IOWA DEPARTMENT OF PUBLIC HEALTH

Iowa Health *focus*

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Human rabies death is state's first in 51 years

By Kevin Teale, Communications Director

A 20-year-old man who died at a Cedar Rapids hospital on September 28 is believed to be the state's first case of rabies in humans since 1951.

Ronald Buckley was admitted to St. Luke's Hospital on Sept. 17 after a three-day illness. Laboratory tests at the Centers for Disease Control and Prevention in Atlanta confirmed the rabies diagnosis. Additional tests suggest the virus came from a bat.

People who had direct contact with Buckley within the week before he was hospitalized - especially those who may have had contact with his saliva, such as in sharing a cigarette - are urged to contact Linn County health authorities to assist with the public health investigation into how Buckley contracted the disease and whether those who had contact with him need rabies shots.

There has never been a documented case of human-to-human transmission of the disease; thus it's highly unlikely anyone has been infected by contact with Buckley. In the rare cases around the country in which humans contract rabies, they usually have been bitten by rabid bats.

Preparing for flu season - This year's trivalent vaccine strains are: A/Moscow/10/99 (H3N2)-like, A/New Caledonia/20/99 (H1N1)-like, and B/Hong King/330/2001-like. See related article on page 4.

West Nile a formidable combatant

By Stephen Gleason, D.O., Director

Like many other diseases, West Nile Virus (WNV) was not mentioned when I attended medical school. And even when I became director of the Iowa Department of Health in 1999, WNV was still a newly discovered illness for Americans, found in some dead birds and affecting a few people on the east coast. Now it has been found in most states and has sickened over 2,400 people and killed over a hundred.

It's an illustration of the dynamic of the never-ending battle between humans and microbes, at least some kinds of microbes. The battle ebbs and flows. Humans may get the upper hand against some microbes, only to be assaulted (Continued on page 2.)

Inside this issue:

West Nile a formidable combatant in the war between microbes and humans

By Dr. Stephen Gleason

Continued from page 1

by others at other times and under other circumstances. We may win a few battles, but we are nowhere near winning the war.

The global battle against WNV began in the West Nile area of Uganda in 1937 when a woman with a fever was first recognized to be infected with the virus. The mechanism of infection wasn't discovered until the 1950s when it was found to be the cause of meningoencephalitis in some elderly patients in Israel. Since then, the disease has been discovered in Africa, Europe, the Middle East, west and central Asia and Oceania. We in North America were spared until 1999, and the infection's rapid spread across the United States can be viewed as a major advance for the virus.

As of this writing, all but a handful of western states have discovered the virus in animals and/or mosquitoes. It has been found in humans in most states east of the Rockies. As of Oct. 1, the nation has had 2,477 reported human cases; 124 of those patients have died. Iowa has had 24 human cases. So far, Iowa has had no deaths, although a Wisconsin resident with WNV has died in an Iowa hospital.

When confronted with a new disease – or any disease, for that matter – one of the most difficult tasks for the public is determining the risk. "How likely am I or my loved ones to get sick or die?" we ask ourselves. One problem with answering such a question is the danger of minimizing the suffering of those who have the disease. Even one case is a tragedy for the person who has it and that person's family.

Another problem is the effect of media attention. The attention helps get the word out so people can recognize a disease and take precautions, but the nature of "news" tends to exaggerate the risk.

No doubt about it, WNV can be vicious. It can kill people – lots of them, as seen in our neighboring state of Illinois – and that's why we take it seriously. On the other hand, it must be said that the risk for any Iowan to become infected with WNV is low. And the risk of showing symptoms, or of becoming seriously ill or dying from it, are *very* low.

A 1999 study in New York City, where the disease first spread and where there are large concentrations of people, showed that 2.6 percent of the population had been infected with WNV. Studies elsewhere showed an even lower percentage. Among the 2,477 cases reported in the U.S. so far – and to be included in these cases, patients had to show actual signs of illness – about 5 percent have died. Among all cases, the median age is 55; among fatalities, the median age is 79.

As most of you know, the disease involves a cycle in which mosquitoes bite birds that are carrying the virus in their blood. These birds, in turn, were infected by the bite of carrier mosquito. But the mosquito can also inject the virus, carried in its saliva, into another bird, animal or person. There the virus can replicate and may cause illness. By the way, it was previously thought that only certain species of birds, horses and humans were susceptible. But the Department of Public Health in Illinois has reported the presence of WNV in three gray squirrels, a dog and a wolf.

As usual, the role of public health is to protect the population from the disease, and help the public put it into perspective. Protection boils down to preventing mosquito bites by avoiding the outdoors during the times when they're most active, applying repellent with DEET when outside and eradicating standing water where mosquitoes breed.

As for perspective, we should make sure people understand that WVN is not transmitted from person to person, nor from animals to people. Without downplaying the risk, we should also remind the public that the chronic diseases that kill most of us, including heart disease and cancer, are still with us and are much more likely to affect us and our families. Preventing those diseases, through diet, exercise and following the directions of our physicians, are equally, if not more important, than protecting ourselves from WNV.

Finally, I hope by the time this column is published, the risk of WNV is past because of cool weather. If so, be assured that the Iowa Department of Public Health, as well as other public health officials at the national, state and local levels, will be even better prepared to take up the battle when mosquitoes become active next summer. Even if we can't win the war, we want to win as many battles as possible.

Presumed West Nile cases total 25 in Iowa

By Kevin Teal, Communications Director

The Iowa Department of Public Health recently announced six new presumed cases of West Nile virus. The new cases are:

- A 61-year-old male from Marshall County. The person was hospitalized and has been released.
- A 42-year-old male from Cass County; the person was not hospitalized.
- A 12-year-old female from Crawford County; the person was not hospitalized.
- A 45-year-old male from Jasper County; the person was hospitalized and released.
- A 65-year-old female from Marshall County; the person was not hospitalized.
- A 70-year-old female from Iowa County; the person was not hospitalized.

All the new cases are presumed, meaning symptoms and preliminary test results are consistent with infection. The diagnoses are being confirmed by the Centers for Disease Control and Prevention (CDC) in Atlanta, Ga. The new cases bring the total to 25, six of which have been confirmed.

