens.
- The focus of the health disparities summit seemed to be primarily on health care rather on the environment.

- NYSDOH indicated it has directed \$21 million Medicaid dollars to Public Health programs. At least 1% of Medicaid dollars, or a minimum of \$480 million, should be used for Public Health programs focused on prevention activities and eliminating health disparities.

Action Agenda

- In January 2009, the NYSDOH Office of Minority Health (OMH) and the NYS Minority Health Council hosted a summit entitled “Spotlighting Solutions for Eliminating Minority Health Disparities” to begin the development of a comprehensive plan to eliminate minority health disparities in New York State. The summit brought together NYSDOH leaders and stakeholders representing many disciplines, sectors, and perspectives to share knowledge, strengthen relationships and engage in action planning. Participants explored strategies and interventions that reduce or eliminate health disparities and exchanged information to help identify effective approaches for addressing health disparities in New York State. Participants included representatives of community-based organizations in environmental justice areas. The priority areas identified during the summit, as well as the promising practices and strategies identified in the white paper commissioned for the summit, will assist in development of the comprehensive plan (Moving toward Health Equity in New York: State Strategies to Eliminate Health Disparities, B. D. Smedley <http://www.cicatelli.org/nysmh/files/Moving%20Toward%20Health%20Equity%201-7-09.pdf>). State initiatives to improve the health of minorities continue to be implemented, including expanded access to health insurance, implementation of a new prevention agenda, health care quality incentives tied to reimbursement, and expanded use of health information technology.
- The work on the Office of Minority Health’s health disparities summit pre-dated involvement with the environmental justice task force. NYSDOH will explore ways to enhance coordination between NYSDOH efforts on environmental justice and on elimination of health disparities.
- NYSDOH believes the \$21 million referred to in this recommendation refers to the Governor’s 2007-08 General Fund Investment in Public Health initiatives, not Medicaid dollars. (Governor Paterson added additional funding in 2008-09, increasing the \$21 million investment to nearly \$30 million.) With respect to Medicaid dollars, the Department views the Medicaid program as a public health program. Medicaid is the main payer of primary and preventive care for communities most impacted by poor health outcomes. The Medicaid program not only pays for primary and preventive care but also sets provider standards for care and publishes health plan performance on key preventive health services such as primary care, prenatal care, body mass index screening, lead screening and others. In recent years, the Department has looked to the Medicaid program as a tool to impact specific public health goals. For example in 2008, the Medicaid program began reimbursement for tobacco cessation counseling for pregnant women, diabetes self management education, asthma management and social work counseling. The Department continues to identify ways the Medicaid program's benefit package can reinforce population-based public health interventions.

Food Policy

Stakeholder Recommendation

- Issue an executive order requiring that the environmental justice perspective be made part of state agency food and agriculture program planning and decision-making, and that agency programs be targeted to address disparities in access to affordable high quality, nutritious, and locally grown food through existing state food and nutrition programs, and other programs that could encourage and support food business retention and development, and nonprofit food project development, in environmental justice communities.
- Offer State incentives and/or give priority for supermarket operators, public or private developers, and state-financed or supported affordable housing developments (80% market rate- 20% affordable housing) to locate in low-income communities and communities of color if they increase shelf space and refrigerated space for fresh fruits and vegetables.
- Assist food distributors supplying school districts to identify and procure locally produced foods.
- Require all state food contracts to include a plan to maximize the availability of New York grown food purchased through the contract.

Action Agenda

- NYSDOH has made significant progress towards ensuring that existing food and nutrition programs are targeted to address “health” disparities and to improve access to affordable, safe and nutritious food in environmental justice communities. NYSDOH food and nutrition programs (Women, Infants, and Children [WIC], Farmers’ Market Nutrition Program, Child and Adult Care Food Program, Hunger Prevention and Nutrition Assistance Program) serve low-income populations, high-risk women, pre-school and school-age children, families and the elderly. Services are located or provided in low-income urban and rural neighborhoods and communities, with a focus towards improving nutrition and health status and preventing obesity through the provision of nutritious food, child care meal reimbursements, alleviation of hunger through support of emergency food relief organizations, nutrition education, and referral for health and social services. NYSDOH will explore ways to better incorporate the environmental justice perspective.
- The NYSDOH WIC program-approved grocers will be implementing provisions of the new WIC food package as of January 2009. WIC stores will be required to maintain adequate stock of vegetables and fruits to meet the needs of WIC participants, resulting in increased shelf space designated for fruits and vegetables in some stores in environmental justice communities.
- Many of these recommendations are under investigation by the Council on Food Policy.

