HEALTH INFORMATION OPERATIONS (HIO) WEEKLY UPDATE

20 March 2002

The HIO Weekly Update provides information regarding global medical and veterinary issues of interest to the United States (US) Army. The weekly update does not attempt to analyze the information regarding potential strategic or tactical impact to the US Army and as such, should not be regarded as a medical intelligence product. Medical intelligence products are available at http://mic.afmic.detrick.army.mil/. The information in the HIO Weekly Update should provide an increased awareness of current and emerging health-related issues. This report and other items of interest are available on the USACHPPM website at http://chppm-www.apgea.army.mil/.

TABLE OF CONTENTS

HOT ISSUES

Anthrax, Cutaneous - Laboratory Worker

A presumptive case of cutaneous anthrax has been identified in Texas in a worker at a private laboratory that is helping CDC process environmental samples from CDC's anthrax investigations. The laboratory where this individual works was able to culture *Bacillus anthracis* from the swab obtained by the worker's private physician. The isolate from this culture was sent to CDC on March 12 and CDC confirmed later that day that the isolate was *Bacillus anthracis*. CDC does not believe that the case poses any risk to public health. The report is at: http://www.cdc.gov/od/oc/media/pressrel/r020313.htm

Anthrax Detector - Sandia National Laboratories

On 6 March, Sandia National Laboratories announced that a patent application had been submitted for a prototype handheld detector under development, which can identify the fatty acid methyl esters (FAME) of anthrax in less than five minutes. The technique works by pre-concentrating airborne particles on a tiny hotplate that vaporizes the fatty acids in bacteria's cell walls to create the FAME that forms a unique fingerprint of the bacteria. A small computer program compares the amount of mass of each ester emitted in the analyzed gases - a process called elution - with already categorized elution peaks indicative of anthrax of other diseases. The report is at http://www.sandia.gov/media/NewsRel/NR2002/anthrax.htm.

Influenza Surveillance – DoD

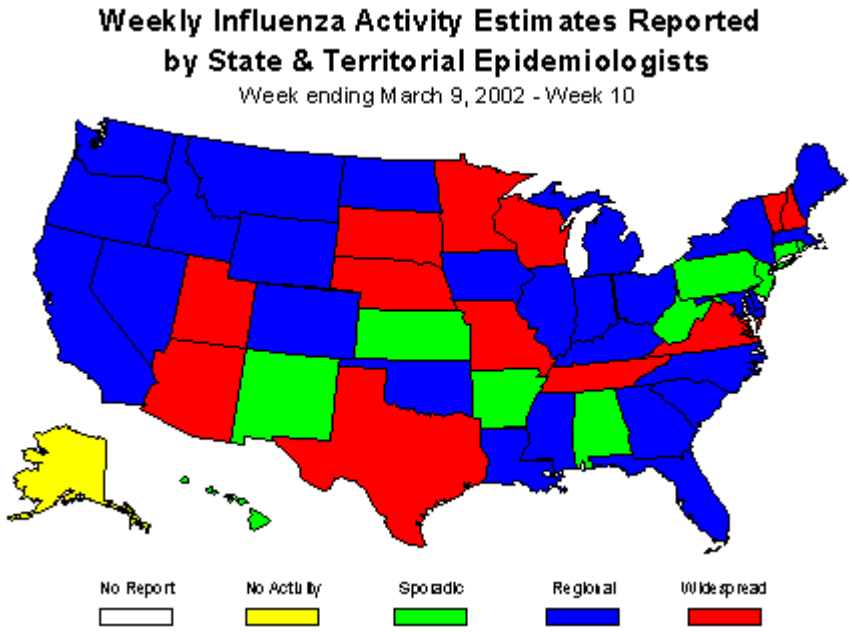
The DoD Worldwide Influenza Surveillance Program is a laboratory-based influenza surveillance program managed by the Air Force. As of 14 March, 474 (20%) of 2,408 submitted specimens have been identified as positive for influenza since the start of the influenza season (29 September): 461 (97%) were influenza A and 13 (3%) were influenza B. Of the 15 influenza isolates identified from NAB Little Creek, Virginia, one-third were influenza B viruses. Army laboratories in San Antonio, TX (BAMC) and Washington DC (WRAMC) identified 23 influenza isolates during the month of February: 21 were influenza A and two were influenza B. Of the 461 influenza A isolates, 92 (20%) have been subtyped, and 86 (93%) were influenza A (H3N2) and 6 (7%) were influenza A (H1N1). Further info, including data from the CDC and international sites, is available at: https://pestilence.brooks.af.mil/Influenza/

Note: Some users may experience difficulty accessing this link directly from this document; if this occurs, copy and paste the hyperlink in your browser address bar.