Nationally, as of September 27, 2,339 human cases have been reported from 32 states and the District of Columbia. There have been 116 deaths. Demographics on available data indicate a median age of 56 years (range: 1 month - 99 years). Fifty-three percent of cases are male. The median age of the fatalities is 79 years (range: 27 - 99 years), with 58 percent being male. In total, 42 states and the District of Columbia have reported WNV activity.

The virus is transmitted by mosquitoes, and due to warm weather predicted for the coming week, mosquitoes are expected to continue to be active, especially in morning and evening hours. Iowans should avoid mosquito bites, using repellent with DEET and long-sleeved clothing when outside.

For the most up-to-date information on West Nile Virus and the latest totals go to the IDPH web site at www.idph.state.ia.us.

West Nile risk to hunters considered low

By Russ Currier, DVM, IDPH Veterinarian

If I could paraphrase Charles Dickens in *The Tale of Two Cities*, I would be prompted to offer, "We know everything about West Nile virus and we also know nothing about West Nile virus (WNV)." Insofar as hunting is concerned the risks are indeterminate to probably very low. Nevertheless, WNV is a new pathogen that has spread throughout North America over the past three years. Our current knowledge only allows us to provide this perspective.

The greatest risk to hunters is most likely from mosquitoes. Cooler, shorter days curtail mosquito activity. Once temperatures drop below 60 degrees, mosquito flying and feeding activities cease. Accordingly, hunters early in the season (ducks/geese) – when daytime temperatures potentially rise above 60° F -- should be particularly aware of these risks and include DEET-type repellents with their gear. Again, earlier warnings still apply. The IDPH does not advise using any DEET product above 30 percent. When used appropriately, there is no risk of any toxicity.

What are the risks from various game birds? Unfortunately, we do not know for sure, but earlier studies in New York have shown that ducks and geese may contract infection, and that while domestic geese have high viremias, this phenomenon was not observed in Canada geese. Domestic chickens are easy to infect, but develop low levels of virus in the bloodstream. Chickens are gallinaceous or galliform-type birds that also include pheasants and turkeys. Whether these game birds develop high viremias remains unknown. In any case this situation is offset by the cooler time period and reduced likelihood of mosquito activity during their respective hunting seasons.

Recent field studies in Illinois have

Page 3

corroborated earlier work in New York that squirrels can be infected by WNV and may exhibit clinical disease. Given this observation, and for reasons of tularemia risk too, it may be prudent not to hunt squirrels or rabbits that appear impaired in their behavior of running and taking cover. Dressing game also is difficult to assess, so IDPH concurs with the CDC recommendations that hunters should wear gloves when handling and cleaning animals to prevent blood exposure to bare hands, and thoroughly cooking meat. There has been a small number of laboratory infections in personnel working with avian surveillance species such as crows and blue jays. Infections of laboratory personnel have followed cuts with sharp instruments and bone fragments. In terms of consumption, the viability of West Nile is eliminated with cooking, so this procedure should serve to render the meat safe, in any case.

Overall, hunting and the consumption of game birds are safe activities, even with a few theoretical risks from WNV. Perhaps, greater risk exists for traumatic injury from driving to the hunting areas, slips/falls from negotiating terrain, drinking alcoholic beverages, and handling firearms. The IDPH supports DNR efforts to keep this activity safe for hunters and persons living or working near hunting areas. So drive, hunt, and drink responsibly.

Flu season looms around the corner

By Tina Patterson, Bureau of Disease Prevention & Immunization

Colder weather is approaching, and it is time to consider a flu shot this year. With all of the attention on the West Nile Virus, keep in mind that 114,000 Americans are hospitalized annually for influenza.

Influenza is a virus that is spread from person to person primarily through coughing and sneezing. Symptoms may include fever, cough, sore throat, headache, chills, and muscle aches. Influenza should not be confused with the stomach flu. People who are infected remain contagious from the day before symptoms start until five days after the illness begins.

Projected distribution of influenza vaccine for the 2002 season is estimated to be 88-93 million doses. Flu vaccine usually is administered in October and November each year. It can be given anytime during the flu season. In Iowa, the highest number of cases of influenza have been reported in January and February, so a flu shot that is given in December or later will still be a protection.

Influenza vaccine is capable of causing medical problems in some people, such as allergic reactions. The risk of the vaccine causing serious harm or death is extremely small. Mild problems may include soreness, redness or swelling at the injection site, fever, and body aches. If any unusual condition occurs after receiving the influenza vaccine, contact a physician immediately.

Influenza viruses change often so the vaccine is updated annually. Protection develops about two weeks after receiving the vaccine and may last up to one year. The 2002-2003 trivalent vaccine strains are: A/Moscow/10/99 (H3N2)-like, A/New Caledonia/20/99 (H1N1)-like, and B/Hong King/330/2001-like.

The Centers for Disease Control and Prevention recommend that the following people receive a flu shot in early October.

- 65 years of age or older
- People with a chronic medical condition such as Asthma, or another lung disease
- Heart disease
- Diabetes
- Kidney disease
- Blood disease (sickle cell)
- Immune system problems caused either by disease (HIV, cancer, leukemia) or by medical treatment (chemotherapy or radiation therapy)
- More than three months pregnant during the flu season
- Children receiving long-term aspirin therapy

The following people should receive a flu shot in mid-October:

- People who live or work in nursing homes or other chronic care facilities
- Health care workers
- People who are care givers

Everyone else should wait until November or later. Whether someone is at high risk for complications or not, influenza can infect others. Vaccination can help avoid these problems that not only impact home life but the business world as well.

Hunters should take precautions against CWD

By Russ Currier, DVM, IDPH Veterinarian

Chronic wasting disease (CWD) was first recognized in the 1960s as a syndrome, presumably of nutritional origin, of captive mule deer held in several wildlife research facilities in Ft Collins, Colorado.

Later, CWD was determined to be a transmissible spongiform encephalopathy (TSE) in the family of "prion"-type diseases such as Creutzfeldt-Jacob disease (CJD) in humans, bovine spongiform encephalopathy in British cattle, and scrapie in sheep. Somewhat later, the disease was recognized in other cervids (antlered ruminant or cloven-hoofed animals) such as white tail deer and elk.

