

Community Health Assessment 2003 Now Available Online

In 1844, the Health of Towns Association was formed in the United Kingdom to deliberate on Edwin Chadwick's reports about poor living conditions in towns and cities. Today, the resultant philosophy of seeking ways to enhance the holistic well-being of people who live and work in cities is promulgated in the World Health Organization's Healthy Cities Project (Bull WHO 81:222, 2003). The Healthy Cities principles draw on various work on the social determination of health and take into account the increasing recognition of the complex effects of urbanization on health. For example, in the United States, California's Healthy Cities and Communities program, which began in 1987, has contributed significantly to improving that state's health profile through a multi-tiered strategy.

The release in May of the Kansas City Health Department's 178 page *Community Health Assessment 2003* report is a significant first step towards providing a baseline against which improvements in this community's health can be measured. The report is available on the City's web site, www.kcmo.org/health.

Although, for years, the Health Department had been producing topic specific reports on health status, the current document is the first time that a comprehensive report has been released.

Community Health Assessment 2003

West Nile Virus - Update

On Monday, the 2nd of June, the Kansas City Health Department will initiate its 3rd season of monitoring for West Nile virus (WNV) activity in the community by accepting reports of dead birds and

submitting some of these birds to be tested for the presence of the virus. In 2001, no WNV activity was detected in Kansas City. However, in 2002, the virus was active in the metropolitan area infecting birds, horses, and people. Five Kansas City residents were identified as clinical cases of West Nile disease and it was estimated that as many 3,500 persons or more may have been infected with WNV.

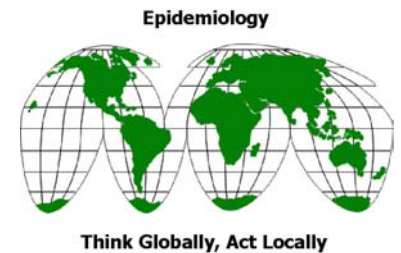
The difference between this year and the

Community Health Assessment 2003 is designed to be used by public health officials, other governmental agencies, community coalitions and organizations, policy makers, academic institutions and others for the identification of areas of health concern and for the formulation of community responses to those concerns.

With the publication of *Community Health Assessment 2003*, the Health Department will cease updating some of the categorical reports it used to issue, particularly in the area of maternal and child health. That information is included in the assessment document.

The Office of Epidemiology & Community Health Monitoring was responsible for developing the assessment document. Undoubtedly, there are other data in the community that could be used to enhance the information presented in the report. As that information becomes available to the Health Department it will be included in future editions. It is anticipated that each May a revised document will be issued.

The difference between this year and the



Community & Hospital Letter

May 2003
Vol. 23 # 10

Published by:

Office of Epidemiology &
Community Health Monitoring
Kansas City Health Department
2400 Troost, Suite 4000
Kansas City MO 64108

Gerald L. Hoff, Ph.D., F.A.C.E., Editor

prior two years, in terms of dead bird surveillance, is that this year only reports of dead crows and blue jays are being requested. With a loss of >50% of the communicable disease surveillance staff due to budgetary reasons over the past year, the Health Department cannot conduct as an extensive program as in prior years. The same surveillance zones will be used in 2003 as in the prior years. Instead of simply a weekly dead crow index per zone being employed, it will be a combined crow-blue jay index. A reanalysis of last year's data suggests that this will be a more sensitive measure.

On the prevention side, the Health Department, with the assistance of other City departments, already has conducted its first round of mosquito larviciding of appropriate water sources on public property. The next round will be in late summer. In addition, information on WNV on the City's web site has been updated. That information and the 2003 WNV plan can be accessed at www.kcmo.org/health.

Physicians and veterinarians are reminded that WNV in humans or animals is a reportable disease condition to the Kansas City Health Department.

SARS - Update

The April issue of *Community & Hospital Letter* carried an initial discussion of the sudden acute respiratory syndrome (SARS) problem that was emerging in Asia. As could be expected in a dynamic and evolving investigative process, new information has been forthcoming daily. Notice of important updates for physicians have been distributed by the Health Department's Health Alert Network, with the actual reports posted on the web site at www.kcmo.org/health. The following synopsis of the newer SARS information is not meant to be comprehensive, but rather to touch on key issues.