Influenza Surveillance - US

During week 10 (March 3-9, 2002), 448 (23.5%) of 1,905 respiratory specimens tested by World Health Organization (WHO) and National Respiratory Virus Surveillance System (NREVSS) laboratories were positive for influenza. The overall proportion of

patient visits to sentinel physicians for influenza-like illness (ILI) was 2.3%, which is above the national baseline of 1.9%. The proportion of deaths attributed to pneumonia and influenza was 8.8%, which is above the epidemic threshold of 8.3% for week 10. Twelve state and territorial health departments reported widespread influenza activity, 27 reported regional activity, 10 reported sporadic activity, and 1 reported no influenza activity. Since September 30, 10,081 (15.4%) of 65,494 submitted specimens were positive for influenza. Of the 10,081 isolates identified, 9,865 (98%) were influenza A viruses and 216 (2%) were influenza B viruses. Two thousand seven hundred and eighty-three (28%) of the 9,865 influenza A viruses identified have been subtyped; 2,748 (99%) were H3 viruses and 35 (1%) were H1 viruses. Thirty-six percent of the influenza B isolates reported this season were identified in the Mid-Atlantic region. The CDC classified influenza during the tenth week of the 2002 influenza season as in the map below The current weekly report is at:
http://www.cdc.gov/ncidod/diseases/flu/weekly.htm



Picture courtesy of the CDC at: http://www.cdc.gov/ncidod/diseases/flu/weekly.htm

International Conference on Emerging Infectious Diseases - CDC

Conference sessions of the 2002 International Conference on Emerging Infectious Diseases will be available as webcasts following the conference's closing date. Email notification of webcast availability is at http://www.cdc.gov/iceid/program.htm.

Medical Statement - Senate Armed Services Committee

On 13 March, the Assistant Secretary of Defense for Health Affairs and the Executive Director, TRICARE Management Activity, testified before the Personnel Subcommittee of the Senate Armed Services Committee regarding medical issues in President Bush's

fiscal 2003 budget request. Highlights of the statement include the following: (1) formation of a high-level working group with DHHS representatives to improve collaboration on defense against biological and chemical terrorism such as IND protocols on smallpox vaccine, pyridostigmine bromide (PB) tablets, botulinum toxoid vaccine, and anthrax vaccine post-exposure with antibiotics; (2) develop and implement a seamless system of electronic healthcare and surveillance data, integrating the entire spectrum from fixed facility systems to field hand-held technology; (3) fully utilize the eight joint ventures established with VA throughout the country and before FY 2005, transmit/receive computerized patient medical record data to/from VA; (4) perform operational test and evaluation of CHCS II this summer with potential worldwide implementation in third quarter FY02; and (5) deployment of TRICARE Online worldwide later this year following operational testing now underway. TRICARE Online uses the Internet to assist medical beneficiaries in gaining access to the Military Health System by providing information on health, medical facilities, and providers. The testimony is at http://www.senate.gov/~armed_services/e_witnesslist.cfm?id=200.

OB/GYN Devices - FDA Alert

On 14 March, the FDA issued a nationwide/international alert on OB/GYN medical devices manufactured by A&A of Alpharetta, Georgia, which are labeled as sterile but in fact may not have undergone any sterilization process. These products include but are not limited to curettes (flexible and rigid), uterine dilators, endometrial sampling sets, fetal blood samplers, fetal bladder drains, laparoscopy accessories, bone marrow needles, harvesting pumps used in in-vitro fertilization, and aspiration sets. The report is at http://www.fda.gov/bbs/topics/NEWS/2002/NEW00799.html.