During 2002, the known distribution of chronic wasting disease (CWD), expanded from its Wyoming-Colorado-Nebraska focus, eastward to Wisconsin in some wild deer tested just west of Madison and also confirmed in an elk from a game farm in Aitken County in north central Minnesota. In September 2002, another Wisconsin deer from a game farm tested positive. Just how these animals became infected is speculative. Under study are the practice of game farming, movement of stock from one locale to another, and deliberate feeding of deer in natural environments that, in effect, bunches up large numbers of animals, thus enhancing exposure. We do not fully understand the mechanism of exposure or transmission.

The disease agent or prion particle is a protein molecule with an aberrant shape or configuration that closely resembles the protein molecules present in nerve tissue cell walls. After exposure to prions, normal cell wall proteins can be forced to reconfigure into a prion-type molecule that affects adjacent molecules and through an inexorable process of conversion leads to weakening of the cell wall and ultimately cell death. The incubation period may extend for 12 to 36 months, so most cases are in two-to-seven-year old animals. The course of illness extends from a few days to approximately a year and includes tremors, difficulty walking, and loss of body condition from eating less.

The prion agent – highly resistant to degradation -- has been found in glandular organs of the digestive tract. This finding suggests that the prion agent is shed through the digestive tract during the course of illness and that both direct and indirect contact may play a role in transmission. Concentrating deer and elk in captivity or by artificial feeding would enhance both direct and indirect contact. Death always occurs after onset of disease.

Presently, there is no evidence of CWD crossing over to cattle or other livestock and to humans. Nevertheless, hunters are advised to take measures to reduce risk until our understanding of the disease process improves. First, one may consider not hunting in known endemic areas. There is no confirmation of CWD in any wild or captive cervids in Iowa. Second, take only healthy-appearing deer and not any with obvious loss of condition. If hunters should shoot a deer in poor condition they should notify the Iowa Department of Natural Resources for disposition. Third,

clean or field-dress deer, wearing protective water-proof gloves. Wash hands and instruments thoroughly after field dressing is completed. Fourth, process the deer singly with no meat or product from other deer such as a large commingled product like sausage. Processors should not saw through or split the backbone or vertebral column. For deer taken from endemic areas e.g. north eastern Colorado and adjacent areas of Wyoming and Nebraska, debone all the meat and avoid consuming brain, lymph nodes or glands, brain, spinal cord, spleen, and tonsils. For extra safety, testing may be considered for any deer/elk taken from endemic areas.

Hunters are advised to consult with game warden authorities in the state with the endemic area as to whether testing is available. If any deer tested is positive for CWD, it should not be consumed.

In summary, it is important to note that there is no evidence of CWD transmission from cervids to humans that result in a prion- or TSE-type illness. Agriculture and environmental agencies at both state and federal levels are actively researching how this disease activity occurs. So far, the management approach will be similar to other livestock disease programs that consist of 1) passive surveillance or 2) carefully testing sick-appearing deer or elk that are emaciated or have neurological disorders and 3) active surveillance or random surveys of testing normal deer and elk killed by hunters or motor vehicles.

The practice of game farming of cervids will be monitored more closely including the relocation of breeding stock. For the 2002 season, DNR officials will be sampling 3,500 deer harvested in the state for surveillance purposes, but not for meat hygiene reasons.

Web sites for additional information are:
http://www.state.ia.us/government/dnr/organiza/fwb/wildlife/pages/CWDindex.htm

http://www.wcdefa.org/

http://datcp.state.wi.us/ah/agriculture/animals/disease/chronic/pdf/handling_surveillanc.pdf

Community Health Needs Assessment gets a face lift

By Louise Lex, Ph.D., Healthy Iowans 2010 Coordinator

Someone once defined community health planning in three steps: 1. Bring key decision-makers together to 2. Decide what's important and then, 3. Agree to do something about it.

For several years, local boards of health have formed community partnerships to identify their health problems, prioritize them, and develop an action plan. What was new in 1999 was a uniform reporting form for this process – the Community Health Needs Assessment and Health Improvement Plan (CHNA/HIP).

By 2000, county information could be accessed on the Iowa Department of Public Health's web site and available locally to elected officials, community leaders, academicians, health professionals, and consumers.
Since this first effort was so successful, but needed updating, a cross-division team began looking at ways to make it more user-friendly and to add new resources without a complete overhaul.

Members of the team include Jenny Terrill, Ken Sharp, and Louise Lex (co-chairs); Roger Chapman, Dawn Gentsch, Kathy Williams, Marvin Firch (alternate), Janice Edmunds-Wells, Pam Deichmann, Marilyn Wulff, Binnie LeHew, Carol Hinton, and Angie Tagtow.

Like the original tool, after pilot testing, the new version will be rolled out at Barn Raising IV, scheduled for August 14 and 15, 2003. Team leaders invite FOCUS readers to offer comments or suggestions for improvements. Responses can be sent to Ken -- ksharp@idph.state.ia.us, Jenny-- jterrill@idph.state.ia.us, or Louise--- llex@idph.state.ia.us.

The 2000 reports are available at www.idph.state.ia.us. Double click on Resources, Publications, Data, and on Iowa Community Health Needs Assessment Data.

Farm injuries tracked from 1990-1999

By Mary Harlan, Health Promotion & Disability

Agricultural injuries are a major concern in Iowa. According to the National Safety Council, agriculture is the most dangerous occupation.