SARS is the latest in a long list of emerging infectious diseases to gain the attention not only of the scientific community but also of the general public. SARS is characterized by symptoms that include a temperature of 100.4 °F (38 °C) or higher, dry cough, myalgia, and mild sore throat, which progresses to atypical pneumonia. The disease is unusual in its high morbidity and mortality rates; and some claim it mimics and rivals the 1918 influenza pandemic, which still stands as the worst pandemic in history. More disturbingly, SARS seems to be transmitted through direct contact, and extreme infection-control measures are thus needed in affected areas.

Locally, suspect cases of SARS should immediately be reported to the Kansas City Health Department (24 hour duty officer pager - 816.717.6721).

To report a human or animal case of WNV

Call 816-513-6152

Fax 816-513-6316

To report a dead crow or blue jay

Call 816-513-6140

Fax 816-513-6316

Already this year, WNV is active in Minnesota, Florida, Georgia, Louisiana, Ontario, northern Mexico and El Salvador. In Louisiana, the virus has been detected in birds and/or mosquitoes in 38% of the state's parishes.

A recent report from the California Encephalitis Project (Clin Infect Dis 36:731, 2003), discussed the diagnostic challenges of determining the cause of individual encephalitis cases in people. Of 334 patients enrolled in the project, a confirmed or probable agent of encephalitis was found in 13% of cases, a possible etiology in 12%, a non-infectious etiology in 10%, and a non-encephalitis infection in 3%. Thus, despite extensive testing and evaluation, the etiology of 62% of cases remained unexplained.

As of the 10th of May, the World Health Organization (WHO) reported 7,296 probable cases of SARS in 30 countries worldwide. There had been 526 deaths (7.2%) and 3,087 persons were reported to have recovered from the disease. The US reported 64 probable cases. Meanwhile, China has reported the most cases with 4,884 persons affected and 235 deaths. The bulk of the SARS cases occurred in Beijing where 2,227 persons were reported ill and 116 persons died. Most disturbing is the fact that 50% of the recent cases in Beijing reportedly have no known contact to another SARS case or travel to other places where SARS is active. The globally observed death rate for SARS may be too low based on studies conducted in Hong Kong. There, researchers found the mortality rate to be age-related — 13.2% in persons <60 y old versus 43.3% for persons >60 y (Lancet 361:online publication 5/7/03). Also, compared with adults and teenagers, SARS seems to have a less aggressive clinical course in younger children (Lancet 361: online publication 4/29/03).

Several different viral and bacterial agents have been recovered from SARS patients, however, the consensus opinion is that SARS is caused by a novel coronavirus that is unrelated to known human or animal coronaviruses (Lancet 361:1312 and 1319, 2003). Independent corroboration that the coronavirus is the etiologic agent of SARS came from monkey experiments conducted in the Netherlands (Eurosurveillance Weekly 4/17/03). The infected monkeys developed SARS, including clinical symptoms and

pathological lesions seen in people who have died from SARS. The WHO has designated this agent as SARS virus and it is written as SARS CoV.

The genus *Coronavirus* is comprised of 13 virus species, which fall into 3 distinct phylogenetic groups. Group 1 contains canine, feline, human, and porcine species. Group 2 contains bovine, human, murine, rat and turkey coronaviruses. And, Group 3 contains a single virus, avian infectious bronchitis virus. To date, there is no evidence that genetic recombination of coronaviruses played a role in the emergence of SARS CoV. Genetic sequencing of SARS CoV suggests that it is not related to any of the 3 coronavirus groups (Science: online publication 5/1/03) despite some similarities to Group 2 (Lancet 361: online publication 5/9/03).

From an epidemiological point of view there is concern that the droplet-mode of transmission of SARS CoV may not be the only important method of virus dissemination. Researchers in Hong Kong have reported that some persons who recover from clinical SARS continue to secrete the virus in feces and tears. Also, some persons have recovered and then relapsed. And, the virus has been found in some asymptomatic individuals. Data from a variety of laboratories around the world have been summarized on the WHO web sit (www.who.org) and show that SARS CoV can survive in feces and urine at room temperature for at least 1-2 days and persist even longer (up to 4 days) in feces from patients with diarrhea (it is believed that the higher pH of diarrhetic stools is a contributory factor). Of course, the mere presence of infectious virus in these body wastes does not mean these are sources of spread of the virus in the community. More

information is needed on amount of infectious virus excreted in order to be able to assess the risk of transmission of infection by these routes. Fortunately, the virus is readily killed after exposure to commonly used disinfectants and fixatives.

