

WIKIPEDIA

COVID-19 pandemic on *Diamond Princess*

Diamond Princess is a cruise ship registered in Britain, and owned and operated by Princess Cruises. During a cruise that began on 20 January 2020 positive cases of COVID-19 linked to the COVID-19 pandemic were confirmed on the ship in February 2020. Over 700 people out of 3711 became infected (567 out of 2666 passengers and 145 out of 1045 crew), and 14 people, all of them passengers, died. At the time, the ship accounted for over half the reported cases of SARS-CoV-2 outside of mainland China.^[14]

Contents

Timeline

Criticism

Survey report

Demographics

Deaths

Itinerary

Number of confirmed cases

Notes

References

Timeline

The fateful cruise of the *Diamond Princess* departed from the Port of Yokohama on 20 January 2020 for a round-trip billed as a tour of Southeast Asia during the Lunar New Year period,^{[15][16]} with 2,666 passengers and 1,045 crew on board.

An 80-year-old passenger from Hong Kong, China, had embarked in Yokohama on 20 January. He had been in Shenzhen, Guangdong Province, China on 10 January, then returned to Hong Kong and flew to Tokyo on 17 January to board the ship. He developed a cough on 19 January, but he went on board.^[17] He left the cruise when the ship reached Hong Kong on 25 January.

The cruise continued. On 31 January, the ship docked in Taiwan, which according to Vice Premier Chen Chi-mai was "the earliest country to activate epidemic prevention measures against this disease."^[18] A paper in the *Journal of Medical Internet Research* authored by Chen, describes how the passengers of the COVID-19 stricken cruise ship were later traced using mobile phone geolocation, and how their 627,386 contacts were alerted through textmessaging.^[19]

On 1 February, the ship called at Naha Port in Okinawa and was quarantined.^[17] On the same day, the 80-year-old man who disembarked in Hong Kong six days earlier tested positive for COVID-19. Having a fever, he went to the hospital and got tested.^{[17][20]} Hong Kong's Department of Health immediately contacted the agent of the ship's operating company, but the ship did not immediately inform the passengers and they were notified about that on 3 February, two days later.^[21] Over the next few days, the cruise ship had shows and dance parties as usual and also continued to open public facilities that attract large crowds, including fitness clubs, theatres, casinos, bars and buffet-style restaurants.^[21]

On the evening of 3 February, the cruise ship returned to Yokohama Port and anchored off the coast of Daikoku Pier without docking. The Japanese government decided to re-quarantine the ship unusually because there may be infected persons. Officials of the Ministry of Health, Labour and Welfare boarded the ship for quarantine.^{[17][21][22]}

On 4 February, tests revealed infections of 10 out of 31 people tested. The authorities immediately decided to isolate all passengers on board for 14 days.^[21] On 5 February, the authorities announced positive test results for SARS-CoV-2 for ten people on board, the cancellation of the cruise, and that the ship was entering quarantine for 14 days based on World Health Organization guidelines.^{[23][24][25][26][27]} A total of 3,700 passengers and crew were quarantined by the Japanese Ministry of Health, Labour and Welfare for what was expected to be a 14-day period, off Yokohama.^[28]

On 7 February, the total number of people on board with confirmed SARS-CoV-2 infections grew to 61.^[29] Another 3 cases were detected on 8 February, bringing the total to 64.^[30] On 9 February, 6 cases were detected,^[31] while another 65 were detected on 10 February, bringing the total to 135.^[32] The numbers overwhelmed local medical facilities, and stricken passengers were divided into 3 groups according to condition, and evacuated to suitable locations, allowing intensive care to perform as intended.^[33] On 11 February, 39 more people tested positive for the virus, including one quarantine officer,

COVID-19 pandemic on board *Diamond Princess*



Diamond Princess, off Toba, Mie Prefecture, Japan, December 2019

Disease	COVID-19
Virus strain	SARS-CoV-2
Location	Pacific Ocean
First outbreak	Wuhan, Hubei, China
Index case	<i>Diamond Princess</i>
Arrival date	5 February 2020 (4 months, 2 weeks and 2 days)
Confirmed cases	712 ^[1]
Recovered	653 ^[1]
Deaths	14 [2][3][4][5][6][7][8][9][10][11][12][13]

bringing the total to 174.^[34] Passengers with confirmed cases were reported to be taken ashore for treatment.^[35] On 13 February, 44 more people tested positive for the virus, bringing the total to 218.^[36] On 15 February 67 more people were reported to be infected, bringing the total to 285.^[37] On 16 February 70 more people were reported to be infected, bringing the total to 355. The next day on 17 February, the Ministry of Health, Labour and Welfare confirmed 99 more cases, raising the total to 454, 33 of whom were crew members.^{[38][39]} On 18 February, another 88 cases were confirmed, bringing the total to 542.^[40]