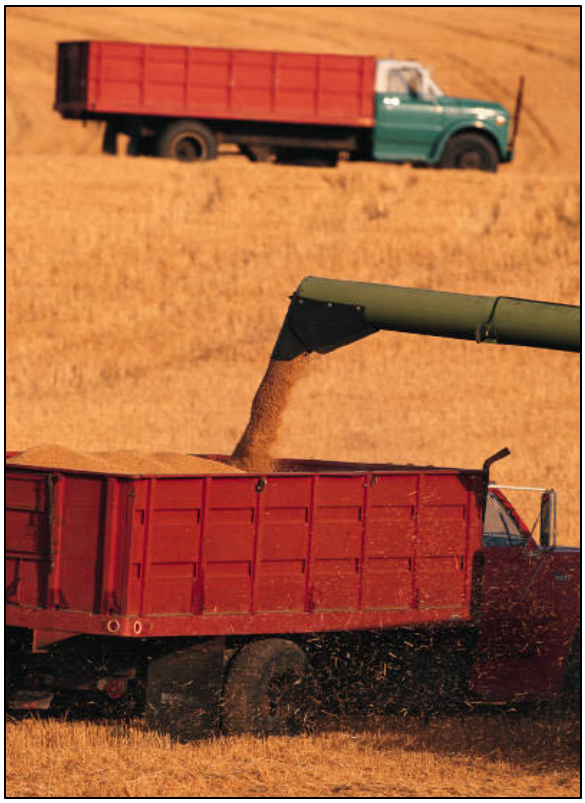
Since 1990, the Iowa Department of Public Health (IDPH) has supported and maintained a statewide farm-related injury registry. The registry data have been used to identify persons at risk for injury, develop educational safety programs, design safer farm equipment and lessen health risks for farmers, their families and persons providing services. Without data on injuries, appropriate prevention activities would not have been developed.

Some of the information collected covers county of injury, types of injuries, causes of injuries, gender of person injured, age, whether they were hospitalized and specific types of machinery or animals, and location on the farm.

Hospitals are the primary reporters. Occupational Health Nurses in Agricultural Communities (OHNAC) provided additional support for data collection until that program ended in September 1996. Other sources of information are newspaper clippings, sheriffs' departments, and the IDPH Bureau of Vital Records.

Beginning in 1998, the definition for "farm-related" injuries was changed from location-centered to production-centered. No longer were injuries to people hunting, swimming or riding horses for pleasure collected. Without the active surveillance conducted by the OHNAC nurses and the definition change, the number of injuries reported declined.

During the 1990s farms increased in size from 325 acres in 1992 to



343 acres in 1997 the average age of the agricultural workforce increased from 50.3 years in 1992 to 52.4 in 1997. The number of farmers 25 to 34 years of age declined from 13,100 in 1992 to 7,554 in 1997 or a reduction of 42 percent, a significant loss.

The significant findings for the decade were that males sustained more than 80 percent of the injuries each year. The usual leading age group for non-fatal injuries was 30 - 39 years of age. Machinery was consistently the leading cause of injury for males followed by animals and tractors. The leading cause of injury for females was consistently animals followed by fall/slip and machinery. The leading types of non-fatal injuries were laceration/avulsion followed by abrasion/bruise/contusion, fractures and puncture wounds caused by vaccination syringes.

The year with the most fatalities was 1994 with 34. The leading age group for fatalities was 60 - 69 years of age. The leading cause of fatal injuries for males each year was tractor rollovers. The leading cause of fatal injuries for females was motor vehicles. The leading types of fatal injuries were mangled/crushed and respiratory/cardiac arrest. The month of October had the highest average number of fatalities.

Each year, children's fatalities ranged from 13 in 1990 and 1992 to 6 in 1993 and five in 1998. In 1998 no child died while engaged in agricultural production.

The highest percent of hospitalized injuries occurred in 1990 and the lowest in 1999. The percent of fatalities hospitalized ranged from 9.5 percent in 1990 to 28 percent in 1996. Many farmers work alone and are not alive when found.

The complete report is available on IDPH's web site under publications.

Health Alert Network: Preparing for Disaster

By Tom Boeckmann, Center for Disaster Operations & Response

Communication issues seem to be one of the biggest obstacles in any disaster response and the Iowa Department of Public Health is gearing up to overcome these hurdles.

Although far from completion, the Iowa Health Alert Network has come a long way in recent months to assure local public health agencies are informed of potential public health concerns. In turn, local agencies bear the responsibility to notify other public health and health care entities within their respective counties.

As in the past, routine public health information will be shared through the well-known "Friday Epi Update" which is a weekly email sent by the Center for Acute Disease Epidemiology. Information of a more urgent matter will be sent by the Iowa Health Alert Network (IHAN).

Currently, 93 counties have come on-board as part of the first phase of the IHAN. Through a cooperative agreement with the Department of Public Safety, the health department will use the Iowa Online Warrants and Articles (I.O.W.A.) system. Public Safety will simultaneously notify all law enforcement public safety answering points in the state, who in turn will notify a local public health contact person available 24-hours per day, seven days per week. Local plans will then be activated, if needed.

CDOR is also working on other notification systems to include:

- A 24-hour, seven days per week paging system which will provide pagers to all local public health agencies;
- A "blast fax" system to simultaneously fax all local public health agencies and other partners in public health operations and response;
- An auto-dial system to simultaneously call all local public health agencies and other public health and medical communities;
- High-speed internet connections to cover at least 90 percent of local public health agencies;
- Web-based notification and data entry tools for a comprehensive public health notification directory; and
- A system to encrypt e-mails sent as part of the Han system.

I will be meeting with local public health agencies over the next few months to solicit opinions, concerns, and ideas as the IHAN system grows and to discuss the needs assessment for information technology. If you have questions or concerns, please contact Tom Boeckmann, Iowa's Health Alert Network Officer, at 319 472-5340 or e-mail at

Program helps Emmet Co. lose 4,100 pounds

By Michelle Welch, RD/LD, Avera Holy Family Health, Estherville

Emmet County is smaller, thanks to a grant from IDPH's Division of Health Promotion, Prevention, and Addictive Behaviors. Over the past two years, funds from the tobacco settlement have been used, in part, to help target cardiovascular disease and obesity in 10 counties.

Avera Holy Family Health of Estherville has been successful in using the funds to expand a program originally developed for its hospital staff in 1998. Co-workers loved the program, and members of the community started requesting a similar program be offered to them. The Emmet County IDPH office staff notified hospital challenge organizers of grant fund availability in 2000.

The Lifestyle Challenge program is a weight loss and physical fitness competition that occurs between January and April each year since 1998. Teams of five compete against one another in two separate categories, total net weight loss per team, and total reported exercise minutes completed by the team outside their usual workday. Results of the Lifestyle Challenge are in the chart at bottom.

Each participant is weighed and the data are kept confidential; only the net change of the team's weight is reported. Physical activity is counted in minutes, to help encourage those that are just starting to become physically active. Starting with the 2002 program, team members are limited in the amount of weight loss or activity minutes one person can contribute to a team's total in the competition.

