

## Examples of infectious disease threats, unusual health events, and newly discovered pathogens, worldwide, 2000–2011



Source: CDC

### 2000

- 1** • Outbreak of Rift Valley fever in Saudi Arabia and Yemen, representing the first reported cases of the disease outside the African continent
- First detection of carbapenem resistance among the common gram-negative bacteria Enterobacteriaceae (*Klebsiella pneumoniae*)

### 2001

- 2** • Identification in the Netherlands of a new virus, human metapneumovirus, among children with respiratory infections

### 2002

- First detection of *Staphylococcus aureus* bacteria completely resistant to vancomycin
- 3** • Outbreak of multidrug-resistant *Salmonella* Newport in the United States
- 4** • Norovirus infection on cruise ships entering U.S. ports

### 2003

- Global outbreak of severe acute respiratory syndrome (SARS) caused by a previously unknown coronavirus
- 5** • Identification of a new, hypervirulent strain of *Clostridium difficile* as the cause of hospital outbreaks of gastrointestinal illness in the United States and Canada
- 6** • Cases of monkeypox in the United States linked to exotic pets imported from Central Africa
- 7** • Re-emergence of avian influenza A (H5N1) in Southeast Asia, and outbreaks in Africa

### 2005

- 8** • Marburg hemorrhagic fever outbreak in Angola
- 9** • Identification in Sweden of a new virus, human bocavirus, among children hospitalized with acute respiratory infections

### 2006

- 10** • Rift Valley fever outbreak in Kenya
- 11** • Ebola hemorrhagic fever outbreak in the Democratic Republic of the Congo

### 2007

- 12** • Outbreak of Nipah virus encephalitis in Bangladesh
- 13** • First detection in Italy of mosquito-borne transmission of chikungunya fever, previously detected only in parts of Africa and South and Southeast Asia
- 14** • Discovery in Thailand of a new human species of *Bartonella*, an insect-borne bacteria that multiplies inside red blood cells causing fever, fatigue, muscle pain, headache, and rash
- 15** • Hemorrhagic fever outbreak in Uganda caused by a new strain of Ebola: Bundibugyo Ebola virus
- 16** • Outbreak of Marburg hemorrhagic fever in Uganda

### 2008

- 17** • Ebola-like outbreak in Zambia due to a previously unknown virus: Lujo hemorrhagic fever virus
- 18** • Isolation in Australia of a new virus (transplant-associated arenavirus related to lymphocytic choriomeningitis virus) after three recipients of liver or kidney transplants from a single donor developed febrile illness and died
- Increasing outbreaks and international spread of carbapenem-resistant Enterobacteriaceae, and first detection of New Delhi metallo-beta-lactamase (NDM-1), a genetic element that can confer such resistance

### 2009–10

- 19** • Locally transmitted dengue in Florida, representing the first cases acquired in the continental United States outside the Texas–Mexico border since 1945
- Influenza pandemic caused by a new influenza strain, influenza A

### 2010

- 20** • Outbreaks of cholera in Haiti

### 2011

- 21** • Outbreak of Shiga toxin-producing *Escherichia coli* O104:H4 (STEC O104:H4) infections in Germany
- Identification by an international team of researchers of a strain of gonorrhea (H041) resistant to all available antibiotics