Of course, the most visible aspect of SARS has been the imposition of quarantines, use of protective face masks by the general public and medical providers, and the posting of travel advisories. The combination of these measures has lead to severe economic repercussions for some cities and countries. For example, FIFA, the world governing body for soccer, elected to move the Women's World Cup tournament from China to either the United States or Australia this Fall because of the SARS situation in China. On the 4th of April, President Bush added SARS to the list of federally quarantinable diseases as a measure of enhancing this country's abilities to respond to the SARS threat. The Kansas City Health Department and Aviation Department jointly developed a response plan should a suspect case of SARS be detected in an airline passenger.

A Gallup poll released in mid-April revealed that 37% of respondents were "somewhat" or "very" worried that they or their family will be exposed to SARS. Slightly more, 39%, said they were "not too worried" and about a quarter said they were "not worried at all." Meanwhile, nearly a half million new internet websites have come online due to SARS (Br Med J 326:900, 2003). On nearly every page, advertisers offer protection against the disease — ranging from respiratory masks and disinfectants to nutrient supplements that, the vendors claim, strengthen the immune system.

Would you like to receive *Community & Hospital Letter* in .pdf format by e-mail? The e-mail version would be sent out approximately two weeks earlier than the hard copy. If you elect to receive an e-mail copy, you will not receive a hard copy. To order, send an e-mail to

gerald_hoff@kcmo.org

Potpourri

The Kansas City Health Department's annual report for 2002 has been posted on its web site at www.kcmo.org/health. The report is in .pdf format and is separated into individual files by area of interest, eg communicable diseases, environmental, etc.

The estimated global burden of diarrheal disease for the

period 1992 through 2000 recently was published (Bull WHO 81:197, 2003). For children <5 y old in developing countries, there was a median of 3.2 episodes of diarrhea per child-year. This indicated little change from previous estimates. Meanwhile, there was a decline in mortality, that was most pronounced in children <1 y of age. Estimates of mortality revealed that 4.9 children/1,000/y died as a result of diarrheal illness in the first 5 y of life. Despite improving trends in mortality rates, diarrhea accounted for a median of 21% of all deaths of children <5 y of age, or 2.5 million deaths/y. There has not been a concurrent decrease in morbidity rates attributed to diarrhea, as population growth in developing countries has resulted in increased morbidity because there are more children.

It is known that consumption of alcohol with a meal can have a protective effect against foodborne illnesses (J Infect Dis 159:979, 1989; Epidemiology 3:371, 1992). This was again demonstrated during the investigation of a *Salmonella*

enteritidis PT1 outbreak in Portugal (Eurosurveillance Weekly 7:3/27/03). Consumption of red wine had a protective effect against the disease and there was a dose-response effect with the number of alcoholic beverages consumed; the more drinks consumed, the larger the protective effect.

Data from CDC's Foodborne Diseases Active Surveillance Network (FoodNet), found that between 1996 and 2002, the incidence of infection with *Campylobacter*, *Listeria*, and *Yersinia* decreased, while the incidence of *Salmonella* did not change significantly (MMWR 52:340, 2003). The incidence of *Shigella* declined from 1996 to 1999, but then increased and the estimated incidence in 2002 was 14% higher than in 1996. Infections with *Vibrio* and *Cryptosporidium* also increased.

In March, the Food and Drug Administration (FDA) announced the addition of significant new warnings on two products containing lindane that are used to treat scabies and head lice on children. The FDA added a boxed warning to the labels emphasizing that lindane products are 2nd line

therapies and are only to be used with caution on persons who weigh <110 pounds. Further, sales of these products will be limited to 1 and 2 ounce sizes. According to the FDA, about 1 million prescriptions are written each year for various products to treat head lice and scabies.

According to WHO, traffic accidents kill 4 times as many people as wars and far more people commit suicide than are murdered. In 2000, injuries kill >5 million people (10% of deaths worldwide). Road deaths, totaling 1.26 million claimed the highest number of victims, followed by suicide at 815,000 and interpersonal violence at 520,000. Men were 3 times as likely to die in road accidents or be murdered than were women. Homicides were 3 times as frequent as suicides in Africa and the Americas. In Europe and southeast Asia suicide rates were more than double murder rates.



Office of Epidemiology & Community Health Monitoring - 100-050-1025
Kansas City Health Department
2400 Troost Ave, Suite 4000
Kansas City MO 64108