Asthma Reduction Efforts In Idaho continued

ications to use when, and how to reduce exacerbations and emergency room visits. The NHLBI recommendations state: "It is the opinion of the expert panel that use of written action plans as part of an overall effort to educate patients in self-management is recommended, especially for patients with moderate or severe, persistent asthma, and for patients with a history of severe exacerbations."

The Asthma Coalition of Idaho (ACI), a multidisciplinary group of healthcare providers, not-for-profit organizations, and public health professionals (among others), developed an asthma patient action plan for use in Idaho. The Idaho action plan uses a traffic light analogy of green for "go," yellow for "caution," and red for "medical alert." The IRHP is beginning to distribute these statewide to encourage consistent patient management in Idaho.

For a copy of the Idaho asthma patient action plan, or additional questions regarding asthma surveillance in Idaho, please contact Stacy Berry at (208) 334-5947 or berrys2@idhw.state.id.us

Box 2: What is the Healthy People 2010 initiative?

In January 2000, the Department of Health and Human Services launched Healthy People 2010, a comprehensive, nationwide health promotion and disease prevention agenda. Healthy People 2010 contains 467 objectives designed to serve as a road map for improving the health of all people in the United States during the first decade of the 21st century. More information may be found at http://www.cdc.gov/nchs/about/otheract/hpdata2010/abouthp.htm

Healthy People 2010 Asthma Objectives:

- Reduce asthma emergency department visits, hospitalizations and deaths;
- Reduce activity limitations and school or work days missed; and,
- Increase the proportion of persons with asthma who receive appropriate asthma care according to NAEPP (National Asthma Education and Prevention program) guidelines.

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more inside

West Nile Virus Update

The number of reported West Nile virus (WNV) infections in humans in Idaho in 2006 has surpassed reported infections in 2004 and 2005 combined. The reason for the increased number of reported infections in 2006 is unclear, but may be related to more mosquito breeding habitat due to a particularly wet spring, ongoing infections in wild birds, increased surveillance and testing, and improved clinical recognition and reporting.

To view WNV surveillance findings in Idaho and the nation, which includes positive test findings in humans, horses, birds, and pooled mosquitoes, please access the Idaho Department of Health and Welfare WNV website at http://westnile.idaho.gov. Idaho WNV surveillance findings are updated several times a week during the peak of the WNV season; the first report of WNV activity in a county for the year is updated the same day it is reported.

Limited laboratory testing is available through the Idaho Bureau of Laboratories (IBL) to healthcare providers with suspected human cases of West Nile infection, at no charge. Because WNV testing is available through commercial laboratories, testing at the IBL is offered for neuroinvasive cases, or cases in which initial testing gives unclear results. Tests are available to detect IgM and IgG in serum and/or CSF. IgM is generally detectable within the first 5 - 7 days of illness onset; IgG becomes detectable a week or so later. The most efficient diagnostic method is detection of IgM antibody to WNV in serum collected within 8 to 14 days of illness onset or CSF collected within 8 days of illness onset. CSF IgM testing is recommended if neuroinvasive disease is suspected, otherwise, serum is sufficient for testing. Contact Colleen Greenwalt at (208) 334-2235 if you have questions on testing.

Avian Influenza Surveillance in Wild Birds to Start in Idaho in September

THE IDAHO DEPARTMENT OF FISH AND GAME (IDFG) is working with other state and federal agencies in Idaho and neighboring western states to establish regional avian influenza surveillance in resident and migratory wild birds. Surveillance activities will begin in the fall of 2006 coinciding with the southern migration of certain wild waterfowl species for the winter. Once surveillance efforts commence, you may receive calls from hunters and other citizens interested in the surveillance efforts and in learning more about personal safety precautions. It is important to note that wild birds are theorized to play a role in expanding the territory of H5N1; however, infected domestic poultry, smuggled birds, and human movement may also play a significant role in disease introduction and transmission.

Background

All influenza viruses are of avian origin. There are currently 16 hemagglutinin (H) and 9 neuraminidase (N) known envelope proteins, resulting in 144 possible H-N combinations or subtypes of influenza. The H5N1 (Asian lineage) is a particularly virulent subtype to certain bird species. Only a few avian influenza subtypes have crossed the species barrier to infect humans; subtype H5N1 (Asian lineage) has caused a large number of detected cases of severe disease with a high case-fatality rate (see Box 1). Of all the

–continued on next page

Avian Influenza Surveillance continued

avian influenza viruses known, the current H5N1 (Asian lineage) subtype is of greatest pandemic concern. Early detection through wild bird surveillance is a critical public health, wildlife health, and poultry health activity, and may provide early warning that avian influenza has entered the United States.