On the morning of 17 February (Japan time), two U.S. government-chartered planes departed for the United States, carrying hundreds of U.S. citizens who were passengers of the cruise ship. Among about 400 cruise passengers, 328 boarded the planes, excluding those who expressed their intention to stay on the ship and 44 under treatment in Japan.^{[41][42]} The U.S. government initially asked Japan to keep them on board for 14 days based on the CDC guideline despite the proposal by the Japanese government to bring American passengers back home early.^[43] The U.S. government, however, changed its policy to return home on 15 February.^[44] The first plane landed at Travis Air Force Base in California at midnight on 16 February (U.S. Time), and the other plane landed at Joint Base San Antonio in Texas on the early morning of 17th (U.S. Time).^{[42][45]} Canada, Hong Kong, Australia and Italy also followed the United States within a few days.^[41] There were 164 Australian passengers, of which twenty-four were infected, and eight were sent for 14 days quarantine to Darwin.^[46] One of these Australian passenger would die on 1 March.

On 18 February, Michael J. Ryan, Executive Director of the World Health Organization's Health Emergencies Programme, said it would have been better to have the passengers on board for two weeks on board than to have them scattered all over the world, and he appreciated the Japanese government's initial decision was appropriate. However, he said that he was disappointed at the continued increase in the number of infected people.^[47]

On 18 February, Kentaro Iwata, an infectious diseases expert at Kobe University, uploaded a video on YouTube that he raised questions about the prevention of epidemics measures in the "Diamond Princess" shortly after boarding the ship. He removed it on February 20.^[48]

On 19 February, passengers with negative test results began to disembark.^[43]

On 20 February, the World Health Organization's Director-General reported the total number of the cases outside of China to be 1,076, and stated that over half of these cases occurred among the passengers on the *Diamond Princess*.^[14] By late March it was stated that 712 of 3,711 people on the *Diamond Princess*, or 19.2% had been infected by COVID-19.^{[49][50]}

By 1 March, all passengers and crew members had disembarked from the ship.^{[21][51]}

In early March 2020, Indonesia evacuated 69 Indonesian crew of *Diamond Princess*, after their COVID-19 test results in Japan were negative. However, an Indonesian naval hospital ship bringing them to Sebaru Island for a mandatory quarantine period had two crew ill. All were tested again; 67 passed the second test, but two did not and were retested with a more accurate, different test, with one negative and one positive result. The 68 people with negative tests disembarked at Sebaru Island for observation and the one positive case was evacuated by helicopter to Persahabatan Hospital.^{[52][53]} Eventually, all 69 crew members received negative COVID-19 test results.^[54]

On 16 May, *Diamond Princess* departed from the Port of Yokohama. The ship is said to be going to Malaysia.^[55]



Diamond Princess undergoing a cleaning and disinfection process at Daikoku Pier in Yokohama Port photographed on 1 March 2020

Criticism

There are many harsh criticisms of Japan's epidemic prevention measures of quarantine on Japanese cruise ships.^[56] There is the possibility that quarantine in a cruise ship is dangerous, because the cruise ship does not use HEPA filters which can effectively screen 99 percent of the particles with a diameter of 3 microns or more, as is used in modern airplanes.^[57]

Kentaro Iwata, an infectious diseases expert at Kobe University who visited the ship, strongly criticised the management of the situation in two widely circulated YouTube videos published on 18 February.^{[58][59][60][61]} He called *Diamond Princess* a "COVID-19 mill."^[62] He said that the areas possibly contaminated by the virus were not in any way separated from virus-free areas, there were numerous lapses in infection control measures, and that there was no professional in charge of infection prevention—the bureaucrats were in charge of everything.^[63] Japanese officials denied the accusations and argued that the zoning on board, of course, was not perfect, but it was not insane from the medical point of view.^{[64][65][63][66]} Yoshihiro Yamahata and Ayako Shibata, two medical doctors who attended to the passengers as first responders, wrote later that "At the beginning of implementation of the quarantine, we had to enact measures based on limited information, which is confusing" and that "it was thought that COVID-19 could not be spread via human-to-human transmission.", which explains why there "might be a gap between the new and old infection control measures."^[67] While the U.S. Centers for Disease Control and Prevention commended the efforts to institute quarantine measures, their assessment was that it may have not been sufficient to prevent transmission among people on the ship.^{[68][69]} Anthony Fauci, director of the U.S. National Institute of Allergy and Infectious Diseases, said that the quarantine process had failed.^[60] Dr. Yoshihiro Takayama, who worked on *Diamond Princess* as a member of the Ministry of Health, Labor and Welfare and helped Iwata get on board as a nominal member of