USCENTCOM

Medical Statement - Command Surgeon

On 13 March, the USCENTCOM Command Surgeon testified before the Personnel Subcommittee of the Senate Armed Services Committee regarding theater medical support. Highlights of the statement include the following: (1) publication of regional threats by the USACHPPM; (2) publication of detailed medical operations and preventive medicine planning as part of the CINC's OEF campaign plan; (3) issuance of force health protection and medical surveillance guidance and requirements in all deployment orders; (4) issuance of follow up messages on potential threats and specific health issues such as Rift Valley Fever, meningococcal disease, malaria, and TB; (5) institution of sound preventive policies and procedures to address health threat potential posed by detainee operations; and (6) implementation of preventive medicine measures to acquire DNBI rates that are among the lowest of any US armed conflict to date. The testimony is at http://www.senate.gov/~armed_services/e_witnesslist.cfm?id=200.

USEUCOM

Influenza Surveillance – Europe

For week ten, 4-10 March, the EISS reported widespread influenza activity in five countries: Germany, Italy, Netherlands, Norway, and Romania. In general, European clinical morbidity rates were declining or stable; however, increasing rates were observed in four countries: Germany, Poland, Romania, and Sweden. Influenza A, primarily the H3N2 subtype, was dominant in nine countries. Influenza B was dominant in five countries: Belgium, Slovakia, Slovenia, Spain, and Switzerland. For week 10, no cases of influenza A (H1N2) or influenza B/Victoria/2/87-like viruses were reported. The report is at http://www.eiss.org/cgi-files/bulletin_v2.cgi?display=1&code=59&bulletin=59.

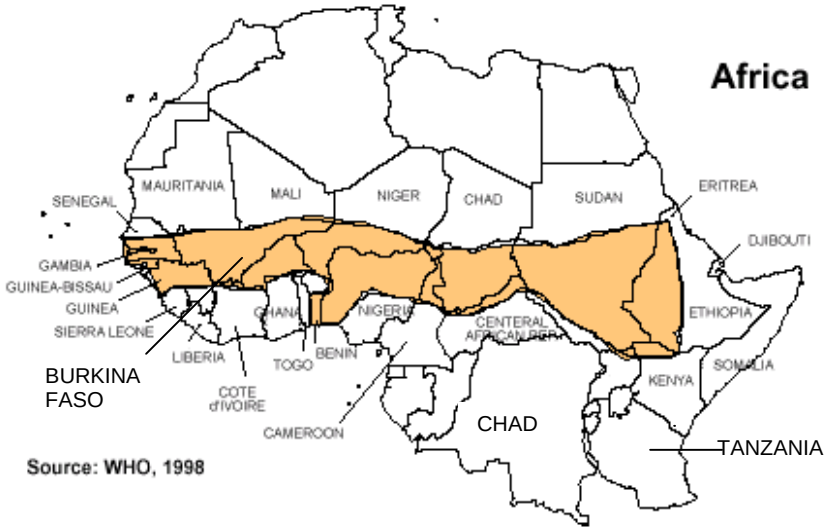
Medical Statement - Command Surgeon

On 13 March, the USEUCOM Command Surgeon testified before the Personnel Subcommittee of the Senate Armed Services Committee regarding theater medical support. Highlights of the statement include: (1) provided contingency medical support to include hospitalization, blood, medical supplies, and patient movement capabilities for USCENTCOM operations, (2) provided forward stabilization of critically injured patients closer to the forward edge of the battle areas than ever before through the use of forward surgical teams in the Balkans and in Nigeria and with planned deployment to Georgia, and (3) instituted the Multinational Integrated Medical Unit initiative in Kosovo, where a medical facility staffed by both Americans and British health care providers provide world-class support to all NATO and coalition forces in the British and American sectors of Operation Joint Guardian. USCENTCOM is using this initiative in Kosovo as a template for coalition medical operations in OEF. The Command Surgeon stated that he believed this type of international and coalition cooperation is the wave of the future. The Command Surgeon also stated that of the OEF patients moved to the Landstuhl Regional Medical Center to date, 75% were due to DNBI and 25% were WIA, which is consistent with operations in the Balkans over the last six years. The testimony is at http://www.senate.gov/~armed_services/e_witnesslist.cfm?id=200.