Surveillance Activities

The wild waterfowl avian influenza surveillance effort in Idaho will be timed to coincide with the southern migration of waterfowl that spend their summers in Alaska and winter in the southern areas of the western U.S. Birds that spent the summer on breeding grounds in Alaska may have commingled with Asian birds that migrated across the Bering Straits to the same breeding grounds. In theory, if the birds from the Asian continent are infected with H5N1, they may transmit H5N1 to birds that would then migrate and carry the virus into the lower U.S. in the fall. Depending on the species, birds tend to start their southern migration from Alaska in the late summer to fall, and winter within the Pacific Flyway along the western-most United States. Idaho does not receive a large contingent of waterfowl from Alaska, but some may enter Idaho and surveillance efforts will be focused on those species.

The Idaho avian influenza surveillance effort will have three components: early surveillance of certain resident waterfowl species (mallards, pintails and swans) prior to the influx of migratory birds in order to establish a baseline; surveillance of hunter-killed birds, primarily mallards and pintails; and environmental surveillance through collection of waterfowl feces in urban settings. Surveillance findings will be posted on the Idaho Department of Fish and Game website (http://fishandgame.idaho.gov/) regularly during the surveillance period, which is scheduled to continue through December 2006.

Prevention Messages for Your Patients

- The H5N1 virus is not currently found in the U.S.
- Birds can carry a number of diseases, including Salmonella and avian influenza, which can be shed in feces. It is good practice to avoid direct contact with wild birds and their feces to minimize the potential for disease transmission. Thorough hand-washing is encouraged, should contact occur.
- The Idaho Department of Health and Welfare and IDFG recommend that hunters take the following precautions to minimize the potential for contacting disease agents from harvested waterfowl: do not kill obviously sick or unhealthy waterfowl, handle dead birds with caution by wearing latex or rubber gloves while cleaning the birds, clean contaminated surfaces and equipment with dilute bleach after handling or cleaning carcasses, and wash hands thoroughly afterwards.
- There currently is no scientific evidence that people have been infected with avian influenza by eating safely handled and properly cooked poultry or eggs. Recent studies have shown that the cooking methods that are already recommended by the U.S. Department of Agriculture (USDA) and the Food and Drug Administration (FDA) for poultry and eggs (cooking poultry at 165º F) to prevent other infections will destroy influenza viruses.

Box 1: Human H5N1 Infections

According to the World Health Organization (WHO) between 2003 and 2006 (as of 8/14/2006) there have been 238 documented human cases of H5N1 from 10 countries (Azerbaijan, Cambodia, China, Djibouti, Egypt, Indonesia, Iraq, Thailand, Turkey, and Vietnam); 139 (58%) were fatal.

- Transmission to humans is typically due to direct or close contact with H5N1-infected poultry or H5N1-contaminated surfaces.
- Infection from wild birds has been documented under rare circumstances (feather picking from infected swans in Azerbaijan).
- Human-to-human spread of H5N1 has been very limited, inefficient and unsustained.
- Unlike seasonal flu, most cases have occurred in previously healthy children and young adults.

The WHO published a summary of the epidemiology of the first 205 cases of H5N1, which may be found in: **Epidemiology of WHO-confirmed human cases of avian influenza A(H5N1) infection**, *Weekly Epidemiological Record*, vol. 81, 26 pp 249-260, June 30, 2006). This article and other information on avian influenza may be accessed through the following web site: http://www.who.int/csr/disease/avian_influenza/en/index.html

Asthma Reduction Efforts in Idaho

ASTHMA IS A CHRONIC CONDITION that is poorly understood, often difficult to manage, and a challenge to track in the population. Efforts are underway in Idaho to measure the impact of asthma in the state and to provide educational asthma management tools for patients and healthcare providers.

Tracking Asthma in Idaho

The Idaho Respiratory Health Program (IRHP) and the Office of Epidemiology and Food Protection, both located within the Idaho Department of Health and Welfare, work together to identify and gather available surveillance data to evaluate asthma prevalence, severity, and mortality. Surveillance efforts also are meant to evaluate both the economic and quality-of-life impact associated with asthma. Surveillance efforts are carried out to estimate the current burden of asthma in Idaho and are compared to **Healthy People 2010** asthma objectives (see Box 2), which function as benchmarks to help guide priority areas and efforts at reducing asthma in the community.