Communication with the Public on Food

Stakeholder Recommendation

- Assemble a team of State officials knowledgeable about State and federal food-related programs and funding to regularly visit environmental justice/urban communities to share information on existing programs that are relevant to address environmental justice food issues and opportunities – and to expand partnerships with municipalities and community-based organizations (e.g., the Mass Avenue Project in Buffalo).
- Increase awareness and use of existing government food and nutrition programs (e.g., WIC, Farmers’ Market Nutrition Program, Electronic Benefit Transfer, School Food, Senior Meals) in environmental justice areas by providing program outreach materials (such as brochures) through retail food outlets that participate in the programs, including supermarkets and corner stores/bodegas.
- Involve respected community leaders at Senior Centers, faith-based institutions, and anti-poverty and other community organizations in existing food program outreach, screening, and enrollment efforts to maximize the participation of those eligible for mandatory/entitlement federal programs such as Food Stamps and School Meals.

Action Agenda

- The existing Governor’s Council on Food Policy clearly meets this definition with State officials working in conjunction with farmers, food industry representatives, nutrition advocates and others who represent nearly all sectors of the food industry and together represent the diversity and expertise necessary to develop an effective food policy for the people of New York State. As a first step, the Council recently concluded a series of six listening sessions across NYS to hear comments and testimony on issues, most of which were relevant to or consistent with environmental justice issues. Many of the issues identified by the Council and documented during the listening sessions are the same or are consistent with environmental justice concerns.
- The NYSDOH WIC program has used a variety of outlets in environmental justice areas including retail food distributors, supermarkets, corner stores, and bodegas for outreach into low-income communities and families to increase awareness and knowledge of local WIC and Farmers’ Market Nutrition Program services and locations. A new informational campaign began in fall 2008 informing environmental justice communities and families on changes to the WIC food package starting in January 2009.
- The NYSDOH Nutrition Outreach and Education Program (NOEP) funds 38 community not-for-profit organizations in environmental justice communities to provide program outreach and screening primarily for the Food Stamp Program, but also for the Summer Food and school meals (School Lunch and Breakfast) programs.

Food and Children

Stakeholder Recommendation

- Update and expand nutritional guidelines on foods sold in schools. Schools are an educational setting, and therefore what occurs in a school carries the message of model behavior. The foods available in schools are part of the education of children and so should

be of high nutritional value. Expand nutrition standards to increase the amount of fruits and vegetables available and decrease the amount of heavy starches and fats. Improve nutritional standards to include low sodium and whole grain.

- Set nutritional standards for school lunches, breakfasts, and snacks that are stricter than existing U.S. Department of Agriculture (USDA). Currently, 17 states set nutritional standards for school lunches, breakfasts, and snacks that are stricter than existing USDA standards. Schools are an educational setting, and therefore what occurs in a school carries the message of model behavior. The foods available in schools are part of the education of children and so should be of high nutritional value. Expand nutrition standards that increase the amount of fruits and vegetables available and decrease the amount of heavy starches and fats. Improve nutritional standards to include low sodium and whole grain.
- Set nutritional standards for competitive foods sold a la carte, in vending machines, in school stores, or in bake sales in schools. Currently twenty-two states have nutritional standards for competitive foods sold a la carte, in vending machines, and in school stores.
- Add reimbursement for a third meal for children in programs that are open for 10 hours or more. This would ensure access to good nutrition for children of working parents who rely on child care for extended hours.
- Expand access of Child Nutrition Reauthorization programs in rural communities. Many Northeast States face particular child nutrition challenges by their overwhelmingly rural nature. The Child Nutrition Act facilitates meals in communities where more than 50% of children qualify under income guidelines. However, many low-income youth miss these benefits because poverty is spread among small towns and not concentrated in large, urban centers. Furthermore, smaller schools and child care centers have higher per-plate costs because they cannot achieve economies of scale. Changes to summer food, child care and after-school food, and school meals would ameliorate these challenges.
- Establish a Farm to School Program that will facilitate the purchasing of New York-grown farm products by schools. There is currently a New York State Farm to School Program within the Department of Agriculture & Markets with limited staff-time and promotional funds. The program could include 2 ½ employees that coordinate efforts with individual school districts, the NYS Education Department, and NYSDOH. We recommend additional coordination through Cornell Cooperative Extension for county-level support.

