Introduction

The purpose of this document is to outline the Environmental Health Officer Professional Advisory Committee’s plan to incorporate the Surgeon General’s National Prevention Strategy. EHOPAC members have the opportunity to demonstrate the NPS in their professional life and in their personal life as highlighted herein.

Background

The National Prevention Strategy (NPS) is designed to guide the nation in the most effective and achievable manner for improving health and well-being with the goal of increasing the number of Americans who are healthy at every stage of life. The NPS focuses on increasing the length of life and ensuring that people’s lives are both healthy and productive. The Strategy relies on partnerships between Federal, state, local, tribal and territorial governments; business, industry and other private sector partners; and non-governmental organizations to address the health needs of the Nation.

The NPS is organized according to four Strategic Directions which provide the foundation for prevention efforts:

- Healthy and Safe Community Environments
- Clinical and Community Preventive Services
- Empowered People
- Elimination of Health Disparities

The Seven Priorities provide evidence-based recommendations that are most likely to address the leading causes of preventable illness and injury:

- Tobacco Free Living
- Preventing Drug Abuse and Excessive Alcohol Use
- Health Eating
- Active Living
- Injury and Violence Free Living
- Reproductive and Sexual Health
- Mental and Emotional Well-being
Environmental Health Officers (EHOs) of the US Public Health Service Commissioned Corps serve in a wide variety of jobs, and are involved in diverse activities outside of work, that contribute to the goals of the NPS on a daily basis. This paper reflects EHOs commitment to NPS implementation, and highlights how EHO activities cross over several domains of Strategic Direction and Priorities.

NPS at Work

EHOs are stationed at no fewer than a dozen departments and agencies, both within and outside the Public Health Service, which directly influence the health of Americans. EHOs duties include: direct intervention/regulatory oversight; technical assessment/guidance; grants administration; research and training/outreach. The National Prevention Strategy identifies five causes of death which account for 66% of all deaths and are felt to be most responsive to prevention strategies: heart disease; cancer; stroke; chronic lower respiratory disease, and; unintentional injury. Environmental Health Officers play an important prevention role in each of these areas:

- **Heart disease and stroke**
  - Ensure the safety and nutritional value of the food
  - Work in targeted obesity programs that focus on healthy eating and active living
  - Promoting active living by maintaining safe and sanitary conditions at parks and recreational facilities
  - Provide safety support to federal research activities
  - Encourage active living by maintaining safe and sanitary conditions at parks and recreational facilities

- **Chronic lower respiratory disease**
  - Develop programs to control environmental triggers
  - Support standards to reduce air pollution
  - Provide safety support to federal research activities

- **Cancer**
  - Identify, control, and prevent industrial and environmental exposures to potential carcinogens
  - Develop standards and guidance
  - Maintain federal regulatory oversight of screening programs
  - Provide safety support to federal research activities
  - Encourage preventive screenings as part of workplace and community health efforts

- **Unintentional injury**
  - Manage and support injury prevention programs
  - Train injury prevention specialists
  - Provide outreach to at-risk groups on prevention methods and risk avoidance
  - Ensure the safety of occupational and recreational facilities
Specific ways in which EHOs support the *Strategic Directions* of the NPS include the following:

- **Healthy and Safe Community Environments**
  - EHOs at the CDC/IHS engage in healthy homes initiatives to address injury hazards, asthma triggers, lead-based paint, radon, pest infestation/vector borne disease and mold, among other household hazards
  - EHOs at CDC/EPA/IHS/NPS support healthy places and built environment efforts through “green initiatives” that build healthy and sustainable environments
  - EHOs at CDC/EPA/IHS/NIH work to improve the quality of the air, land and water through technical assessments, training, regulatory oversight and research
  - Provide direct technical support to state, local and tribal public health departments
  - EHOs at CDC/EPA provide grants and technical support for the revitalization of brownfields
  - EHOs in all agencies help ensure the safety of communities through training and exercises related to emergency response planning and preparedness including bioterrorism, natural hazards and disasters, and food protection
  - EHOs at CDC/EPA and other agencies promote the use of green technologies to reduce environmental waste and pollution
  - EHOs at US Coast Guard/EPA support activities under the National Contingency Plan to mitigate the effects from hazardous material releases in the Nation’s waterways
  - EHOs at CDC provide training through the Environmental Health Training in Emergency Response course to increase the preparedness of community-base emergency responders for addressing the environmental impacts of emergencies and disasters

