Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Public Health Issues – An Update

Recent news from the American Public Health Association, the World Health Organization, and other Health Care Agencies

R. J. Zabransky, Ph.D., Shaker Heights, OH

Global Immunization Program Pushed

A UNICEF and World Health Organization report, The State of the World’s Vaccines and Immunization, pointed out that billions of lives in the past 100 years have been saved by vaccines, which are still the least expensive way to control the spread of infectious diseases. While 3 million lives are saved annually, an additional 3 million could be saved if more funding for research and immunizations were made available. The report’s recommendations to alleviate the vaccine crisis include (i) increased efforts for research development and production of vaccines, (ii) increased manufacturing and vaccine availability in developing countries, and (iii) improving access to priority vaccines, new and old, especially for children and adolescents. See the report at www.who.int or www.unicef.org.

And Vaccines Don’t Cause SIDS

There is no evidence of a link between crib death, known as sudden infant death syndrome (SIDS), and the administration of multiple vaccines in infancy. National Institute of Health statistics recorded 2,523 SIDS deaths in the United States in 2000; 5,417 were recorded in 1990. The decline in SIDS deaths is attributed to the campaign instructing parents to place babies on their backs for sleeping and to restrict their proximity to soft bedding materials. The study concluded that a review of vaccine schedules as a probable necessary. Details are available at www.unicef.org.au/resources.html.

CDC Guidelines for Testing and Reporting of Antibody to Hepatitis C Virus

The Centers for Disease Control and Prevention (CDC) recently published its Guidelines for Laboratory Testing and Result Reporting of Antibody to Hepatitis C Virus (MMWR 2003;52[RR-3]:1-13). The guidelines offer continuing education credits and are intended for laboratory, physicians, nurses, and health educators who request, interpret, or perform anti-hepatitis C virus (HCV) testing. The purpose of the guidelines is to establish a standardized approach for testing and reporting of anti-HCV results to ensure that a positive laboratory report uniformly represents serologic evidence of HCV infection. These guidelines also provide information regarding interpretation of screening and supplemental tests, when more specific testing should be performed, and which tests should be used for this purpose. To download the guidelines, go to www.cdc.gov/mmwr/PDF/rr/rr5203.pdf.

Smallpox Vaccination Program and Adverse Reactions

There have been a number of articles and notices about the smallpox vaccination program, guidance for clinicians and health care providers, the role of public health agencies, and adverse reactions. For complete, up-to-date, and accurate information, go to the CDC website and the available links: www.cdc.gov/mmwr/preview/mmwrhtml/rr5204a1.htm, www.cdc.gov/mmwr/preview/mmwrhtml/mm5214a5.htm, or www.cdc.gov/mmwr/preview/mmwrhtml/mm5218a5.htm.

Baltimore Program Follows HIV Therapy

The Baltimore (MD) City Health Department is using a program, based on the directly observed therapy (DOT) program for treating and following tuberculosis (TB), to follow patients taking prescribed HIV medications. The program reaches out especially to people who are in transient housing or have drug addictions. The health care workers administering the program, HIV DOT, have developed a good rapport with participants, key to gaining compliance by the disadvantaged patients. To date, Peter Beilenson, M.D., the Baltimore health commissioner, reports 100% compliance by 95% of the program participants. Significant drops in viral load and CD4 counts are described in virtually all patients. Details are available at www.ci.baltimore.md.us/government/health.

RNA Testing Helpful in Diagnosing HIV Infection in Infants

Quantitative RNA (QRNA) testing can be used to diagnose infection in HIV-exposed infants according to a report from the Emory University School of Medicine in Atlanta. The study involved 156 HIV-exposed non-breastfed infants, comparing QRNA testing with DNA PCR or ELISA/Western blot testing for the diagnosis of HIV infection. The researchers reported that there was no difference in the sensitivities and specificities of QRNA and DNA PCR results overall, and the results were concordant at least 88% of the time. “Quantitative RNA testing can be used for diagnosis in HIV-exposed infants, recognizing the chance for a false-negative result,” researchers say. “It may be most useful as a confirmatory test in infants with another positive diagnostic test result.” Nesheim, S., et al. 2003. J. Acquir. Immun. Defic. Syndr. 32:192-195.