DMAT, pointed out and corrected Iwata's errors on Facebook, saying the video could put ship passengers, crew, and medical staff in a corner.^{[70][71][72]} Takayama also revealed that Iwata was forced to leave the ship in two hours and only looked around the lounge, and he had been dismissed due to trouble with DMAT members and staff.^{[70][71]} The authorities also admitted at a press conference that Iwata, who was a member of the DMAT, tried to act alone, so they asked him to leave.^[66] The next day on 20 February, Iwata removed his videos and apologised to those involved, but still insisted the situation on the ship had been chaotic.^{[72][65]}

A preliminary report based on the first 184 cases by Japan's National Institute of Infectious Diseases (NIID) estimated that most of the transmission on the ship had occurred before the quarantine.^[72] The cruise line, Princess Cruises, had first assumed there was only minimal risk and had initiated only the lowest-level protocols for outbreaks before the quarantine.^[73] By 27 February, at least 150 of the crew members had tested positive for the virus.^{[74][75]} Dr. Norio Ohmagari, top government adviser and director of Japan's Disease Control and Prevention Center admitted that the quarantine process might not have been perfect.^[74] A crew member reported that many of the crew had been expected to still work and interact with passengers even under the quarantine.^{[76][77]} Princess Cruises stated that Japan's ministry of health was the lead authority defining and executing quarantine protocols, yet Japan's ministry of foreign affairs stated that a criteria of behavior was presented but the ultimate responsibility for safe environment rested with the ship operator.^[76] Food service workers were found to have likely been the main early route of spread.^[78] 46.5% of the infected passengers and crew members had no symptoms at the time of testing.^{[79][49][50]} The ship outbreak had a basic reproduction number of 14.8;^[80] much higher than the usual 2–4.^[81] Calculations indicate that an early evacuation could have reduced the case number to just 76 cases, and that the applied quarantine reduced the case number by about 2300 cases.^[80]

Survey report

Professor Hiroshi Nishiura of Hokkaido University, a member of Novel Coronavirus Expert Meeting, analyzed the days when they were infected based on the data of the onset date and incubation period of passengers and crews. It was speculated that passengers were infected during the three days from February 2 to 4. However, the crew, who continued to support the lives of passengers as "essential workers", became infected a week after the cruise ship anchored. Although strict rules were laid out and medical equipment such as N95 masks were distributed to them, it was difficult for them who were not medical workers to act as instructed. The living environment of their communal living also increased the risk. There was no bias or regularity in the distribution of infected sites on the cruise ship. After searching for traces of the virus's genes, the most common place was modular bathroom floors.^[21]

According to the Self-Defense Forces Central Hospital, which accepted some of the patients of the cruise ship, the average age of the patients was 68 years, and the number of men and women was about half. Cruise ship crews were mainly in their 30s and 50s, and passengers were mainly in their 70s. 48% of the patients had underlying disease. Cardiovascular diseases such as hypertension are the most common, followed by endocrine disorder such as thyroid diseases, diabetes, respiratory diseases, and cancer in that order. The condition of patients during hospitalization was mild (41.3%) and severe (26.9%), but 31.7% had no clinical findings during the entire period.^[82]

Those infected got CT scans even asymptomatic and mild symptoms at the SDF Central Hospital, and half of them were found to be abnormalities. Their CT images showed a frosted glass-like shadow, a feature of the new coronavirus pneumonia. About one-third of patients with abnormal shadows in the lungs subsequently had worsening symptoms. They often started to get worse on the 7th to 10th day of their first symptoms, which progressed relatively slowly. Captain Tamura, a medical officer at The SDF Central Hospital, believes that the progression of inflammation in the patient's lungs in the absence of subjective symptoms is one of the reasons why the infections, which were thought to be mild, seemed to worsen rapidly. They called it "Silent Pneumonia" in the sense of pneumonia that develops without any symptoms. It was found that the deterioration of the patient's condition can be sensed by detecting decreased SpO2 (blood oxygen saturation) in the elderly and tachypnea in the young. The risk factors for mortality were mainly age (elderly people) and basic diseases, but there were not a few cases in which the disease became severe even though they were neither. However, the cause was not able to be grasped.^{[21][82]}