Meningococcal Meningitis - African Meningitis Belt (AMB)

On 14 March, the CDR Weekly reported a changing pattern in recent years for meningococcal meningitis in the AMB (picture follows). Historically, epidemics in this area would occur in cycles, usually during the dry season (November-June in west Africa and variable in east Africa). In recent years epidemics have flared for two to three consecutive years. The present African meningococcal meningitis pandemic began in 1996 with over 300,000 cases reported to the WHO by the end of 1998. The most affected countries have been Burkina Faso, Cameroon, Chad, Mali, Niger, and Nigeria. In 2001, six countries in the AMB experienced large epidemics: Benin, Burkina Faso, Central African Republic, Chad, Ethiopia, and Niger. Benin reported 6,147 cases including 265 deaths. In addition, Angola, which is outside the belt, reported an outbreak between May and October. Four countries are currently reporting outbreaks,

two within the belt (Ethiopia and Burkina Faso) and two outside the belt (Somalia and the Democratic Republic of the Congo). Cases in these outbreaks have been laboratory confirmed as *Neisseria meningitidis* serogroup A, which is the most common outbreak strain in the AMB. During epidemics, a smaller number of cases are usually reported to be due to serogroup C. Vaccines licensed in the US contain groups A, C, Y, and W135 meningococcal polysaccharides. The vaccine used for routine immunization programs in the UK provides protection for only group C. The report is at http://www.phls.co.uk/publications/CDR%20Weekly/PDF%20files/2002/cdr1102.pdf.



USJFCOM

Allograft-Associated Bacterial Infections - US

On 15 March, the CDC reported that as of 11 March, 26 patients with allograft-associated infections have been identified: 13 with *Clostridium* spp. infection and 14 associated with a single tissue processor. The CDC solicited these reports after the reported death of a recipient of an allograft contaminated with *Clostridium* spp. Sterilization of tissue that does not adversely affect the functioning of tissue when transplanted into patients is the best way to reduce the risk for allograft-associated infections. However, two sterilization methods (ethylene oxide and gamma irradiation) that would eliminate spores have associated technical problems that limit their use in processing of tissues for transplantation. New low-temperature chemical sterilization technologies that kill spores but preserve the biomechanical integrity and function of some allografts are being evaluated. The FDA has released new guidelines for tissue processors at http://www.fda.gov/cber/guidelines.htm#tissval. The CDC report is at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5110a2.htm.

Bacterial Conjunctivitis Outbreak - US College Campuses

On 15 March, the CDC reported an outbreak of conjunctivitis due to an unusual non-typeable strain of *Streptococcus pneumoniae*, which occurred in 574 students over the course of the winter term in mostly undergraduate students at Dartmouth College, New Hampshire. Sensitivity revealed resistance to erythromycin and susceptibility to bacitracin, sulfonamides, and quinolones. A survey of college faculty and interviews with local childcare centers, schools, ophthalmologists, and primary-care physicians did not identify excessive episodes of conjunctivitis in persons other than college students. School health officials used various media in an effort to educate students, faculty, and staff about ways to reduce transmission to include frequent handwashing and avoidance of shared personal items such as towels, drinking glasses, and other utensils. The student health service also provided all undergraduate students with an alcohol-based antiseptic gel and instructions on proper use for hand antisepsis. Although this method improves hand hygiene in hospital settings, the benefit of antiseptic gel in a community outbreak setting is unknown. The college's winter term ended on 14 March with students departing for spring break. As of 13 March, the student health service continued to report new cases of conjunctivitis. The CDC expressed concern about spread of the conjunctivitis in students crowding popular vacation spots with limited access to handwashing facilities. Between 1 February and 14 March, Princeton University also reported 247 cases of conjunctivitis with preliminary evidence pointing to a bacterial infection. The Princeton University update is at http://www.princeton.edu/Siteware/WebAnnounce.Princeton_Announcements.shtml#1 and the CDC report is at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5110a1.htm.

