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Foreword

Historically, ships have played a significant role in the global transmission of infectious disease. Some of the earliest recorded evidence of attempts to control human disease transmission via ships dates to the 14th century, when ports denied access to ships suspected of carrying the plague. In the 19th century, the spread of cholera pandemics was thought to have been facilitated by merchant shipping. A World Health Organization (WHO) review identified more than 100 disease outbreaks associated with ships between 1970 and 2003 (Rooney et al., 2004).

Today's world fleet of propelled seagoing merchant ships of more than 100 billion tonnes comprises 99 741 ships, with an average age of 22 years, registered in more than 150 nations and crewed by more than a million seafarers of virtually every nationality (IHS Fairplay, 2010). World seaborne trade figures suggest that the amount of goods loaded on ships has increased considerably in recent decades; in 2007, it reached 7.3 billion tonnes, a volume increase of 4.8% over the previous year (United Nations, 2008). During the three decades to 2008, the annual average growth rate of world seaborne trade was estimated at 3.1% (United Nations, 2008). The shipping industry also supports tourism and recreation. American cruise ships alone carried 13.4 million people during 2009, for an average period of 7.3 days per person, a passenger number increase averaging 4.7% per year over the preceding four years (Cruise Lines International Association, 2010). Naval ships also carry considerable numbers of crew, sometimes more than 5000 per ship. Ferries are ubiquitous around the world in port cities and at some river crossings and are used by many people on a daily basis.

Because of the international nature of ship transport, international regulations relating to sanitary aspects of ship transport have been in

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