PCR test on board was of course widely carried out. However, there were quite a few cases in which even though those who had close contact with infected patients got CT scans and had "frosted glass-like shadows" in their lungs, PCR tests showed that they were negative. The patients were supposed to have two PCR tests at intervals to leave the hospital, but in many cases the second was positive, even though the first was negative. Tamura said that he felt the sensitivity of PCR test was about 70%. The percentage of "about 70%" was also stated by the doctor at the National Center for Global Health and Medicine who treated coronavirus infections. Sensitivity is an index to measure the proportion of positives, in the case of 70%, 30% of actual positives may be judged as false negatives and released.^[82] In fact, there were a series of people in Japan and abroad who tested positive after disembarking, even though they tested negative on board.^{[83][84][85][86]}

Demographics

Of the 3,711 people aboard *Diamond Princess* on the 20 January cruise, 1,045 were crew and 2,666 were passengers.^[87] The median age of the crew was 36 while the median age of the passengers was 69.^[87] The passengers were 55% female and the crew was 81% male.^[87] Of the 712 infections, 145 occurred in crew and 567 occurred in passengers.^[88]

Deaths

#	Date ^[a]	Age	Gnd.	From ^[b]	Notes	Ref.
1	2020.02.20	87	M	Japan (<u>Kanagawa</u>)	Hospitalized on 2020.02.11 ^[c]	[2] ^[89]
2	2020.02.20	84	F	Japan (Tokyo)	Hospitalized on 2020.02.12	[2] ^[89]
3	2020.02.23	80s	M	Japan	Hospitalized on 2020.02.05	[3]
4	2020.02.25	80s	M	Japan (Tokyo)	Hospitalized on 2020.02.09	[4]
5	2020.02.28	70s	F	Japan (Tokyo)	Hospitalized on 2020.02.07	[5]
6	2020.02.28	— ^[d]	M	United Kingdom	First death of a UK citizen from COVID-19	[6] ^[91]
7	2020.03.01	78	M	Australia	Evacuated to a hospital in <u>Perth, Australia</u> ^[e]	[7]
8	2020.03.06	—	M	Hong Kong		[8]
9	2020.03.19	70s	M	Canada		[9]
10	2020.03.22	70s	M	Japan		[10]
11	2020.03.22	70s	M	Japan		[10]
12	2020.03.28	60s	F	Hong Kong		[11]
13	2020.04.09	—	—	Japan		[12]
14	2020.04.14	70s	M	Japan (<u>Chiba</u>)	Hospitalized on 2020.02.07 ^[f]	[13]

Two passengers died on 20 February^[92] and a third on 23 February, all three of whom were Japanese citizens in their 80s.^[93] A fourth passenger, an elderly Japanese man, was reported on 25 February to have died.^[94] The fifth fatality, a Japanese woman in her 70s,^[5] and the sixth fatality, a British national in his 70s, both died on 28 February.^{[91][6]} A 78-year-old Australian national, who was evacuated from the ship, died on 1 March in Australia, making him the seventh.^[7] A Hong Kong national from the ship died on 6 March, making him the eighth.^[95] A Canadian man in his 70s died on 19 March, making him the ninth death.^{[96][9]} Two Japanese male passengers in their 70s died on 22 March making them the 10th and 11th deaths.^[10] A Hong Kong woman in her 60s died on 28 March, making her the twelfth death.^[11] The thirteenth fatality is a Japanese passenger who died on 9 April.^[12] The details concerning the passenger's age and gender were not disclosed according to their family's wishes.^[97] Another Japanese man in his 70s died on 14 April, making him the fourteenth fatality.^[13]

Itinerary

 Itinerary^[98]

