V.I.E.W.S.

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THE HAZARDS OF PIGEON DROPPINGS (AVIAN FECAL MATTER)

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As unknown as it is to many, avian fecal matter or "bird droppings" can be dangerous to your health.

I remember Venice, Italy, and the millions (it seemed) of pigeons in the Piazza San Marco. Tourists would come, also by the millions, and feed the pigeons, take pictures with the birds on their shoulders, on their heads, or on their feet; birds could also be seen on and under café tables, with kids chasing the birds to the delight of their parents.

And I remember thinking at a nearby café, my cappuccino covered by a napkin for protection from pigeon droppings, pigeon dust, pigeon feathers, and other vector borne macro and micro pigeon parts, that this did not seem healthy. All those birds, all that poo, all these people, and all those air and earth borne pathogens. La dolce vita this? Probably not.

Years later, my brother the medical doctor told me that the Venice scene was not healthy. He wondered how many cases of pigeon related diseases Venetian doctors saw each tourist season. Major Italian cities host pigeons and rats as their most prevalent indigenous fauna; so, it seems, does New York City. What is clear is that residents of both cities should think about the hazards pigeons present.

Pigeon droppings contain uric acid that actually eats into the surface it drops on. Painted surfaces, canvas awnings, signs and other similar surfaces pose the most risk because birds nest or perch on them. Dried bird droppings can contain many fungal and viral diseases that can represent a serious hazard to your health. Histoplasmosis, Encephalitis, Meningitis, St. Louis Encephalitis, and Salmonella are just a few of the common viral and bacterial diseases that have been associated with bird droppings.

Pigeon poo carries all sorts of bacteria, viruses, and germs. When it dries, it becomes powder that can be aerosolized (airborne) and inhaled. Pigeons are most hazardous when populations are not contained and controlled or where the birds are encouraged to be fruitful and multiply, as they are in Venice. Then, they become a living environmental hazard to city residents at large by defecating and roosting everywhere public. Special concern arises in areas near air conditioners, which are supposed to bring fresh air into living spaces, not pathogenic organisms.

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INFLUENZA UPDATE

Only people at high risk of serious illness or death from the flu should be vaccinated during the 2004-2005 season.

People 65 and older and children 6 to 23 months are at highest risk. Most healthy people ages 2 to 64 should NOT be vaccinated.

Whether you get a flu shot or not, you should take these simple but effective precautions to help stop the spread of flu:

• Cover your cough.

• Wash your hands frequently with soap and water. (Studies have shown that the more frequently you wash your hands with ordinary soap and water, the less likely you are to catch influenza or "colds.")

• Stay home if you are sick with fever and cough.

• Contact you physician.

WHO SHOUD BE VACCINATED THIS SEASON?

1. People age 65 and older
2. Children age 6 to 23 months
3. People age 6 months and older with chronic medical conditions
4. Pregnant women
5. Residents of nursing homes and other long-term care facilities
6. Children age 6 months to 18 years on long-term aspirin therapy
7. Caregivers and household contracts of infants under 6 months
8. Health care workers with direct patient contact

People age 65 and older. The elderly are the highest priority for vaccination because they have the highest mortality rates. People 65 and older account for 90% of flu-related deaths. Influenza vaccination dramatically reduces hospitalizations among people 65 and older—not only for influenza and pneumonia, but also for heart disease and stroke.

Children age 6 to 23 months. Young children, especially those under two years, have the highest hospitalization rates for influenza and its complications—substantially higher, even, than healthy adults 65 years and older.

People age 6 months and older with chronic medical conditions such as heart disease, pulmonary disorders, including emphysema and asthma, diabetes, renal disease, and immunodeficiency caused by HIV infection or immunosuppressive therapy, such as radiation therapy, chemotherapy, and high-dose steroids.

Pregnant women. Pregnant women are at increased risk for influenza-related complications and hospitalization. Influenza vaccine has not been associated with adverse fetal effects, even when given in the first trimester.

Residents of nursing homes and other long-term-care facilities. The vaccination of residents and staff is critical to prevent dangerous outbreaks. Vaccinating of health care workers has been shown to dramatically decrease deaths among residents.

Children ages 6 months to 18 years on long-term aspirin therapy, because of the risk of Reye syndrome associated with salicylates in the presence of influenza infection.

Caregivers and household contracts of infants under 6 months, not the infants. Vaccinating caregivers and household contacts protects infants under 6 months.

Health care workers with direct patient contact. Direct contact is defined as routine daily hands-on or face-to-face contact with patients. This would include doctors nurses, and others who care for patients.

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The good news is that bird related diseases can be treated and that few people get sick from exposure to these bacteria and fungi. The danger is minimal, but real nonetheless. ***Diseases associated with avian fecal matter are mostly a danger for the immunosupressed and most individuals will not get sick from casual contact***. It is important to report areas where pigeon droppings fall thick and fast so that effective and safe decontamination procedures can be applied thereby minimizing exposure to avian fecal matter.

Here are some of the ways zoonotic pathogens in pigeon droppings can be harmful to your health.