- **Clinical and Community Preventive Services**
  - EHOs at FDA provide training and oversight to state programs to improve quality of radiation services and preventive screening equipment under the Mammography Quality Standards Act to ensure that women have access to high quality screening for breast cancer
  - EHOs at CDC collaborate with laboratories to identify environmental factors that might contribute to foodborne or waterborne illnesses and disease outbreaks
  - EHOs at IHS work with American Indian and Alaskan Native (AI/AN) communities to reduce asthma triggers
  - EHOs at IHS conduct programs to improve children’s environments through enhanced disease surveillance and hazard monitoring and integration with clinical services

- **Empowered People**
  - EHOs at IHS train AI/AN households in ways to reduce asthma triggers and vector-borne diseases
  - EHOs at CDC/FDA provide guidance to states, local and tribal communities and individuals on sheltering, decontamination and other self-help strategies following emergencies involving the release of hazardous materials
  - EHOs at CDC/EPA encourage stakeholder involvement from affected communities during the planning of remediation activities surrounding hazardous sites

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• EHOs in all agencies provide outreach materials to communities on ways to minimize exposures to environmental hazards
• EHOs in all agencies provide guidance, training, subject matter expertise, and mentoring to government, academia, health departments, community organizations, professional organizations, partners, students, and other stakeholders in an effort to develop local expertise

• Elimination of Health Disparities
  • EHOs at IHS support Community Injury Prevention programs for AI/AN communities which are at a disproportionate risk for injuries
  • EHOs at CDC/EPA/IHS are engaged in activities to reduce pollution and asthma triggers which disproportionately affect low income and minority populations

Numerous activities of EHOs are directly linked to the Priorities outlined in the Strategy:

• Preventing Drug Abuse and Excessive Alcohol Use
  • EHOs at IHS counsel on the impact of drug and alcohol use as significant contributing factors to injury and death as part of the Community Injury Prevention program

• Healthy Eating
  • EHOs at FDA/USDA help to ensure the safety of the food supply through surveillance and the development of guidance
  • EHOs at CDC work in foodborne illness surveillance programs.
  • EHOs at CDC trains environmental public health professionals through the Environmental Public Health Leadership Institute to enhance their ability to ensure the safety of food service establishments, among other activities
  • EHOs at ATSDR advise EPA when drinking water sources are not suitable for human consumption, and work with them to provide an alternate clean, safe water supply
  • EHOs at NPS are involved in an initiative that seeks to model sound nutrition in the concessions in national parks
  • EHOs at CDC support sustainable food efforts through promotion of sustainable food supply and practices to support healthier environments

• Active Living
  • EHOs at ATSDR/EPA/IHS work to improve the safety of schools, Head Start programs and childcare facilities to provide a safe environment for children
  • An EHO at the CDC works in the Division of Nutrition, Physical Activity and Obesity providing technical assistance on evidence-based physical activity interventions for obesity prevention
  • EHOs at CDC work with public health and industry representatives to prevent drowning, injuries and waterborne illnesses at public swimming pools and spas through the Model Aquatic Health Code
  • EHOs at NPS ensure safe and sanitary conditions at national parks to enhance the utilization of park lands
  • EHOs at CDC support Healthy People, Healthy Places which promote alternative transportation, community, and urban planning to support physical activity

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- EHOs at CDC have supported research and writing for National Physical Activity Guidelines for Americans and the Surgeon Generals’ Call to Action on Walking, and transportation and health policy

- **Injury and Violence Free Living**
  - Through its Community Injury Prevention program, IHS officers serve as Area Injury Prevention Specialists
  - EHOs at NIH help evaluate and provide guidance on ways to reduce workplace hazards and illnesses
  - EHOs serve in the Federal Occupational Health service, providing health and safety support to employees of federal agencies
  - EHOs at number of agencies serve as Safety and Health Officers to protect employees from workplace hazards and reduce injuries and illnesses.
  - EHOs at CDC evaluate hazardous waste sites for any physical hazards present on-site that could injure the community and work with EPA to remove those hazards

- **Mental and Emotional Well-being**
  - EHOs at a number of agencies serve citizens who are concerned about environmental hazards adversely affecting their health at home, school, and work
  - EHOs at NPS contribute to the agency’s Healthy Parks Healthy People program
  - EHOs at EPA work alongside Wellness Coordinators to promote physical and mental wellness of agency employees while at work and home

**NPS at Home**

EHO’s as professionals lead by example and are involved in health promotion efforts within their agencies. As individuals, EHOs strive to live healthy lives, be active in community organizations, serve in professional organizations, and personally mentor other colleagues and students in setting a good example and in behaviors becoming of an officer which also align with prevention strategy priorities.