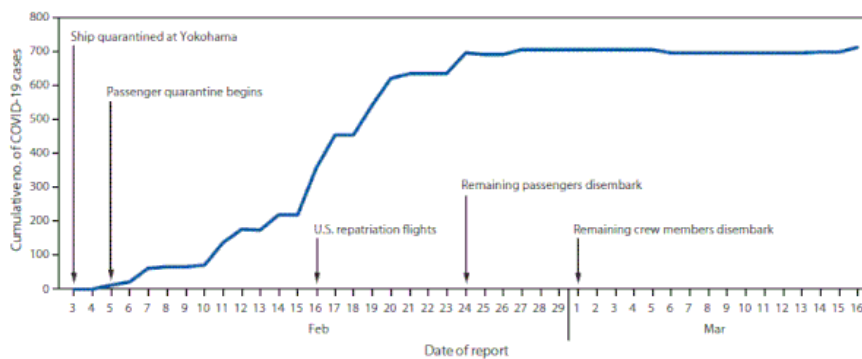
Date	Arrive	Depart	Port	80 y/o index case
20 January		17:00	<u>Yokohama</u> , Japan	embarked
22 January	7:00	21:00	<u>Kagoshima</u> , Japan	
25 January	7:00	23:59	<u>Hong Kong</u> , China	disembarked
27 January	7:00	16:00	<u>Chân Mây</u> , Vietnam	
28 January	8:00	18:00	<u>Hạ Long Bay</u> , Vietnam	
31 January	7:00	17:00	<u>Keelung</u> , Taiwan	
1 February	12:00	23:00	<u>Okinawa</u> , Japan	tested positive
4 February ^[9]			<u>Yokohama</u> , Japan	

Number of confirmed cases

Confirmed cases on *Diamond Princess* ()

Date (JST)	Tested (cumulative)	Confirmed (cumulative)	Notes and ref(s)
3 February			Berthed at the Port of Yokohama
5 February	31	10	^[99]
6 February	102	20	Calculated from reports ^{[99][100]}
7 February	273	61	^[100]
8 February	279	64	^[101]
9 February	336	70	^[102]
10 February	439	135	^[103]
12 February	492	174	Calculated from reports ^{[103][104]}
13 February	713	218	^[104]
15 February	930	285	Includes 73 asymptomatic cases ^[105]
16 February	1,219	355	Includes 111 asymptomatic cases ^[106]
17 February	1,723	454	Includes 189 asymptomatic cases ^[38]
18 February	2,404	542	Includes 254 asymptomatic cases ^[107]
19 February	3,011	621	Includes 322 asymptomatic cases ^[108]
20 February	3,063	634	Includes 328 asymptomatic cases ^[109]
26 February	4,061	705	Includes 392 asymptomatic cases ^[110]
5 March	3,618 ^{*1}	696 ^{*2}	Includes 410 asymptomatic cases ^[111]

*1: Actual number of individuals tested. *2: Excluding cases found after disembarkation.



Notes

- a. Date of announcement of death in italics if actual date of death was not reported
- b. national or resident
- c. Intubated on 2020.02.15.
- d. Although **Sky News** reported that the British passenger was in his 70s, many other news sources did not report this, and the press release by the Japanese Ministry of Health, Labour and Welfare did not mention his age either.^{[90][6][91]} As the fifth death occurred on the same day and was of a passenger in her 70s, it is unclear if Sky News mixed up the details of the two deaths, or if Sky News was able to obtain information that other news sources did not.
- e. Death was reported by Australian authorities.
- f. Disembarked and hospitalized on 2020.02.07 following a positive test result with only a mild cough. Intubated on 2020.02.16. Placed on **ECMO** on 2020.02.23.
- g. The original itinerary of *Diamond Princess* listed 4 February 2020 as its return date, but it arrived in port a day early.^[26]

References

1. "新型コロナウイルス感染症の現在の状況と厚生労働省の対応について(令和2年5月21日版)" (https://www.mhlw.go.jp/stf/newpage_11441.html). *Ministry of Health, Labour and Welfare* (Press release) (in Japanese). Retrieved 21 May 2020.