Action Agenda

- Governor Paterson has proposed legislation- the Healthy Schools Act- to address many of these issues, and the Council on Food Policy is also reviewing this issue.
- The NYSDOH Child and Adult Care Food Programs provide reimbursements for snacks and supper served in approved at-risk after school programs serving low-income children and teens.

- The NYSDOH Child and Adult Care Food Program reimburses child care organizations and at-risk after school programs for nutritious meals and reaches all areas of New York State, including rural upstate communities and urban centers.
- The NYS Education Department has received federal funds to initiate a pilot program during this school year. This issue has been identified by the Governor’s Council on Food Policy as a priority, and recommendations will be made in the Council’s report to the Governor.

Farmers’ Markets and WIC

Stakeholder Recommendation

- Ensure all farmers markets have access to critical food and nutrition programs such as the WIC and Senior Farmers’ Market Nutrition Program and the Farmers’ Market Wireless Electronic Benefit Transfer Program that serve low-income nutritionally at-risk women, children, Seniors, and other participants.
- Ensure that farmers’ markets authorized by the WIC Farmers’ Market Nutrition Program are included in the new federally funded WIC Fruit and Vegetable program in addition to existing WIC authorized stores.

Action Agenda

- NYSDOH works in partnership with the NYS Department of Agriculture and Markets to operate the Farmers Market Nutrition Program. The NYS Department of Agriculture and Markets manages the enrollment and authorization of farmers’ markets, while NYSDOH issues benefits to WIC participants who redeem the benefit at local approved farmers’ markets. Yearly, the two agencies work together to identify potential new locations or communities where WIC participant access to farmers’ markets could be improved. New markets are developed to improve WIC participant access.
- NYSDOH has begun discussion with the NYS Department of Agriculture and Markets to establish a pilot program during the next Farmers’ Market Nutrition Program season to determine feasibility and logistics of farmers’ markets accepting WIC program checks for fruits and vegetables.

Food Availability

Stakeholder Recommendation

- In view of the forthcoming new federally funded WIC Fruit and Vegetable Program, encourage state agency collaboration in assisting WIC-authorized corner stores/bodegas in environmental justice areas that currently carry few fresh fruits and vegetable to expand their produce offerings – including items that are sensitive to cultural food preferences in the communities they serve.
- To enable increased availability of a diversity of fresh, nutritious, and local grown produce through the state’s eight regional food banks to food pantries, soup kitchens and other

emergency food outlets in environmental justice areas, encourage local procurement expenditures by food banks using Hunger Prevention and Nutrition Assistance Program (HPNAP) funds in place of payments for transporting donated commodities at high expense from the West via the Second Harvest network.

Action Agenda

- NYSDOH has been meeting with or providing information to major food distributors and all 4400 authorized WIC grocers across New York State, many in environmental justice communities, in preparation for the changes to the WIC food package beginning in January 2009. Authorized WIC grocers will be required to maintain appropriate stock of approved WIC foods, including low-fat or nonfat milk, whole grain breads and cereals, and fresh, frozen or canned fruits and vegetables, components of the revised WIC food package. WIC stores must continue to carry these food products to retain their enrollment in the WIC program.
- NYSDOH's HPNAP provides funding to food banks, soup kitchens, and food pantries to support existing operations and improve the nutritional quality of the foods provided. HPNAP program policy requires contractors to spend 10% of their HPNAP funding for fruits and vegetables and 2% of their funding for reduced or low-fat fluid milk. The emergency food relief organization (EFRO) network is encouraged to purchase local produce when in season. HPNAP also provides funding for community gardens, veggie mobiles, gleaning projects at local farms, and community supported agriculture projects to obtain additional fresh produce, which benefits local EFRO's and their recipients. Funding is the limiting factor in expanding any of these programs to increase nutritious food offerings in EFROs. Transporting available donations from other states via the America's Second Harvest network for pennies a pound has proven to be a very cost-effective method to bring product into New York State. Encouraging more local procurement expenditures is under consideration and is an issue under review by the Council on Food Policy.

