

Maritime Activity

Quarantine and Border Health Services Branch

Each year, thousands of ships of different types and functions make calls at numerous U.S. ports, presenting a formidable public health challenge. In a single voyage, cruise ships can carry thousands of people from different communities and environments. Crew members often come from countries with suboptimal vaccination coverage and can be a source of communicable diseases on ships. Due to the close quarters and prolonged contact on ships, communicable diseases can easily spread from person to person or through contaminated food, water, or environmental sources. Additionally, on cruise ships, individuals with chronic conditions, elderly people, or pregnant women may be more seriously affected by infectious diseases.



The maritime community includes (clockwise from top left) cruise ships, container ships, specialist ships, bulk carriers, and tankers (not pictured).

Mission

The mission of the Quarantine and Border Health Services Branch (QBHSB) Maritime Activity is to support the maritime community in its efforts to reduce the risk of introduction and transmission of communicable disease on ships and into the United States, through development of evidence-based investigation and response tools, and to be a source of or conduit for subject-matter expertise.

Regulatory Authority

U.S. Foreign Quarantine regulations, 42 CFR Part 71, require the master of a ship destined for a U.S. port to immediately report the onboard occurrence of any death or any ill person among passengers or crew to the quarantine station with jurisdiction over the port at which the ship will arrive.

Under the revised International Health Regulations (2005), the CDC Quarantine Stations are the "Competent Authorities" for oversight of implementation and application of health measures at U.S. ports of entry. This includes the authority to issue or require Ship Sanitation Exemption and Ship Sanitation Control Certificates.

Maritime Industry Statistics (2008)*

- 17 major cruise lines operated in North America, including 118 vessels and over 9.9 million passengers booked on 4,212 cruises
- Top 5 cruise ship U.S. departure ports were Miami, Port Canaveral, Fort Lauderdale, Los Angeles, and San Juan
- Top 4 cruise destinations were the Western and Eastern Caribbean, the Bahamas, and Alaska
- U.S. waterborne cargo trade (foreign and domestic) amounted to 2.3 billion metric tons
- 7,119 oceangoing cargo vessels made 60,578 calls at U.S. ports
- Top 5 U.S. ports for foreign container trade were Los Angeles/Long Beach, Houston, Savannah, New York, and Seattle/Tacoma

*Data from the Department of Transportation Maritime Administration

Surveillance

Illness and death reporting by cruise ships can be done via the electronic Maritime Illness and Death Reporting System (MIDRS), which was implemented in 2009. Reports may be submitted at the MIDRS website or by MIDRS e-mail. At CDC's request, cruise ships also send cumulative end-of-voyage reports for specific conditions of interest (e.g., influenza-like illness) among passengers or crew.

Except during the 2009 influenza A (H1N1) pandemic, the most common illness reported by cruise and cargo ships is chickenpox in crew members. Deaths onboard occur more often in passengers than crew, with cardiovascular disease as the most common cause of death.

Maritime Illness and Death Reporting System (MIDRS)

<https://www.cdc.gov/midrs>

For more information:
MIDRS_DGMQadmin@cdc.gov

In addition to illness and death reports sent to DGMQ, cruise ships also provide notification of gastrointestinal illness onboard to the CDC Vessel Sanitation Program (VSP) via MIDRS. More information on VSP can be found here:

<http://www.cdc.gov/nceh/vsp>

Maritime Activities

- Assist in the collection and analysis of data related to illness and death onboard cruise or cargo ships destined for a U.S. port of arrival
- Provide maritime illness and death surveillance data to CDC leadership, internal CDC partners, and maritime industry partners, as requested
- Develop guidance documents for quarantine stations responding to maritime illness reports (e.g., varicella, tuberculosis, rubella, measles, mumps, pertussis)

- Develop guidance for the cruise industry response to illness onboard ships
- Work with a variety of maritime partners and agencies to develop and participate in exercises to test and refine maritime notifications and illness or outbreak response
- Provide MIDRS administrative support
- Assist quarantine stations with outbreak investigations and facilitate communication between quarantine station field activities and CDC subject-matter experts for maritime issues
- Provide cruise travel guidance to the CDC Health Information for International Travel ("Yellow Book")

Partnerships

The Maritime Activity works closely with a variety of organizations to better support the maritime community. Some of these organizations include:

- **Cruise Lines International Association (CLIA)** – the world's largest cruise association, composed of 25 of the major cruise lines serving North America and dedicated to the promotion and growth of the cruise industry
- **Chamber of Shipping of America (CSA)** – represents 33 U.S.-based companies that own, operate or charter oceangoing tankers, container ships, dry bulk vessels, and companies that maintain a commercial interest in the operation of these vessels
- **U.S. Coast Guard** – a U.S. armed force that safeguards maritime interests in the heartland, in the ports, at sea, and around the globe
- **CDC Vessel Sanitation Program (VSP)** – assists the cruise ship industry to prevent and control the introduction, transmission, and spread of gastrointestinal illnesses on cruise ships and conducts periodic operational sanitation inspections of cruise ships
- **Customs and Border Protection (CBP)** – Department of Homeland Security agency responsible for securing and facilitating trade and travel and enforcing immigration regulations

www.cdc.gov/midrs; MIDRS_DGMQadmin@cdc.gov
1-800-CDC-INFO (800-232-4636); cdcinfo@cdc.gov; TTY: (888) 232-6348