FDA Okays West Nile Screen for Donated Blood

Chiron Corporation (Emeryville, CA) announced that the U.S. Food and Drug Administration (FDA) has accepted the investigational new drug application submitted by Chiron's...
collaborator, Gen-Probe Inc. (San Diego, CA), for a gene-based assay to screen blood donations for West Nile virus. The nucleic acid assay (NAT), marketed by Chiron and developed by Gen-Probe, is expected to be for sale in time for the upcoming U.S. mosquito season. Roche Diagnostics (Pleasanton, CA) is also working to have a West Nile virus blood test ready for the summer season. The FDA called upon the blood testing industry last year to develop a NAT to detect West Nile virus by mid-year 2003. Out of a total of more than 3,500 cases of West Nile virus infections documented in the U.S. last year, the FDA believes that approximately 21 may have been caused by blood transfusions or transplants. The Chiron approval is discussed at www.devicelink.com/ivdt/archive/03/01/008.html.

Ebola Virus Spreading in Congo

The Ebola virus has killed 88 of the 97 who have contracted it in the Republic of the Congo since the current outbreak began in the Central African country a month ago, according to a bulletin from the Congo Health Ministry. Spread by infected body fluids, the deadly virus kills between 50 and 90% of its victims through massive internal bleeding. There is currently no cure for Ebola virus disease. Another 130 people suspected of exposure to Ebola virus are under surveillance. It is believed this outbreak was triggered by consumption of infected monkey meat, known as "bush meat," which is a staple among remote forest communities. See the summary at www.reliefweb.int/wrwb.nsf/CD/Congo?OpenDocument &StuiKey=Congo&ExpandView.

In a related issue, illegal hunting and the Ebola virus appear to be decimating the gorilla and chimpanzee populations in remote areas of western equatorial Africa, according to a new study from the Wildlife Conservation Society based at New York's Bronx Zoo. Many conservationists had believed that ape populations in these densely forested, remote regions in Gabon and the Republic of the Congo were relatively stable. Details are available at news.nationalgeographic.com/news/2003/02/0205_030205_ebola.html.

SARS Updates

Almost every day, new information appears in the scientific and lay press concerning severe, acute respiratory syndrome (SARS). For the most accurate and up-to-date information concerning the case descriptions and definitions, epidemiology, pathology, virology, diagnosis, management, vaccination, treatment, specimen handling and processing, and biosafety issues of SARS, you can visit the following websites and sources: the National Center for Biotechnology Information (www.ncbi.nlm.nih.gov/), WHO (www.who.int/csr/sarsarchive/), www.who.int/csr/sars/casedefinition/en/, or the CDC (www.cdc.gov/mmwr/), www.cdc.gov/niciod/sars/sarslabguide.htm, www.cdc.gov/niciod/sars/pdf/specimencollection-sars2.pdf, www.cdc.gov/niciod/sars/exposureguidance.htm, www.who.int/csr/sars/infectioncontrol/en/, www.cdc.gov/niciod/sars/index.htm, or www.cdc.gov/niciod/sars/lab.htm.

Ten Million TB Patients Successfully Treated

On the occasion of World TB Day, WHO announced the achievement of a significant milestone in global efforts against the resurgent epidemic of tuberculosis (TB). More than 10 million tuberculosis patients have now been successfully treated under DOT, the internationally recommended TB control strategy. Of these, more than 90% live in developing countries where the disease causes the most suffering, economic losses and death. The announcement comes 10 years after WHO declared TB a "global emergency" in 1993. Visit the WHO website: www.who.int/gtb.

FDA Approves Expanded Use of HPV Test

The FDA recently approved expanded use of Digene's (Gaithersburg, MD) Hybrid Capture 2 High-Risk HPV DNA Test for detecting the presence of human papillomavirus (HPV) in women. The test can identify 13 of the high-risk serotypes associated with the development of cervical cancer. The HPV DNA test does not detect the cancer. The FDA initially approved the HPV DNA test in March 2000 for testing women who had abnormal Pap test results to determine whether they needed to be referred for further examination. The new indication allows the test to be used for screening for HPV infection in conjunction with the Pap test in women over age 30. The HPV DNA test is not intended to substitute for regular Pap screening, nor is it intended to screen women under 30 who have normal Pap tests. Although the rate of HPV infection in the latter group is high, most infections are short-lived and not associated with cervical cancer. The FDA approved the expanded use of the test based on published literature describing studies of a cross section of women with normal and abnormal Pap test results who tested positive or negative for high-risk serotypes of HPV. Digene announced the approval at www.digene.com/corporate01/press_releases/hec2approval.htm.