Long-term data on participants has been maintained so their results can be compared from year to year, determining their ability to maintain weight losses. It is crucial that the program send the message of lifestyle change versus rewarding extreme dieting or physical activity. A change in the mindset of team members since the guidelines were added to the program were experienced.

Participants are allowed an average of no more than two hours of physical activity per day, and weight loss for the entire contest averaging no more than two pounds per week. Educational materials and classes are provided to participants throughout the Lifestyle Challenge.

Though we are proud of all participants' achievements, our challenge champions are perfect examples of lifestyle change. A group of eight participants were recognized as challenge champions at the end of the 2002 competition for maintaining and/or increasing their weight losses of 20 to 47 pounds over the past two years.

According to the Lifestyle Challenge staff, the formula for success is simple:

- Absolutely, make it FUN for all participants! Promote friendly competition.
- Maintain confidential information about participants' weights.
- Promote supportive environments by emphasizing teams from worksites, clubs and families.
- Help team members see the link between exercise and long-term weight loss success.

Daily Exercise - Staci Inman and Annesley Gunderson from team Chapel Cherubs work on their Challenge Champion status. They have lost a combined 62 pounds since the Challenge ended in April.

- Be inclusive of all adults.

We did not discriminate and make this a "fat person's event. " Our Challenges have all shapes and sizes of people participating for fun and to encourage mentoring/role modeling. People began noticing that their healthier co-workers/teammates had different habits, and started following suit.

To see more on the Lifestyle Challenge go to the hospital's web site at ***www.averaholyfamily.org***

Year	Number of Participants	Average Weight Per Person	% Female Persons	% Male Persons	Total Pounds Lost	Wt. Loss Avg./Person	Exercise Hours Avg./Person	Total Exercise Hours
2001	450	194 pounds	79%	21%	**2,242**	5	27.3	**12,281**
2002	380	198 pounds	78%	22%	**1,942**	5.1	25	**9,509**
Total	830	196 pounds	–	--	**4,184**	5	26.2	**21,790**

Taking steps towards healthy aging

By *Carlene Russell, RD, Nutritionist, Iowa Departments of Elder Affairs Public Health*

With funding from the CDC and the National Association of State Units on Aging, the Health and Aging State Program has awarded 10 grants nationwide to support collaborative health programs between the public health and state units on aging. One of the grantees, the Iowa Departments of Elder Affairs and Public Health will use the $10,000 award to fund a walking program, specifically for seniors, in Hardin County.

At group sessions, program participants will receive step counters or pedometers to measure their total number of steps for the day. The objective is to customize activity level recommendations for the number of steps seniors should aim for in maintaining good health. The pilot group will also include individuals using walkers and canes so appropriate recommendations can be determined for this group. The Hawkeye Valley Area Agency on Aging and Hardin County Public Health are program coordinators.

According to Mary Kahler, senior health consultant, there is a new focus on aging to add life to years rather than years to life. Adding life to years refers to the health and functioning of older adults that is influenced by many factors other than biological senescence. Exercise programs for older adults can delay age-induced impairment in personal mobility necessary for the performance of routine activities.

Despite the extensive amount of information about positive effects of exercise in preventing disease and increasing life expectancy, an astonishing number of Americans remain sedentary, particularly older Americans. Former Surgeon General David Satcher, M.D. reported that 33 percent of men and 50 percent of women age 75 and older engage in no leisure time physical activity. Both *Healthy People 2010* and *Healthy Iowans 2010* identify the need for older adults to increase physical activity. Additionally, there is very little information about exercise recommendations of individuals in this age group. The Hardin County pilot is a step in the right direction -more senior Iowans being active!

Out for a walk - Walking is good exercise at any age. Above, Ann Moede, 98, attributes her longevity to physical activity.

Obtaining Past Issues

Back issues of *Iowa Health FOCUS* are available on the Iowa Department of Public Health Web site at: www.idph.state.ia.us.

Tobacco Division Welcomes New JEL Coordinator

By Keven Arrowsmith, Division of Tobacco Use Prevention & Control

Randi Huffman

The Division of Tobacco Use Prevention and Control is pleased to welcome Randi Huffman as its new JEL coordinator.

"I'm very excited about joining the division and working with the JEL students," said Huffman. "I look forward to helping the students educate their peers on the dangers of tobacco use and secondhand smoke."

Huffman wants JEL to get more involved in the counter-marketing activities and to be more visible to the public. She would also like to see the students work with their local community partnerships to change school policies toward tobacco use. Working to expand JEL to college students is another goal Huffman has for the program.

"I've been familiarizing myself with the JEL program and the students during the past month," said Huffman. "We are gearing up for a JEL retreat on October 26 in Des Moines. Newly elected JEL executive council members will meet to set goals and objectives and write a mission statement for JEL."

Huffman is originally from Stacyville, located in Northeast Iowa. She attended North Iowa Area Community College in Mason City earning an Associate of Arts degree and in August, Huffman received a Bachelor of Arts in Health Promotion from the University of Northern Iowa. She interned with the IDPH from June to August 2002, focusing on environmental epidemiology. Huffman is currently attending Des Moines University, working towards a Masters of Public Health and a Masters of Public Health Administration.

Former IDPH director recognized for contributions

David Fries

The Association of State and Territorial Health Officials (ASTHO) announced the recipients of the 2001 and 2002 awards during its Annual Conference in Nashville last month. Due to the tragic events of September 2001, last year's awards were presented at this year's conference.

The 2002 recipient of the Swearingen Award is David J. Fries, Interim Executive Director, Iowa Priority (former Deputy Director of Operations, Iowa Department of Public Health). Fries began a 29-year career at the Iowa Department of Public Health following graduation from Mankato State University and an honorable discharge from the United States Navy.

His years in public health program management, administrative and operational responsibilities have assisted in the advancement of the public health agenda in the state of Iowa. As Deputy Director of Operations Fries had oversight of a $150 million budget and 345 employees. He worked closely with the Director to advance the department's mission. Upon election of retirement from the department, he was named President and Executive Director of the Iowa Public Health Foundation.

Currently he serves is interim executive director for Iowa Priority, established to help ease the financial burden of high prescription medication costs to individuals eligible for Iowa Medicare.

