Vector Waste Meeting Kit

WHAT'S AT STAKE

Cockroaches, rats, mice, birds, and bats invade our homes, offices, pipes, barns, or other out-buildings and leave behind waste in the form of feces, urine, insect parts, hair, and carcasses. They are also considered vectors capable of transmitting disease or causing harm to people and/or animals.

WHAT'S THE DANGER

DANGERS OF VECTOR-BORNE WASTE

Vector-borne diseases (VBDs) such as malaria, dengue, and leishmaniasis exert a huge burden of morbidity and mortality worldwide, particularly affecting the poorest of the poor. The principal method by which these diseases are controlled is through vector control, which has a long and distinguished history. Vector control, to a greater extent than drugs or vaccines, has been responsible for shrinking the map of many VBDs.

Cockroach feces, saliva, and body parts and mouse and rat urine contain proteins that can dry up, become airborne, and create allergy symptoms in humans. The symptoms include itchy skin and eyes, a scratchy throat and nose, and with increased exposure, severe asthma. In addition, some mice and rat species, through their urine, droppings, and saliva spread hantavirus, a disease that can cause severe respiratory distress and death.

Birds and bats often roost together in large numbers. The buildup of their droppings, carcasses, and debris can host mites, funguses, and bacteria that can cause disease in humans. Symptoms of these diseases range from loss of appetite and headaches to fever, muscle weakness, and chest pain.

HOW TO PROTECT YOURSELF

VECTOR WASTE PREVENTION – EMPLOYEE ACTION

When vector waste is found, it should only be removed or cleaned by someone trained to do so safely and adequately. If you are responsible for removing and cleaning up vector waste, make sure you've been trained in its potential hazards and take the proper precautions to protect your health and safety. Precautions may include airing out an enclosed space for at least 30 minutes; wearing personal protective equipment (PPE) such as safety glasses, rubber gloves, disposable protective clothing, and rubber boots; and wearing a respirator that is equipped with a high-efficiency particulate air (HEPA) filter (P100).

Avoid vacuuming, sweeping, dry scooping and pressure washing vector waste, which can create airborne dust. A gentle wet method cleanup is often recommended; using a 10 percent bleach solution to thoroughly soak the entire area and allow it to sit for at least 15 minutes. A rag, sponge, or mop soaked in the bleach solution is then commonly used to wipe up fine debris and to decontaminate any tools and other affected items. Other contaminated debris should be placed in heavy, plastic, double bags by an individual wearing proper personal protective equipment. The debris should then be disposed of in designated trash bins. Lastly, a wet bleach-solution-soaked mop is generally recommended to clean all surfaces.

Proper cleanup can prevent the potential spread of disease or allergens. Other workers who have been exposed to vector waste should shower or thoroughly wash their hands and exposed skin surfaces with soap and hot water. Any contaminated clothing should be washed in hot water separately from other laundry.

VECTOR CONTROL MEASURES

Personal Prophylactic Measures

- Use of mosquito repellent creams, liquids, coils, mats etc.
- Wear full sleeve shirts and full pants with socks.

- Use of bed nets for sleeping infants and young children during daytime to prevent mosquito bite

Biological Control

- Use of larvivorous fishes in ornamental tanks, fountains, etc.
- Use of biocides

Chemical Control

- Use of chemical larvicides like abate in big breeding containers.
- Aerosol space spray during daytime

Environmental Management & Source Reduction Methods

- Detection & elimination of mosquito breeding sources
- Management of roof tops, porticos, and sunshades
- Proper covering of stored water
- Reliable water supply
- Observation of weekly dry day

Health Education

- Impart knowledge to people regarding the disease and vector through TV, Radio, Slides, etc.

COMMUNITY PARTICIPATION

A. Monitoring. It is essential to monitor the health of populations to identify trends in vector-borne disease, allowing for the assessment of needed health resources.

B. Diagnose and Investigate. Joint investigations with environmental health, epidemiology and laboratory must be conducted for vector disease outbreaks, patterns of infectious disease and injuries, environmental hazards, and other health threats.

C. Inform, Educate, and Empower. Inform, Educate, and Empower covers the development and dissemination of information that educates and promotes activities to reduce health risks associated

with vector-borne diseases.

D. Mobilize. To mobilize community partnerships that identify and solve vector-related health problems, appropriate stakeholders who contribute or benefit from public health must be sought out.

E. Develop Policies and Plans. The alignment of resources and strategies to develop policies and plans that support individual and community vector health efforts involves implementing an effective governmental presence at the local, state, and tribal levels.

F. Enforce Laws and Regulations. This essential service is implemented through the review, evaluation, and revision of existing laws and regulations that were designed to protect the community against the spread of vector-borne illness and disease to reflect current scientific best practices.

G. Link and Provide Care. To link the community to important health services, systems must identify barriers to personal health services such as language, access, transportation, etc.

H. Assure a Competent Environmental Health and Vector Control Workforce. This essential service requires the assurance of a workforce that is adequately competent to meet the needs for the community's public health and vector services.

I. Evaluate. To improve community health outcomes, public health professionals must regularly evaluate the effectiveness, accessibility and quality of their programs.

J. Research. Research is imperative for the development of new and innovative solutions to vector control problems. This service is comprised of public health professionals working with institutions of higher learning.

FINAL WORD

Insects, rodents and birds can easily contaminate food, operational equipment and work surfaces with their excreta, hairs or body parts. These are potential pathogens, spreading disease

and giving rise to ‘foreign body’ complaints. Parasites carried by pest species can also be passed on to humans, causing illness and stress.