Cat-Scratch Disease (CSD) in Children - Texas

On 15 March, the CDC reported on an evaluation of medical records for 32 children seen at the Texas Children's Hospital in Houston for CSD, a bacterial infection cause by *Bartonella henselae*. The findings emphasize that although CSD is generally a mild, self-limiting illness, up to 25% of cases have severe systemic illness that can result in protracted hospital stays and lengthy treatments before diagnosis. CSD is a feline-associated zoonotic disease with an estimated annual incidence in the US of 22,000 cases. Although CSD occurs in persons of all ages, the highest age-specific incidence is among children less than 10 years. Infection with CSD is one of the most common causes of chronic lymphadenopathy in children. Serologic testing is the standard method of diagnosis and should be considered for patients who present with adenopathy, fever, malaise, and history of feline contact. A single elevated value for IgG or IgM antibodies is generally sufficient to confirm CSD, because initiation of a humoral immune response generally precedes or is concurrent with symptom onset. The CDC reported that treatment recommendations for *Bartonella*-associated diseases, including CSD, depend on the specific disease presentation. Azithromycin has been shown to hasten resolution of adenopathy associated with CSD. For patients with more severe disease, other antibiotic regimens have been successful, including azithromycin or doxycycline in combination with rifampin or rifampin alone; doxycycline or

erythromycin are considered the drugs of choice for bacillary angiomatosis and peliosis. The report is at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5110a4.htm.

Chagas Disease After Organ Transplantation - US

On 15 March, the CDC reported the first recognized US occurrence of *Trypansoma cruzi* infection through solid-organ transplantation. A cluster of three cases occurred due to transplantation of organs from a single donor. Chagas disease is endemic in parts of Central and South America and Mexico, where an estimated 16-18 million persons are infected with *T. cruzi*. Transmission of *T. cruzi* infection by solid-organ transplantation (particularly renal transplants) has been reported in Latin America, where serologic screening of organ donors and recipients for antibody to *T. cruzi* is standard practice. No test has been licensed for use in the US for screening organ or blood donors. The CDC is coordinating consideration of whether to recommend screening of potential donors for *T. cruzi* infection and, if so, which donors to screen, how to screen, and what to do if the screening tests are positive. The report is at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5110a3.htm.

USPACOM

Medical Statement - Command Surgeon

On 13 March, the USPACOM Command Surgeon testified before the Personnel Subcommittee of the Senate Armed Services Committee regarding theater medical support. Highlights of the statement include the following challenges: (1) vast distance of the theater, which impedes the ability to move medical augmentation into theater when required and the ability to move patients back to definitive care, (2) an aging medical infrastructure with many facilities built during World War II, (3) medical professional shortages, (4) vaccine availability for forward-deployed forces, (5) institution of real time and near real time data streaming and aggregation of joint service medical encounter data, medical facility reports, web-based clinical consultation tools, and an advanced medical disease surveillance system. The testimony is at http://www.senate.gov/~armed_services/e_witnesslist.cfm?id=200.

Antibiotic Residues - Southeast Asia

On 15 March, the Food Standards Agency (FSA) of Northern Ireland reported that the European Commission had issued an alert regarding nitrofuran residues in shrimps and prawns from Southeast Asia (Thailand, Vietnam, Indonesia, India, and Bangladesh). The FSA conducted a retail survey and found that 16 (21%) of 77 samples were positive for nitrofuran residues. Nitrofurans are no longer permitted in the European Union because of health risk concerns. Nitrofurans are mutagens (damage genetic material), and there is concern that they are potentially carcinogenic in humans. The FSA advised against consumption of the affected batches of shrimp and prawns and issued a

withdrawal from sale. The FSA has removed the products from the food market. The report is at http://www.food.gov.uk/enforcement/alerts/51574.

USSOUTHCOM

Medical Statement - Command Surgeon

On 13 March, the USSOUTHCOM Command Surgeon testified before the Personnel Subcommittee of the Senate Armed Services Committee regarding theater medical support. Highlights of the statement include: (1) institution of sound preventive policies and procedures to address health threat potential posed by detainee operations, (2) institution of the Emergency Medical Response Program to provide medical training and to assess the capability of host nations to respond to terrorist incidents at US Embassies/Security Assistance Offices, and (3) development of deployable medical teams at JTF Bravo and Roosevelt Roads to provide forward resuscitative surgery. The testimony is at http://www.senate.gov/~armed_services/e_witnesslist.cfm?id=200.

Yellow Fever - PAHO

On 17 March, the PAHO reported provisional totals of reported yellow fever cases for Central and South America as listed in the following table.