Lighten Up program to challenge Iowans in 2003

By Tim Lane, Bureau of Health Promotion & Disability

For quite some time, Iowans have increased their consumption of energy while decreasing the amount of motion or activity to burn energy. In fact, many Iowans have lost inertia and now are in a state of rest! The resulting obesity epidemic in Iowa is costing us over 19 lives a day and billions of dollars. In 2003 the Iowa Department of Public Health and a team of partners is aiming to address those conditions with *Lighten Up Iowa*.

Leading the charge - IDPH's Louise Lex and Tim Lane, standing, challenge all local boards of health at a state Board of Health meeting to lead the way by forming and recruiting teams for the 2003 Lighten Up Iowa competition.

Lighten Up Iowa is a five-month lifestyle or resolution team competition that challenges participants to stick to their nutrition and activity resolutions from January 6 to June 6. All participants will be encouraged to 1) include five servings of fruits and vegetables as part of a low-fat, high-fiber diet and 2) add physical activity to their routine and tabulate the amount of activity they log. Participants who wish to lose weight should consult with their physician, target no more than 10 percent of their current weight, and strive toward reasonable weekly and monthly goals.

The team approach was tested in 2002 with great success. Based on that effort, the statewide 2003 goals are to enroll over 10,000 Iowans, log 25 million miles of activity, and demonstrate a weight loss of 25 tons. These process goals, although impressive, are secondary to the goal of encouraging healthier habits and environments in work sites, schools, and communities around Iowa. This initiative can significantly impact the growing overweight/obesity epidemic in Iowa, and establish our state as the national leader in addressing this issue.

In the pilot stage of *Lighten Up Iowa*, there was significant evidence of the impact that teams could have on the process of sticking to a resolution. A symbiotic energy exists when participants are involved in an initiative with others and competing with other teams. They're walking together, snack options tend to be healthier, and there is more support for the many small healthy steps that can be taken to address overall health. It has been said that no program can do so much for so many for so little as *Lighten Up Iowa*.

Team members will be asked to pay a $10 entry fee. In exchange, they will receive shirts, a team pedometer, and medals if they succeed in reaching their goal. It is expected that *Lighten Up Iowa* will include all 99 counties with teams from work sites, places of worship, schools, and communities because there are so many groups who agreeing to partner in the 2003 challenge. This level of participation will help generate enthusiasm, thus more participants, and more Iowans seriously addressing a

significant health risk in an inviting and supportive fashion.

Although participants are encouraged to enter the official effort and pay $10 for the various incentives and materials, efforts are underway to sponsor low-income participants and allow students to form teams to compete in the distance component at no cost. Schools can recruit miles from families and friends of students to add to their totals as part of their "distance education." That education will focus on the health, social, and economic benefits of regular activity and good nutrition.

To help everyone prepare for the statewide challenge, go to http://www.lightenupiowa.org. This site provides registration information, related news items, and supportive tips for the teams. During the competition, success stories will be featured as well as items addressing hydration, safety, and Iowa events that participants can enjoy.

I truly believe this program will change the shape of our future and improve the health of thousands. These benefits are not just limited to Iowans. Other states have begun to inquire if we might not challenge them in 2004.

Barn Raising lV: Leading charge for community health

By Louise Lex, Ph.D., Healthy Iowans 2010 Coordinator

Barn raising is part of the Iowa story. It was a time when Iowans pooled their efforts to raise a barn in a much shorter period of time than if it were done by a few. The barn raisers were successful because they shared similar values, and these values were reinforced when they worked together. The event helped them to see themselves as a community. Teamwork required everyone to play a significant role. And the results were a cause for celebration.

The grand old structures that still dot Iowa's landscape are a reminder of our heritage of community building and resourceful problem solving of issues that really matter. The challenge today is to sharpen these skills and continue solving problems to create even more vibrant, healthy communities. Barn Raising IV will bring together cutting edge experts from several arenas to expand participants' knowledge base, to introduce new tools and resources, and to share successful program models through workshops and networking. Participants can expect to return to their communities, revitalized and energized, as they lead the charge for community health.

Conference Objectives:

- Use the latest and most effective methods to keep people healthy.
- Sharpen leadership skills to think on your feet and make an impact, deal with controversy, handle disasters, and resolve the dilemma of limited resources and unlimited needs.
- Expand participants' knowledge base about such key public policy issues as privacy, environmental health, aging, new Iowans, the uninsured, and the overweight/obesity epidemic.
- Apply tools and resources to transform the public health system in Iowa.

Plans are to post continuing education credits, registration, poster sessions, displays, lodging, and speakers on www.idph.state.ia.us.

For questions, contact Louise Lex, Ph.D., Iowa Department of Public Health, at 515 281-4348 or e-mail at llex@idph.state.ia.us.

This conference is supported with a grant from the Wellmark Foundation.

Program encourages new dentists to start in shortage areas

By Dr. Ed Schooley, Delta Dental Plan of Iowa

Dr. William Wever II, a recent graduate of the University of Iowa College of Dentistry, has been named the recipient of the 2002 Delta Dental Plan of Iowa Loan Repayment Program. Dr. Wever has joined the practice of Dr. Heather Heddens, DDS, serving the rural community of Columbus Junction in southeast Iowa.

The program is a collaborative effort of Delta Dental Plan of Iowa and the University of Iowa College of Dentistry, with assistance from the Iowa Department of Public Health and the State Public Health Dental Director.

Many dentists graduate with a school debt of nearly $100,000. Delta Dental Plan of Iowa serves as the financial supporter of the loan repayment program providing each recipient with $50,000 over a three-year period to be used for repayment of educational debt. In return, recipients agree to practice in underserved areas of Iowa and to facilitate the establishment of a long-term source of dental care.

The recipient dentist may be a start-up dental practice or an associate in an existing dental practice and commit a significant part of their appointment time to underserved populations.
Migration of Iowa's population toward urban areas and away from small, rural communities has resulted in the Iowa Department of Public Health's designating 72 of 99 counties as dentist shortage areas.

The fact that many rural Iowa communities are being left with limited access to adequate health and dental care services is a serious problem in rural Iowa. The problem of a lack of dentists in rural communities is exacerbated by the fact that many dentists in these rural communities are nearing retirement, with no younger dentists identified to take over the dental practice.