Because neither asthma disease nor hospitalizations are reportable in Idaho, the availability of data to evaluate the burden of asthma is limited. The available surveillance tools are geared toward adults, and include the Behavioral Risk Factor Surveillance System (BRFSS) and vital records; in the past, they have included the Medicaid Behavioral Risk Factor Survey (MBRFS). Consistent questions regarding asthma risk factors have been included in the BRFSS and MBRFS since 2003. A limited childhood asthma module has also been included since 2003 in both surveys to estimate the burden of asthma in children.

Asthma Surveillance Highlights from 2003 Surveys

- Eight percent of Idaho adults and an estimated nine percent of children currently have asthma, according to self-reports in BRFSS
- Adult females were nearly twice as likely to report current asthma than males
- Estimated asthma prevalence increased with increasing body mass index
- Idaho adults with asthma were almost twice as likely as males to report diabetes or arthritis as a co-morbidity than adults without asthma
- More than 10,000 adults with asthma visited an emergency department in 2003 for worsening symptoms or acute exacerbations
- More than 25 percent of adults in households with an annual income less than $20,000 reported current asthma, when compared to approximately 10 percent of adults reporting asthma in households with greater than $20,000 annual income.

Asthma-associated deaths can occur in all age groups. Idaho vital record reports showed that the most severely impacted age group were residents aged 65 and older, with an average annual death rate attributed to asthma between 2001 and 2003 of 82 deaths per million residents. This rate is above the Healthy People 2010 benchmark of 60 deaths per million residents for that age group.

2003 surveillance findings can be found in their entirety at the IRHP website at http://healthandwelfare.idaho.gov/site/3395/default.aspx. A compilation of 2004 surveillance findings will be found on this site in September 2006.

Educational Opportunities

One goal of the IRHP is to promote and provide education for physicians and other healthcare professionals, in accordance with the goals of the Healthy People 2010 initiative. Healthcare providers are encouraged by IRHP and the National Asthma Education and Prevention program to diagnose and treat asthma using the latest clinical practice guidelines from the National Heart, Lung and Blood Institute (NHLBI). According to the Centers for Disease Control and Prevention, NHLBI guidelines for diagnosis and management of asthma are the clinical "gold standard" for care of patients with asthma. The 2002 revised guidelines can be found online at http://www.nhlbi.nih.gov/guidelines/asthma/execsumm.pdf.

The IRHP has particularly focused on the NHLBI guideline related to asthma action plans. Asthma action plans are self-management instruments for people with asthma. They can help patients monitor lung function, learn which med-

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Autopsy of Suspected CJD or vCJD Patients

CONFIRMATION OF PRION DISEASES such as Creutzfeldt-Jakob Disease (CJD) and variant CJD (vCJD) requires brain tissue. To ensure detection of variant CJD, should it occur in Idaho, the Idaho Legislature passed a law requiring that as of July 1, 2006, under Section 39-277 of the Idaho Code, the Idaho State Epidemiologist is required to ensure an autopsy is performed when CJD or variant CJD is suspected in relation to a person's death. This requirement is in effect provided the person or persons having the highest authority to control the disposition of the deceased person's remains under Section 54-1142 Idaho Code (http://www3.state.id.us/cgi-bin/newidst?sctid=540110042.K) do not refuse the performance of such autopsy.

If you suspect CJD or vCJD in a patient, please discuss autopsy with the patient, or other person with authority, at an appropriate time prior to death. We have found that approaching the family after the patient's death has a low success rate, due to the family's lack of information on the necessity of autopsy, the difficulty in coordinating an autopsy within the optimal time for sample collection, the lack of time to address the concerns of mortuary directors, and other logistics.

The family or other person with authority should be informed that if they agree to an autopsy, they will not incur costs for autopsy or testing, because the National Prion Disease Pathology Surveillance Center (http://www.cjdsurveillance.com) currently covers the costs of post mortem brain tissue collection, including transport of the body to a collaborating facility, return of the body to the original location, and complete laboratory testing for prion diseases.

A checklist for healthcare providers regarding suspected CJD cases and a list of CJD resources is available on the IDHW website at http://epi.idaho.gov.

"WHO Guidelines on Tissue Infectivity Distribution in Transmissible Spongiform Encephalopathies" was recently published and is available on the World Health Organization website at http://www.who.int/entity/blood-products/tse/WHO%20TSE%20Guidelines%20FINAL-22%20JuneupdatedNL.pdf