Specific ways in which EHOs can support the *Strategic Directions* of the Strategy are presented in the Strategy under the sub-heading *Individuals and Families can* which include the following:

- **Healthy and Safe Community Environments**
  - Use alternative transportation (e.g., biking, walking, public transportation, car and vanpooling)
  - Conduct home assessments and modifications (e.g., installing smoke and carbon monoxide detectors, testing for lead, checking for mold and radon)
  - Purchase energy-efficient products, support local vendors, and recycle

- **Clinical and Community Preventive Services**
  - Visit their health care providers to receive clinical preventive services
  - Use various tools to access and learn about health and prevention and ways they can better manage their health (e.g., personal health records, text reminder services, smart phone applications)

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• Empowered People
  o Actively participate in personal as well as community prevention efforts
  o Participate in developing health information and provide feedback regarding the types of health information that are most useful and effective
  o Provide clinicians with relevant information (e.g., health history, symptoms, medications, allergies), ask questions and take notes during appointments, learn more about their diagnosis or condition, and follow up with recommended appointments

• Elimination of Health Disparities
  o Participate in community-led prevention efforts
  o Use community resources (e.g., libraries, literacy programs) to improve their ability to read, understand, and use health information

Specific ways in which EHOs can support the Priorities of the Strategy are presented in the Strategy under the sub-heading Individuals and Families can which include the following

• Tobacco Free Living
  o Quit using tobacco products and ask their health care provider or call 1-800-QUIT-NOW for cessation support
  o Teach children about the health risks of smoking
  o Make homes smoke free to protect themselves and family members from secondhand smoke
  o Refrain from supplying underage youth with tobacco products

• Preventing Drug Abuse and Excessive Alcohol Use
  o Avoid binge drinking, use of illicit drugs, or the misuse of prescription medications and, as needed, seek help from their clinician for substance abuse disorders
  o Safely store and properly dispose of prescription medications and not share prescription drugs with others
  o Avoid driving if drinking alcohol or after taking any drug (illicit, prescription, or over-the-counter) that can alter their ability to operate a motor vehicle
  o Refrain from supplying underage youth with alcohol and ensure that youth cannot access alcohol in their home

• Healthy Eating
  o Eat less by avoiding oversized portions, make half of the plate fruits and vegetables, make at least half of the grains whole grains, switch to fat-free or low-fat (1%) milk, choose foods with less sodium, and drink water instead of sugary drinks
  o Balance intake and expenditure of calories to manage body weight
  o Breastfeed their babies exclusively for the first 6 months after birth when able
  o Prevent foodborne illness by following key safety practices—clean (wash hands and surfaces often), separate (do not cross-contaminate), cook (cook food to proper temperatures), and chill (refrigerate promptly)
• Active Living
  o Engage in at least 150 minutes of moderate-intensity activity each week (adults) or at least one hour of activity each day (children)
  o Supplement aerobic activities with muscle strengthening activities on two or more days a week that involve all major muscle groups
  o Consider following the American Academy of Pediatrics (AAP) recommendations for limiting TV time among children
• Injury and Violence Free Living
  o Refrain from driving while under the influence of alcohol or drugs or while drowsy or distracted (e.g., texting)
  o Use seat belts, bicycle helmets, motorcycle helmets, and protective sports gear
  o Establish clear expectations and consequences with teenagers about safe driving, including speeding, seat belt use, alcohol-or drug-impaired driving, and distracted driving
  o Engage in regular physical activity to increase strength and balance to help prevent falls
• Reproductive and Sexual Health
  o Eat healthfully, take a daily supplement of folic acid, stay active, stop tobacco use and drinking alcohol and see their doctor before and during pregnancy
  o Discuss their sexual health history, getting tested for HIV and other (sexually transmitted illnesses) STIs, and birth control options with potential partners
  o Notify their partner if they find out they have HIV or another STI
  o Discuss sexual health concerns with their health care provider
  o Use recommended and effective prevention methods to prevent HIV and other STIs and reduce risk for unintended pregnancy
  o Communicate with children regarding their knowledge, values, and attitudes related to sexual activity, sexuality, and healthy relationships
  o Make efforts to know where their children are, and what they’re doing and make sure they are supervised by adults in the after-school hours
• Mental and Emotional Well-being
  o Build strong, positive relationships with family and friends
  o Become more involved in their community (e.g., mentor or tutor youth, join a faith or spiritual community)
  o Encourage children and adolescents to participate in extracurricular and out-of-school activities
  o Work to make sure children feel comfortable talking about problems such as bullying and seek appropriate assistance as needed

Conclusion
Environmental Health Officers serve in roles that directly impact the strategic domains for prevention as environmental health is a foundation of public health. EHO’s have made and will continue to make contributions to the prevention of illness and injury and to improve the nation’s health and well-being. The Environmental Health category stands ready to join with other partners toward the goal of a healthier Nation.

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Work Group Members:

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Notes
Table could be used to record NPS related activities by officers

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