Each year approximately 70 dentists graduate from the University of Iowa's College of Dentistry. This program will provide an incentive for a dentist to stay and begin a dental practice in a non-urban area of the state.

"This loan program from Delta Dental Plan of Iowa is a great example of an organization applying its resources to ensure as many Iowans as possible have access to proper dental care," says Iowa Governor Tom Vilsack.

Dr. Wever was selected because of his dedication to improving the dental health of rural Iowans and the potential to make a significant impact on the dental needs of the underserved in Louisa County.

A native of Guatemala, Dr. Wever moved to Columbus Junction with the belief that he can make a difference in this community. He says, "Along with not having enough dentists in this area, there is a high adult Hispanic population not comfortable going to the dentist because of the language barrier. If the parents don't come to the dentist, it's very likely their children aren't receiving the proper dental care either. Educating children about proper oral health care is the most important thing I can do as a dentist."

Louisa County currently has a population to dentist ratio of 2,948 citizens to one dentist making it one of the most underserved counties in the state. Statewide, there are approximately 1,430 practicing dentists. However, more than 970 are in only 27 counties, leaving approximately 460 dentists scattered among the remaining 72 counties.

Vendoland can provide healthy options

***By** Jane Schadle, RNC, MSHA, Wellmark Blue Cross Blue Shield*

It's 3 p.m.; your stomach is growling and you are in need of a quick snack to get you through the end of your day. What you grab can make the difference between an energy boost and the need to take a nap.

Employees at many businesses are familiar with the route to the vending machines. And typically, the only choices available are high calorie, high fat, and high sugar. Wellmark Blue Cross Blue Shield is working to change that for their employees. The employee wellness department together with Sodexho, that manages their on-site cafeteria and vending, have made healthy choices plentiful in all their vending machines. Each item that meets the heart healthy guidelines (less than 300 calories and less than 30% fat) are marked with a bright, easy to read logo.

While many items meet these guidelines, the most popular choices include pretzels, animal crackers, baked crackers, and baked chips.

So the next time Wellmark employees dig into their pocket for change, they can rest assured that there will be a healthy option waiting for them.

Epidemiology Notes

From the Center for Acute Disease Epidemiology, Iowa Department of Public Health, 1 800 362-2736 (24-hour number)

West Nile Human Testing: Many clinicians have requested guidance on when testing for West Nile virus should be considered. Patients with a clinical picture of viral encephalitis and/or meningitis (especially viral encephalitis with severe muscle weakness) or uncomplicated febrile illness requiring hospitalization DURING SUMMER OR EARLY FALL (or if patient gives history of travel to an endemic area during other times of the year) should be considered for testing. Patients with mild, uncomplicated febrile illness or asymptomatic patients who present with a history of exposure to mosquitoes or a horse with West Nile virus need not be tested. In addition, consider other causes of viral encephalitis and/or meningitis (such as other arboviruses and enteroviruses, etc.) in the differential.

West Nile Virus Patient Follow-up and Reporting: Our staff, in cooperation with the University Hygienic Laboratory (UHL), have devised a protocol for follow-up and reporting of patients with laboratory evidence of West Nile virus. For those patients with a laboratory test reported from either UHL or the CDC, we will initiate follow-up with the clinician to determine clinical illness, other confounding factors that may suggest a false positive test (e.g., recent history of travel or vaccination with a cross-reacting flavivirus), discuss case definitions, and encourage submission of a convalescent serology, if appropriate. We will then discuss our findings with the local public health department in that patient's county, and ask the county to initiate follow-up with the patient to collect some additional information (this will be discussed with the county). If we determine that the patient's clinical history and laboratory test suggests West Nile virus infection, this person will be added to our case count and released to the media. For those patients with a laboratory test reported from other laboratories (such as one of the large reference laboratories), we will initiate the same follow-up, but will not add this person to our case count or release to the media until this test is verified by either the UHL or CDC.

West Nile Virus in Unusual Species: The Illinois Department of Public Health reported the presence of West Nile virus infection in five animals that have not been well characterized as targets of this disease. All five animals had neurological disease. These animals included three gray squirrels, a dog, and a wolf (the dog was reportedly immunocompromised). The findings of clinical disease in the wolf and dog is expected to be rare. The CDC is engaged in further research to look at the impact of squirrels on the propagation of this virus.

Listeriosis Outbreak in N.E. United States: The CDC is working with several state health departments in investigating a cluster of Listeria infections among residents of several N.E. states and Michigan. The Listeria bacteria has been isolated and pulsed-field gel electrophoresis (PFGE) - matched in 26 patients, suggesting that these patients acquired illness from the same food. No such cases have occurred among Iowans. Listeria-contaminated food products can cause miscarriages and stillbirths among pregnant women, serious and sometimes fatal infections among newborns, frail or elderly persons, and others with weakened immune systems. These high-risk people are advised not to eat hot dogs or luncheon

meats, unless they are reheated until steaming hot, not to eat soft cheeses, not to eat refrigerated pates or meat spreads, not to eat refrigerated smoked seafood, unless it is contained in a cooked dish, and not to drink raw (unpasteurized) milk or eat foods that contain unpasteurized milk, as all these foods have been shown to be linked to Listeria illness in the past.

Fatal Rabies Case in Iowan: A 20-year old Linn County resident died at a Cedar Rapids hospital on September 28 from rabies. This is the state's first case of rabies in a human since 1951. Laboratory tests conducted at the CDC confirmed the rabies diagnosis.

There has never been a documented case of human-to-human transmission of rabies, so it is highly unlikely anyone has been infected by contact with this case. However, people who had direct contact with the case, especially those who had contact with his saliva from September 7 until his death, need to be identified and assessed for possible exposure.

People can be exposed to the infectious virus, most often in the saliva, through bite or non-bite exposures. Bite exposures are the most common means by which humans acquire rabies. Non-bite exposures are extremely unusual, but have been documented through scratches and licks (by rabid animals), through the inhalation of high concentrations of virus-contaminated aerosols (two infections thought to have been acquired through exposure to high-concentrations of virus during laboratory practices, and two other infections thought to have been acquired after spending extensive time working in or exploring caves with millions of bats), through the accidental injection of live rabies virus in vaccines, and finally, through corneal transplants.