HISTOPLASMOSIS: Histoplasmosis is a flu-like illness that can be caught from soil contaminated with bird or bat droppings. The disease is caused by inhaling spores of a fungus called *Histoplasma capsulatum* These spores are inhaled when contaminated material is disturbed and the spores become airborne or aerosolized. Once airborne, spores can easily be carried by wind currents over long distances. Symptoms range from fever, cough, and headaches to chronic pulmonary infection or widespread disseminated infection affecting mucosal surfaces, liver, spleen, adrenal gland and meninges.

Histoplasmosis is a construction site danger. Typical high risk populations would be bridge inspectors, painters, chimney clearers, construction workers, demolition workers, and pest control workers. Care should be taken by workers in these occupations and others whenever contaminated soil, bat droppings, or bird manure are disturbed.

The most effective way to prevent exposure to the spores is to avoid situations where material that might be contaminated can become aerosolized and subsequently inhaled. Dust suppression methods, such as carefully wetting an area with a water spray, may be useful for reducing the amount of material aerosolized during a construction activity.

For some activities, such as removing an accumulation of pigeon droppings from an enclosed place such as an attic or pumping station house, wearing an approved respirator or other PPE may be needed to further reduce the risk of *H. capsulatum* exposure. However, only persons trained in the proper selection and use of PPE should undertake work where this equipment is needed.

PSITTACOSIS. Psittacosis is caused by *chlamydia psittaci*, a bacteria typically transmitted from infected birds usually of the parrot family, turkeys, and pigeons by inhalation of infectious aerosols. Infected birds shed the organisms in their droppings and other body secretions, which then dries, becomes powdery, and if the soil is disturbed, the organism becomes airborne. Human to human spread has not been reported. The illness is characterized by any combination of fever, chills, lower or upper respiratory disease (pneumonia), myalgia, headache, and photophobia. In addition to causing disease in bird owners and persons inadvertently exposed to pet birds, psittacosis is an occupational health hazard chiefly for those occupations that deal with birds, such as slaughter house workers.

CRYPTOCOCCOSIS MENINGITIS is a ***rare*** illness that typically strikes people with a weakened immune system. The disease is caused by exposure to a fungus found in pigeon droppings, which, when airborne, can be inhaled.

CRYPTOCOCCOSIS affects humans by first entering the lungs and then possibly spreading to other parts of the body. Symptoms of *cryptococcosis* may range from chest paint, dry cough, headache, nausea, blurred vision, fatigue, and fever to swollen glands, abdominal pain, and weakness. However, most persons with normal immune systems may experience no symptoms at all.

Cryptococcosis and *cryptococcosis meningitis* are treatable, and they are not contagious. You need to breathe in the spores to get the disease. These diseases cannot be transmitted by contact with birds that carry the disease. Treatment by physicians can consist of no treatment at all to prescribing one of several medications that are available.

THE OFFICE OF ENVIRONMENTAL, HEALTH & SAFETY COMPLIANCE HAS A NEW INTRANET WEB SITE ON PIPELINE

With the help and support of John Laduca (Administration—Public Affairs) and his staff of media consultants, the Office of Environmental, Health & Safety Compliance (OEHSC) has developed a new web site on **Pipeline**, the brand for DEP's Intranet service.

The new OEHSC Intranet site will be served and maintained in-house, which means OEHSC will have control over production, design, and content of the site.

OEHSC's site on Pipeline features a **Home Page** listing these **Library Categories**: Environmental Policies and Procedures, Equipment, Health & Safety Policies and Procedures, Hazardous Waste, and Hazardous Materials. Also appearing on the Home Page are a Training Calendar, a linked bibliography to V.I.E.W.S., and a bibliography of federal, state, and city health and safety web links, such as OSHA. Readers can access the material by clicking on the relevant Library Category, which is linked to a bibliography page on which relevant documents are listed, "Hot Work," for example. Click on the document title on the bibliography page and the document appears on screen, in PDF format. The document can then be downloaded onto desktops, printed, or e-mailed.

OEHSC is looking forward to building new Library Category pages in order to improve the usefulness and convenience of its site. A Library Category page for the soon to be published DEP ***Employee EH&S Handbook*** is already in the works. We are also contemplating a **Training Materials** Category page, which would make available class materials to employees before and after class sessions.

OEHSC will improved and upgrade its site as users advise and supervisors consent. We look forward to hearing your comments and to working with you.

Kevin Z. Moore manages the OEHSC site. Please contact him with questions and suggestions at 595-5758.

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OEHSC

The **Office of Environmental, Health and Safety Compliance (OEHSC)** has been established to coordinate and enhance agency-wide environmental and occupational health and safety management activities. Its mission is to provide support and direction in complying with relevant federal, state, and local standards, guidelines, and regulations as well as to monitor the effectiveness of agency-wide environmental, health and safety policies.

The goal of the Office of Environmental, Health and Safety Compliance is to promote pro-active compliance strategies through the preparation and revision of procedures, programs, and employee training (specifically tailored to Agency operations), while assessing hazards, preventing violations, and maintaining safe and sensible work practices.