Food Banks

Stakeholder Recommendation

- Assist the regional food banks and other HPNAP-funded contractors to acquire energy efficient refrigeration for trucks and warehouse to transport and store fresh produce.

Action Agenda

- NYSDOH's HPNAP currently funds food service capital equipment, which includes refrigeration, at soup kitchens, food banks, and food pantries. HPNAP supports transportation costs to transport food, including refrigerated or frozen items.

Indoor Air Quality

Stakeholder Recommendation

- Promote alternatives to pesticide use in residential housing and government buildings for pest management. Encourage integrated pest management through agency initiatives

similar to the green building initiative of the NYS Department of Housing and Community Renewal.

- Develop public education materials and resources through NYSDOH to inform the public about the health effects of molds, methods of prevention, and methods of identification and remediation of mold growth. These educational materials should be available at a variety of sites and in a variety of languages and should provide contact information to organizations or government entities to assist public concerns.

Action Agenda

- NYSDOH includes alternate pest control methods in many of its fact sheets that relate to pests and pest control, including "Reducing Pesticide Exposure" and "Get Rid of Cockroaches." NYSDOH will continue to include these methods in future outreach materials and will explore opportunities and means to promote alternate pest control in these settings. Total-release foggers are a class of pesticide products that pose risks of health effects, fires and explosions, and are often used in low-income housing as a means to control insect pests. NYSDOH recognizes the risks this situation poses and is working with NYSDEC and pesticide registrants to develop actions to mitigate the risks posed by these foggers and to explore alternative insect control strategies.
- NYSDOH has developed informational materials on various aspects of mold. These materials include a general "Mold Fact Sheet"; a booklet (prepared in collaboration with the NYS Energy Research and Development Authority) on "Indoor Air Quality and Your Home," which contains information about mold; and a "Health Checklist for Repairing Your Flood Damaged Home," which provides information on preventing mold growth after a flood. These materials are available on NYSDOH's public website (<http://www.health.state.ny.us/environmental/indoors/air/mold.htm>). The website also provides links to other resources (some of which are available in Spanish as well as English), with extensive health-related information and methods of prevention and remediation of mold growth (e.g., a U.S. Centers for Disease Control and Prevention webpage). Mold-related materials are also distributed to many communities after flood events. NYSDOH also has a toll-free environmental health information line (1-800-458-1158), and we provide advice to residents with mold concerns on a daily basis through telephone inquiries. NYSDOH also developed the training course, "Mold, Water and Building Code." We have presented the course to over 1,000 code enforcement officials and other professionals to provide sound information on the basics of addressing and preventing mold growth in buildings and will continue with this activity. In addition, NYSDOH is co-chairing the NYS Toxic Mold Task Force. The Task Force's main objectives are to assess the adverse environmental and health impacts caused by toxic mold in the state and recommend methods for the control of mold and measures to mitigate mold.

State Environmental Quality Review Reform

Stakeholder Recommendation

- NYSDEC and NYSDOH should investigate and designate any critical environmental areas in order to protect the environment and human health and prioritize actions necessary in

critical environmental areas. Environmental justice communities with multiple environmental burdens could be designated as critical environmental areas to bring resources to remediate environmental degradation.

- We recommend that NYSDEC and NYSDOH pull together existing information related to contaminants, pollutants and environmental media in order to establish critical thresholds for the protection of the people of this state and the environment. As part of this effort, health-based and other types of standards and guidance values shall be considered along with multi-media, total and cumulative human exposures, including impacts on sensitive populations.