According to the CDC, the number of human deaths in the U.S. attributed to rabies over the last hundred years has declined from 100 or more per year to an average of 1 to 2 per year. This decline has been attributed to an effective animal control and vaccination program that has nearly eliminated domestic dogs as a reservoir of rabies, and to the development and use of highly effective human rabies vaccines and immunoglobulins.

Almost all human cases that have been recently acquired within the U.S. have been due to a bat-strain of rabies. However, many of these cases have no documented exposure to or bites from bats, suggesting that persons may have had an unrecognized exposure (i.e. person asleep or unconscious or otherwise unable to report an exposure). This has led to the recommendation that if a person awakes to find a bat in their room, or identifies a bat in the room of a sleeping or unconscious person, the bat should be captured and tested for rabies. If positive, post-exposure prophylaxis in the form of rabies vaccine and immunoglobulin should be administered. If the bat cannot be captured and tested, the assumption needs to be made that an exposure may have occurred and rabies may have been transmitted, and post-exposure prophylaxis should be considered. For more comprehensive information on bats and rabies, including measures to "bat-proof" homes, consult the following web site:

<http://www.cdc.gov/ncidod/dvrd/rabies/Bats_&_Rabies/bats&.htm>

Upcoming Events: The Iowa Department of Public Health, Bureau of Disease Prevention and Immunization, is sponsoring an Immunization Update on October 22 and 23. Immunization clinic managers, staff supervisors, and staff who administer vaccines are encouraged to attend on either one of these two days. To register, call Des Moines Area Community College. There is a $7 registration fee. For more information on courses contact Tina Patterson at 515 281-7053.

Worth Noting

The *Iowa Grants Guide* (IGG) - A great tool for finding funding sponsored by the University of Iowa (UI) Division of Sponsored Programs, the Iowa Nonprofit Resource Center (INRC), and the Iowa Council of Foundations (ICOF). See http://www.iowagrantsguide.org/index.php?get=home.

Harkin receives Award of Merit - IDPH Director Dr. Stephen Gleason presents the Director's Award of Merit to Sen. Tom Harkin in Washington recently. Created in 2000, it is the department's highest award and recognizes Sen. Harkin's leadership in Iowa and national health issues, and his extraordinary assistance in obtaining federal money for protecting and promoting the health of Iowans.

CISM members honored - The following Iowa Critical Incident Stress Management (CISM) volunteers were honored for their efforts as relief workers and counselors for those effected by the attacks of 9/11 in New York City at a recent Iowa State University football game. They are from left, Brian Brinkema, Independence Police Dept.; Dave Morland, Boone County Sheriff; Rick Rewerts, Story County Sheriff; Ann Meyers, Waterloo Police Dept.; Pat Wilson, Mental Health, Mason City; Len Murray, Des Moines Police Dept.; Vince Vanden Heuvel, Mental Health, Dubuque; Marcia Cohan, Mental Health, Des Moines; Randy Mitchell, Boone County Sheriff; Ellen McCardle Woods, CISM Coordinator, IDPH Bureau of EMS.

Side Notes

Iowa HIV Conference 2002 - *Successes, Challenges and Renewed Commitment,* October 8 and 9 at the Holiday Inn Airport in Des Moines. The conference will include information on HIV prevention interventions, care and treatment updates, turning theory into practice, reaching at-risk populations, and networking with peers. Substance abuse, social work, and nursing CEUs available. Sponsored by the Iowa Departments of Public Health and Education, and HIV Community Planning Group. For more information, call 319 363-2531 or go to www.trainingresources.org or to www.idph.state.ia.us/conf/list.htm.

DMU ICN Public Health Series - Des Moines University-Osteopathic Medical Center Continuing Education and Health Care Administration departments have collaborated to offer a Public Health Lecture Series over the ICN. This monthly series begins in October. Each program will be offered from 4 to 6 p.m. on Mondays. This lecture series will provide health-care professionals with information on a wide range of pertinent public health topics. CEUs are available. The fee for each session, including continuing education credit, is $20. See the Continuing Education department's web site at www.dmu.edu/continuinged for more information and to register. Des Moines University's Public Health Program is accredited by the Council on Education for Public Health (CEPH).

Lecture Schedule

October 13, 2002 Introduction to Epidemiology by Kathy Schneider, Ph.D.
December 9, 2002 Introduction to Program Evaluation by Mary Pat Wohlford-Wessels, M.S.
January 13, 2003 Introduction to Proposal Writing by David Garloff, Ed.D.
February 10, 2003 Health Promotion by Becky Lang, Ph.D.
March 10, 2003 Community Violence by Allan Hoffman, Ed.D.
April 14, 2003 Effective Use of Community Health Data by Simon Geletta, Ph.D., and Jane Schadle, R.N.C., M.S.H.A.
May 12, 2003 Quality Improvement in Public Health Service by Mary Pat Wohlford-Wessels, M.S.
June 9, 2003 Patient/Client Communication by Mary Pat Wohlford-Wessels, M.S.

ICN Sites - The origination site will be the ICN Classroom (Room 306) at Des Moines University. Confirmed community college sites for the October and December 2002 lectures are: Algona-CC, Davenport-CC3, Sheldon-CC1, Ottumwa-CC4, Iowa Falls-CC, Cedar Rapids-CC3, Carroll-CC, Waterloo-CC2, Council Bluffs-CC1, Dubuque-Downtown-CC , Sioux City-CC2, Grinnell-CC, Mason City-CC3.

Red Ribbon Week - Promote healthy life choices during Red Ribbon Week October 23-31. For substance abuse prevention ideas go to www.redribboniowa.org.

DMU offers course info. on-line - Des Moines University Public Health Program course schedule and on-line registration form are available at www.dmu.edu/dhm/calendar. Courses scheduled to begin in January 2003 include: Designing Health Education, Introduction to Outcomes Research and Advanced Research Methods.

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What would you like to see in Iowa Health FOCUS? Send your suggestions for future articles, letters to the editor, and upcoming events or to add names to the mailing list by e-mailing us at kberg@idph.state.ia.us.