2. "横浜港で検疫中のクルーズ船に関連した患者の死亡について" (https://www.mhlw.go.jp/stf/newpage_09652.html). *Ministry of Health, Labour and Welfare* (Press release) (in Japanese). 20 February 2020. Archived (https://web.archive.org/web/20200229015044/https://www.mhlw.go.jp/stf/newpage_09652.html) from the original on 29 February 2020. Retrieved 23 March 2020.
3. "横浜港で検疫中のクルーズ船に関連した患者の死亡について" (https://www.mhlw.go.jp/stf/newpage_09707.html). *Ministry of Health, Labour and Welfare* (Press release) (in Japanese). 23 February 2020. Archived (https://web.archive.org/web/20200229015241/https://www.mhlw.go.jp/stf/newpage_09707.html) from the original on 29 February 2020. Retrieved 23 March 2020.
4. "横浜港で検疫中のクルーズ船に関連した患者の死亡について" (https://www.mhlw.go.jp/stf/newpage_09745.html). *Ministry of Health, Labour and Welfare* (Press release) (in Japanese). 25 February 2020. Archived (https://web.archive.org/web/20200301111303/https://www.mhlw.go.jp/stf/newpage_09745.html) from the original on 1 March 2020. Retrieved 23 March 2020.
5. "横浜港で検疫中のクルーズ船に関連した患者の死亡について" (https://www.mhlw.go.jp/stf/newpage_09850.html). *Ministry of Health, Labour and Welfare* (Press release) (in Japanese). 28 February 2020. Archived (https://web.archive.org/web/20200229165345/https://www.mhlw.go.jp/stf/newpage_09850.html) from the original on 29 February 2020. Retrieved 23 March 2020.
6. "横浜港で検疫中のクルーズ船に関連した患者の死亡について" (https://www.mhlw.go.jp/stf/newpage_09856.html). *Ministry of Health, Labour and Welfare* (Press release) (in Japanese). 28 February 2020. Archived (https://web.archive.org/web/20200401051845/https://www.mhlw.go.jp/stf/newpage_09856.html) from the original on 1 April 2020. Retrieved 23 March 2020.
7. "Coronavirus: man evacuated from Diamond Princess becomes first Australian to die of Covid-19" (<https://www.theguardian.com/world/2020/mar/01/dutton-says-extending-travel-ban-not-possible-and-defends-coronavirus-response>). *Guardian*. 1 March 2020. Archived (<https://web.archive.org/web/20200301014741/https://www.theguardian.com/world/2020/mar/01/dutton-says-extending-travel-ban-not-possible-and-defends-coronavirus-response>) from the original on 1 March 2020. Retrieved 1 March 2020.
8. "横浜港で検疫中のクルーズ船に関連した患者の死亡について" (https://www.mhlw.go.jp/stf/newpage_10030.html). *Ministry of Health, Labour and Welfare* (Press release) (in Japanese). 7 March 2020. Archived (https://web.archive.org/web/20200318093353/https://www.mhlw.go.jp/stf/newpage_10030.html) from the original on 18 March 2020. Retrieved 23 March 2020.
9. "横浜港で検疫中のクルーズ船に関連した患者の死亡について" (https://www.mhlw.go.jp/stf/newpage_10353.html). *Ministry of Health, Labour and Welfare* (Press release) (in Japanese). 20 March 2020. Archived (https://web.archive.org/web/20200320141201/https://www.mhlw.go.jp/stf/newpage_10353.html) from the original on 20 March 2020. Retrieved 23 March 2020.
10. "横浜港で検疫中のクルーズ船に関連した患者の死亡について" (https://www.mhlw.go.jp/stf/newpage_10393.html). *Ministry of Health, Labour and Welfare* (Press release) (in Japanese). 23 March 2020. Archived (https://web.archive.org/web/20200323132448/https://www.mhlw.go.jp/stf/newpage_10393.html) from the original on 23 March 2020. Retrieved 23 March 2020.
11. "横浜港で検疫を行ったクルーズ船に関連した患者の死亡について" (https://www.mhlw.go.jp/stf/newpage_10599.html). *Ministry of Health, Labour and Welfare* (Press release) (in Japanese). 30 March 2020. Archived (https://web.archive.org/web/20200331032238/https://www.mhlw.go.jp/stf/newpage_10599.html) from the original on 31 March 2020. Retrieved 30 March 2020.
12. "横浜港で検疫を行ったクルーズ船に関連した患者の死亡について" (https://www.mhlw.go.jp/stf/newpage_10802.html). *Ministry of Health, Labour and Welfare* (Press release) (in Japanese). 10 April 2020. Retrieved 17 April 2020.
13. "横浜港で検疫を行ったクルーズ船に関連した患者の死亡について" (https://www.mhlw.go.jp/stf/newpage_10870.html). *Ministry of Health, Labour and Welfare* (Press release) (in Japanese). 15 April 2020. Retrieved 17 April 2020.
14. "Cruise ship accounts for more than half of virus cases outside China – as it happened" (<https://www.theguardian.com/world/live/2020/feb/20/coronavirus-live-updates-diamond-princess-cruise-ship-japan-deaths-latest-news-china-infections>). *The Guardian*. 20 February 2020. Archived (<https://web.archive.org/web/20200304102207/https://www.theguardian.com/world/live/2020/feb/20/coronavirus-live-updates-diamond-princess-cruise-ship-japan-deaths-latest-news-china-infections>) from the original on 4 March 2020. Retrieved 5 April 2020.
15. [1] (<https://www.princess.com/html/global/brochures/au/au-aus-asia-2019-2020.pdf>)
16. "Timeline: coronavirus epidemic" (<https://bnonews.com/index.php/2020/01/timeline-coronavirus-epidemic/>). 23 January 2020. Archived (<https://web.archive.org/web/20200303013717/https://bnonews.com/index.php/2020/01/timeline-coronavirus-epidemic/>) from the original on 3 March 2020. Retrieved 3 March 2020.
17. "新型肺炎患者がいたクルーズ船 横浜港に着岸せず再検疫" (<https://www.asahi.com/articles/ASN2372X8N23UTIL03V.html>). *The Asahi Shimbun* (in Japanese). 3 February 2020. Retrieved 24 May 2020.
18. "CORONAVIRUS/How Taiwan has been able to keep COVID-19 at bay" (<https://focustaiwan.tw/society/202003160019>). *CNA/Focus Taiwan*.
19. Chen, CM; Jyan, HW; Chien, SC; Jen, HH; Hsu, CY; Lee, PC; Lee, CF; Yang, YT; Chen, MY; Chen, LS; Chen, HH; Chan, CC (5 May 2020). "Containing COVID-19 Among 627,386 Persons in Contact With the Diamond Princess Cruise Ship Passengers Who Disembarked in Taiwan: Big Data Analytics" (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7202311>). *Journal of Medical Internet Research*. **22** (5): e19540. doi:10.2196/19540 (<https://doi.org/10.2196%2F19540>). PMC 7202311 (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7202311>). PMID 32353827 (<https://pubmed.ncbi.nlm.nih.gov/32353827>).