Action Agenda

- In the case of critical environmental areas, NYSDEC has primary responsibility; NYSDOH will assist NYSDEC as needed.
- NYSDEC and NYSDOH have established “critical thresholds” for chemicals in various environmental media. NYSDEC “critical thresholds” include air guideline concentrations, ambient water quality standards, groundwater standards, and soil cleanup objectives. Also, NYSDOH has established drinking water standards. NYSDEC and NYSDOH rely upon these “critical thresholds,” as well as Federal guidelines and standards (e.g., National Ambient Air Quality Standards), in conducting activities to minimize risks to public health and the environment. NYSDEC and NYSDOH will continue to conduct these activities and update standards/guidelines as necessary.

Health Studies

Stakeholder Recommendation

- NYSDOH should take a more proactive role in children’s health as impacted by environmental contaminants, focusing on less known associations between exposure to low-level toxins and toxins early in life and health outcomes such as autism and developmental disabilities leading to behavioral problems. NYSDOH should conduct and participate in studies evaluating these relationships. It is further recommended that NYSDOH participate in studies evaluating the risk of illness due to combined exposures of multiple pollutants and as toxins accumulate in the body and interact with other toxins.

Action Agenda

- For meaningful results, studies of less well-known associations between low-level environmental exposures and health outcomes must be well designed. These studies require substantial resources since it is unlikely that existing databases could be used. This type of research is more likely to be done in an academic setting. NYSDOH and the University at Albany School of Public Health are collaborating on a study funded by the National Institute of Child Health and Development that will analyze birth records and questionnaire results to look at a variety of factors to see if they increase the chances for developmental disorders or other health problems. About 6,500 children will be included in the study, which is called the Upstate New York Infant Development Screening Program (Upstate KIDS). Parents will complete an initial questionnaire about the pregnancy and then will

complete several questionnaires about the child's health and development up until the child is 36 months of age. Children identified with developmental problems will be referred to NYSDOH's Early Intervention Program for appropriate services. NYSDOH will explore additional opportunities to participate in these studies.

- In addition, the U.S. Centers for Disease Control and Prevention has many activities relating to monitoring the number of children with autism spectrum disorders (ASDs) and other developmental disabilities and funding epidemiologic research (<http://www.cdc.gov/ncbddd/autism/caddre.htm>).

School Siting

Stakeholder Recommendation

- NYSDEC, NYSDOH, and the NYS Education Department (NYSED) should establish a safe school siting policy to ensure that local and state government and school administrations have policies and procedures to require adequate testing of potential school sites and protective cleanups, if contamination is found.

Action Agenda

- NYSED is the jurisdictional authority for all public school construction outside of New York City. Each capital project is required to undergo the State Environmental Quality Review process, and NYSED reviews all documentation associated with environmental decision making with regard to potential school sites. When necessary, NYSDOH and NYSDEC work with NYSED and the school districts to address contamination identified at new and existing schools. The New York City School Construction Authority (SCA), which has jurisdiction over schools in New York City, evaluates the history of compliance with applicable regulations and performs studies and investigations of every potential school site to determine its suitability. All sites are evaluated for the potential presence of radon, soil vapor intrusion, asbestos-containing material, lead-based paint, PCB-containing material, chemical storage, historic fill, methane generation, industrial emissions, mold and biological agents. If necessary, the SCA also designs appropriate remedial measures. NYSDOH and NYSDEC also provide assistance to the SCA.

Ritualistic Uses of Mercury

Stakeholder Recommendation

- "Ritualistic" mercury contamination of housing should be addressed by the Environmental Justice Interagency Task Force.

Action Agenda

- The comments submitted include a request for NYSDOH to conduct studies to address elemental mercury exposures due to cultural uses of elemental mercury in Latino-Caribbean communities in New York City. The following describes the activities of NYSDOH and the New York City Department of Health and Mental Hygiene (NYCDHMH) with respect to this issue.

Both NYSDOH and NYCDHMH actively participated on the U.S. Environmental Protection Agency's (EPA's) Ritualistic Uses of Mercury Task Force from 1999 to 2002. The task force was convened in response to concerns raised by the commenter about potential significant elemental mercury exposures in Latino-Caribbean communities. As a consequence of recommendations in the task force's final report, NYSDOH collaborated with the NYCDHMH and the U.S. Centers for Disease Control and Prevention in conducting a bio-monitoring study to directly assess elemental mercury exposures in Hispanic and Caribbean communities in the Bronx, Brooklyn, and Manhattan. The study consisted of two parts: a pediatric clinic portion that recruited participants (children age 2-10) from patients scheduled for well-child visits, and a second community portion that was conducted door-to-door in residential buildings adjacent to botanicas (a reported source for obtaining elemental mercury). The study surveyed parents regarding elemental mercury use and awareness, and their child's potential mercury exposure. In the clinic, urine and some blood samples were obtained. In the community portion of the study, urine samples were collected.