British Microbiologists are Stressed

A survey of microbiologists and virologists in the United Kingdom indicated that their numbers had increased by only 12.5%, compared with much larger increases in other medical specialties, contributing to job-related stress. Most of the 367 respondents were consultants with over half working more than 48 hours per week; the majority of the stress was associated with overtime and a heavy on-call schedule. The authors concluded that the long hours worked by microbiologists are in breach of European regulations and are associated with a high degree of psychological morbidity. A question for our readers: what about the U.S.? K. Cartwright et al. 2002. J. Clin. Pathol. 55:200-205.

New CDC Initiative Would Increase HIV Testing

The CDC recently announced an initiative aimed at reducing the number of new HIV infections each year in the U.S. The initiative consists of four parts and will be implemented by several agencies working together within the Department of Health and Human Services (HHS). It includes making HIV testing a routine part of medical care, creating new models for diagnosing HIV infections outside medical settings, preventing new infections by working with people diagnosed with HIV disease and their partners, and further decreasing mother-to-child HIV transmission by incorporating HIV testing in the routine battery of prenatal
tests. Implementing the strategies will require extensive involvement and coordination among a broad range of federal agencies, nongovernmental providers, and professional organizations. The CDC is conducting meetings with state health departments and other partners to introduce the new initiative, and the agency will also work with the Health Resources and Services Administration and other HHS agencies to reach people who have been diagnosed with HIV infection, but who are not receiving ongoing treatment and preventive care services. See the CDC MMWR at www.cdc.gov/mmwr/preview/mmwrhtml/mm5215a1.htm.

IoM Report Criticizes Bioterrorism Preparedness

A new report from the Institute of Medicine (IoM) claims the U.S. is unprepared to respond to the growing threat of biological warfare. The report, *Microbial Threats to Health*, recommends that (i) global infectious disease surveillance be enhanced; (ii) the U.S. public health infrastructure be bolstered, especially in laboratory, communication, and surveillance systems; (iii) knowledge about confronting microbial threats be integrated into training programs for all health care professionals; (iv) the U.S. implement a total vaccine strategy; and (v) the development and use of diagnostic tests be increased. The report emphasized the need for a novel and coordinated approach among all government agencies, academia, and industry. The report is online at www.nas.edu.

Measles Continues to be an International Problem

Despite recognition of the high frequency of the disease worldwide and the existence of a safe, effective, and inexpensive vaccine, measles remains the leading cause of vaccine-preventable childhood mortality. These two care programs, one initiated in 1990 (World Summit for Children) and another in 2001 (WHO and UNICEF), to vaccinate 90% of the world's children and to decrease the annual number of measles deaths by 50% by 2005 compared with 1999 levels. Nevertheless, data from WHO's Global Burden of Disease project indicate that approximately 1.7 million vaccine-preventable childhood deaths occurred in 2000, of which 777,000 (46%) were attributed to measles, the vast majority of which occurred among children living in poor countries with inadequate vaccination services. Although substantial progress has been made in reducing measles deaths globally, in 2000, measles was estimated to be the fifth leading cause of mortality worldwide for children aged less than 5 years. To prevent these deaths, stronger political commitment is needed to provide all children worldwide with two opportunities for measles immunization. Surveillance to assess the burden of disease and guide vaccination policy remains critical. The CDC discussion and associated references are available at www.cdc.gov/mmwr/preview/mmwrhtml/mm5220a4.htm.

Monkey Pox: Updates and Guidance Information

The recent reports of the multistate outbreak of Monkey pox in persons exposed to prairie dogs has prompted a flurry of inquiries to numerous public health agencies. Information about the initial and subsequent infections, interim infection control and exposure management guidance, and guidance for veterinarians and pet owners can be found at the following website and links on the CDC website: www.cdc.gov/ncidod/monkeypox/report060903.htm, www.cdc.gov/ncidod/monkeypox/infectioncontrol.htm, and www.cdc.gov/ncidod/monkeypox/animalguidance.htm.