Global ORRESPONDENT

World Update

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s the United States marked 2 years since Hurricane Katrina and the upper midwest reeled from record-toppling floods, the worldwide disaster preparedness community highlighted other events.

GLOBAL REFUGEE INCREASE

The number of refugees worldwide rose for the first time in 5 years, according to a report by the United Nations (UN) High Commissioner for Refugees, released in late June. The report counted the world's refugees at almost 10 million, up 14% from 2006. In addition, the number of internally displaced people—those who have been driven from their homes but have not crossed an international border—rose to a record 13 million. These figures do not include 4.3 million Palestinian refugees in Jordan, Lebanon, Syria, and the Occupied Territories.

The increase was chiefly due to 1.5 million Iraqi refugees now living primarily in Syria and Jordan, which together permitted some 700,000 Iraqis to enter last year. Since the 2003 invasion, an estimated 2.1 million Iraqis have left the country and another 2.3 million have been internally displaced. Officials at the Iraq mission of the UN's International Organization for Migration say the number of displaced people continues to rise as a result of ongoing sectarian violence. The Iraqi Red Crescent Organization reported that the numbers of those driven from their homes in Iraq advanced by 600,000 in the 5 months since the US troop surge began in February.

GLASGOW SUICIDE BOMBING

On the afternoon of Saturday, June 30, 2007, a Jeep Cherokee loaded with propane was set ablaze and driven into the glass doors of the main terminal building of Scotland's Glasgow International Airport. The 2 occupants of the car were arrested by police at the scene. The driver, Kafeel Ahmed, an engineer from Bangalore, India, suffered burns to 90% of his body during the incident and eventually died of his injuries on August 2. The other man, Bilal Abdullah, a British-born Iraqi doctor, worked at the nearby Royal Alexandra Hospital. A suicide note indicated that both men intended to die in the incident. Five bystanders sustained minor injuries.

British police quickly linked the assailants to 2 failed London car bomb plots 1 day earlier. Two other men, Mohammed Asha, a Jordanian of Palestinian descent, and Sabeel Ahmed, brother to the deceased driver, are being held in connection with the bombings. Abdullah, Asha, and Ahmed all worked as doctors in Britain and are scheduled to return to British courts in September for hearings. Officials have yet to establish clear links between the men and terrorist groups, although in his *News of the World* column Lord John Stevens, security advisor to British Prime Minister Gordon Brown, described the London car bomb tactics as "textbook al-Qaeda."

JAPAN EARTHQUAKE

A magnitude 6.8 earthquake struck central Japan on July 16, 2007, injuring hundreds and igniting a fire at the world's largest nuclear power plant. The epicenter was located in the Sea of Japan 60 km (37 mi) southwest of the city of Niigata. More than 1000 people were injured in the earthquake, which struck at 10:13 AM on a holiday. Nine older adults in the city of Kashiwazaki were killed. About 780 homes, many of traditional wooden construction with heavy tile roofs, were damaged or destroyed, and more than 10,000 people in Niigata Prefecture were evacuated. The tremor was felt in Tokyo, 260 km (160 mi) away.

The earthquake also touched off a fire in an electrical transformer outside a reactor at the Kashiwazaki-Kariwa nuclear power plant. Four of the plant's 7 reactors were operating when the earthquake began and automatically shut down during the tremors. About 1200 L (317 gal) of water containing radioactive material leaked into the Sea of Japan from a unit that was closed for maintenance. The Tokyo Electric Power Company said in a statement that the level of radioactivity in the water was below the legal safe standard and had no effect on the environment. Some local residents, who have long expressed concern over the plant's safety, were dismayed by the 12-hour delay in the company's announcement of the spill. Japan, home to 55 nuclear reactors, is one of the most seismically active countries in the world, with a tremor occurring at least every 5 minutes.

NEW INTERNATIONAL HEALTH REGULATIONS

The World Health Organization's (WHO) new set of International Health Regulations (IHR) took effect worldwide on June 15, 2007. The IHR are designed to prevent, control, and respond to the international spread of disease without interfering with international travel and trade. WHO member countries must promptly report disease outbreaks and public health emergencies of international concern. The new regulations highlight 4 diseases—SARS, smallpox, polio, and new strains of human influenza—for immediate reporting. In some cases, outbreaks of cholera, plague, yellow fever, West Nile fever, and viral hemorrhagic fever also must be reported.

The previous version of the IHR dates to 1969 and was intended to control 6 diseases: cholera, plague, yellow fever, smallpox, relapsing fever, and typhus. Of those, only cholera, plague, and yellow fever were reportable. In the early 1990s the emergence of new agents such as Ebola hemorrhagic fever and the reappearance of plague in India and cholera in South America led the 48th World Health Assembly in 1995 to call for an update of the IHR. The new IHR were adopted by the World Health Assembly on May 23, 2005.

In addition to outbreak reporting, member countries must now maintain specific National IHR Focal Points that are continually available to communicate with the WHO. Countries must also strengthen core public health surveillance and response capacities. The WHO, in turn, will provide countries with guidance in building core capacities and with recommendations and logistical response support for public health emergencies.

Implementation of the new IHR faces several obstacles including funding deficits, continued reluctance of some countries to report disease outbreaks for fear of economically harmful travel and trade restrictions, low efficacy of some surveillance methods, and lack of updated public health law and technical capacity in some countries to accommodate the new regulations. Despite these problems, the new IHR is an important step toward developing effective global health surveillance.

PERU EARTHQUAKE

On Thursday, August 16, 2007, an earthquake measuring 8.0 on the Richter scale struck in the Pacific Ocean off Peru and devastated the coastal region 200 km (125 mi) south of the capital, Lima. At least 519 people were killed and 1090 injured in the areas around Pisco, Ica, and Chincha. The region's adobe brick houses were no match for the powerful tremors, which flattened almost 40,000 homes and damaged another 13,000. The mayor of Pisco, Juan Mendoza Uribe, said that 70% of the city had been devastated. Tens of

thousands of people who lost homes or feared aftershocks slept outdoors in the Peruvian winter.

The Panamerican Highway and other major transport routes suffered heavy damage due to landslides and cracks. Road damage delayed the arrival in Pisco of the Peruvian Red Cross by more than 7 hours, 3 times the normal length. Peruvian doctors ceased a national strike to aid those affected by the quake, but many found few resources left. Peru's National Institute of Civil Defense reported that 95 local hospitals were damaged or destroyed. President Alan Garcia announced government aid plans that include replacing lost adobe homes with small 2-bedroom houses made of steel-reinforced concrete blocks to better withstand future earthquakes.

SOUTH ASIA FLOODS

This year's monsoon floods in south Asia were described by the UN as the worst in living memory. Over 28 million people in India, Nepal, and Bangladesh were affected, and the cost of the flooding topped \$1 billion. More than 2000 people, twice last year's total, died of drowning, house collapses, diarrhea, and other related causes. In mid-August, half the total land mass of low-lying Bangladesh was covered by flood waters.

South Asia's agricultural economy depends on the annual monsoon floods to fertilize fields with silt and provide water for irrigation, but this year's floods began early and have extended beyond the usual crop-sowing period, ruining the region's chances of a sufficient harvest. The UN's Food and Agriculture Organization is predicting a significant need for food aid in the region even after the flood waters have receded.

Many link the devastating floods to global climate change. Warming in the Himalayan mountain range shrinks its capacity to retain precipitation in the form of snow and glaciers, causing torrents in the wet season and empty riverbeds in the dry season. In a Reuters interview, John Holmes, UN Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator, described a "pattern of flooding around the world" and added, "climate change is a reality already."

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