Few parents reported the presence of mercury in the home, a charm or other items, and no association was found for urine mercury levels and reported potential mercury exposure sources. The study concluded that there was "neither self-reported, nor measured evidence of significant mercury use or exposure among participating children" (Rogers et al., Mercury Exposure in Young Children Living in New York City. *J Urban Health* 2008;85(1):39-51). While this study is not an environmental sampling driven study, this study design was selected as one that would directly measure mercury exposure in the population of concern. Recognizing that participation could be biased against those using mercury, a limited number of anonymous urines collected at clinic well-child visits from non-participants were also analyzed for mercury. The mercury levels in these urine samples were similarly unremarkable. These results were similar to findings of previous studies of pediatric urine mercury levels among children in Hispanic or Hispanic-Caribbean communities in NYC (Ozuah et al., *Ambul Pediatr.* 2003; 3(1):24-26) and in Chicago (Rogers et. al., *Clin Toxicol.* 2007; 45(3):240-7).

In response to past complaints from the commenter, NYCDOHMH conducted surveys of botanicas reportedly offering elemental mercury for sale. The surveys, conducted by Spanish-speaking investigators, failed to find mercury being offered for sale at the 11 botanicas still in operation from the list of 20 botanicas provided. A follow-up visit to 4 of the 11 botanicas included using a real-time mercury vapor analyzer to detect the presence of mercury vapor. Three of the four botanicas had no detectable mercury vapor. In the fourth, mercury was detected at the lower limit of the instrument's capability, but could not be traced to any identifiable elemental mercury source within the shop (the instrument used can be subject to interference from sulfur and ammonia compounds). The results from the biomarker studies and botanica surveys do not support the need for additional studies.

Agency Collaboration

Stakeholder Recommendation

- NYSDOH should make health data available for use by state agencies and permit applicants to use when evaluating project impacts on environmental justice communities, developing data exchange agreements if needed. NYSDOH should make data available on health outcomes in addition to cancer and asthma.
- Agencies should consider the unique challenges of presenting data for rural areas with low population density.

Action Agenda

- State agencies and permit applicants can access data for a variety of health outcomes on NYSDOH's public website at <http://www.health.state.ny.us/statistics/>. The data for these outcomes are collected from throughout the state through uniform collection systems such as birth and death certificates or hospital reporting (e.g., cancer registry, Statewide Planning and Research Cooperative System [SPARCS]), etc.). Data are available for geographic areas such as the county, New York City, or New York State as a whole. NYSDOH is in the process of making data available for additional health outcomes and is developing a tool to allow users to query health outcome and environmental data to create maps, charts and tables. Currently, data for ZIP Codes are available for asthma hospitalizations and four types of cancer. NYSDOH is in the process of making more health data available for ZIP codes or ZIP code groupings. NYSDOH is aware of the challenges of presenting data in low population density areas. Some ZIP Codes in rural (and urban) areas are large and may include populations with differing demographic characteristics. In addition, because of the sparse population in some rural areas, ZIP Codes sometimes have to be grouped when displaying relatively rare health outcomes to protect confidentiality and to present more stable disease rates.

Nanotechnology

Stakeholder Recommendation

NYSDOH should develop recommendations for permitting of nanotech facilities.

Action Agenda

- NYSDOH is participating in the NYSDEC Nanotechnology Work Group. The work group's objective is to build knowledge on nanomaterials and an awareness of potential issues/matters associated with the nanomaterials industry. The workgroup recognizes the potential benefits that nanotechnology holds for society yet has concerns about the Environmental Health and Safety (EH&S) aspects of nanotechnology which have not yet been adequately addressed. The work group also has concerns about the adequacy of our current regulatory framework to address nanomaterials in the environment. The workgroup is meeting regularly to develop strategies to address these and other issues.