Country	2001 Cases	2001 Deaths	2002 Cases (as of 17 Mar 02)	2002 Deaths (as of 17 Mar 02)
Bolivia	4	3	1	1
Brazil	38	19	1	0
Colombia	6	4	1	1
Peru	29	17	5	0
TOTAL	77	43	8	2

Please contact the below-listed POC for suggested improvements and/or comments regarding this report. This report is also available on the USACHPPM website at http://chppm-www.apgea.army.mil/Hioupdate/.

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ACRONYMNS

ACIP - Advisory Committee on Immunization Practices
AFMIC - Armed Forces Medical Intelligence Center
AFPS – American Forces Press Service
AIDS – Acquired Immunodeficiency Syndrome
APHIS – Animal and Plant Health Inspection Service
BSE – Bovine Spongiform Encephalopathy
CBRN – Chemical, Biological, Radiological, and Nuclear
CDC – Centers for Disease Control and Prevention
CDR – Communicable Disease Report (England)
CHCS - Composite Health Care System
CIA – Central Intelligence Agency
CME - Continuing Medical Education
CONUS – Continental United States
DARPA – Defense Advanced Research Projects Agency, the central research and development organization for the Department of Defense
DHHS – Department of Health and Human Services
DNBI - Disease Non-Battle Injury
DoD - Department of Defense
DOE – Department of Energy
DOS – Department of State
DOT – Department of Transportation
ECG - Electrocardiogram
EISS – European Influenza Surveillance Scheme
EPA – Environmental Protection Agency
ESSENCE – Electronic Surveillance System for the Early Notification of Community-Based Epidemics
EU - European Union
FAO - Food and Agriculture Organization (of the United Nations)
FBI – Federal Bureau of Investigation
FCC - Federal Communications Commission
FDA – Food and Drug Administration
FEMA – Federal Emergency Management Agency
FMD – Foot and Mouth Disease
FSIS – Food Safety Inspection Service
FTC - Federal Trade Commission
GAO – US General Accounting Office
GEIS – Global Emerging Infections System
HACCP – Hazard Analysis Critical Control Points
HIV/AIDS – Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IAEA – International Atomic Energy Agency
ICBM – Intercontinental Ballistic Missile
ICRC – International Committee of the Red Cross
IDP – Internally Displaced Persons
ILI – Influenza-Like Illness
IND - Investigational New Drug
IRCS – International Red Cross Society
JAMA - Journal of the American Medical Association
JTF – Joint Task Force
K-FOR – Kosovo Forces, a NATO-led international peace enforcement force that entered Kosovo on 12 June 99 under a UN mandate. http://www.kforonline.com/
MMR - Measles, Mumps, and Rubella
MRSA - Methicillin Resistance *Staphylococcus aureus*
NAS – National Academy of Sciences
NATO – North Atlantic Treaty Organization
NCI – National Cancer Institute

NEJM – New England Journal of Medicine
NICHHD – National Institute of Child Health and Human Development
NIH – National Institutes of Health
NIOSH – National Institute for Occupational Safety and Health
NPIC – National Pesticide Information Center
NRC – Nuclear Regulatory Commission
OEF - Operation Enduring Freedom
OIE – World Organisation [sic] for Animal Health
OSHA - Occupational Safety and Health Administration
PA – Protective Antigen
PAHO - Pan American Health Organization: http://www.paho.org
PCBs - Polychlorinated Biphenyls; more info is at EPA: http://www.epa.gov/opptintr/pcb/
PCR – Polymerase Chain Reaction
PHLS – Public Health Laboratory Service
PHS – Public Health Service
PPE – Personal Protective Equipment
RSV – Respiratory Syncytial Virus
TB – Tuberculosis
UK – United Kingdom – England, Northern Ireland, Scotland, and Wales
UN – United Nations
UNHCR – United Nations High Commissioner for Refugees
USAID - United States Agency for International Development
USAMRIID – United States Army Medical Research Institute for Infectious Diseases
USDA – United States Department of Agriculture
USPSTF – United States Preventive Services Task Force
VA - Veteran's Administration
vCJD - variant Creutzfeldt-Jakob Disease
VOA – Voice of America, an international multimedia broadcasting service funded by the US Government
WHO – World Health Organization
WIA - Wounded in Action
WMD – Weapons of Mass Destruction