20. "Coronavirus: Dozens more catch virus on quarantined cruise ship" (<https://www.bbc.co.uk/news/world-asia-51409800>). BBC. 7 February 2020. Archived (<https://web.archive.org/web/20200211024624/https://www.bbc.co.uk/news/world-asia-51409800>) from the original on 11 February 2020. Retrieved 11 February 2020.
21. "調査報告クルーズ船 ウイルス対策のカギは?" (<https://www.nhk.or.jp/special/plus/articles/20200507/index.html>). NHK (in Japanese). 7 May 2020. Retrieved 24 May 2020.
22. Yamahata, Y; Shibata, A (11 May 2020). "Preparation for Quarantine on the Cruise Ship Diamond Princess in Japan due to COVID-19" (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7216790>). *JMIR Public Health and Surveillance*. 6 (2): e18821. doi:10.2196/18821 (<https://doi.org/10.2196%2F18821>). PMC 7216790 (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7216790>). PMID 32365046 (<https://pubmed.ncbi.nlm.nih.gov/32365046>).
23. "クルーズ船10人がウイルス感染 3人が日本人、医療機関に搬送―厚労省" (<https://www.jiji.com/jc/article?k=2020020500169&g=soc>). *時事ドットコム* (in Japanese). 5 February 2020. Retrieved 24 May 2020.
24. "新型コロナウイルス感染者確認のクルーズ船、上陸認可はWHOの見解など参考に検討中＝官房長官" (<https://www.newsweekjapan.jp/stories/world/2020/02/who-9.php>). *Newsweek 日本版* (in Japanese). 4 February 2020. Retrieved 24 May 2020.
25. https://www.mhlw.go.jp/stf/newpage_09276.html
26. "Updates on Diamond Princess" (https://www.princess.com/news/notices_and_advisories/notices/diamond-princess-update.html). *Princess*. 4 March 2020. Archived (https://web.archive.org/web/20200302202526/https://www.princess.com/news/notices_and_advisories/notices/diamond-princess-update.html) from the original on 2 March 2020. Entries from 1 to 27 February 2020
27. Peel, Charlie; Snowden, Angelica (6 February 2020). "Coronavirus: Cases double on Diamond Princess overnight, still in lockdown" (<https://www.theaustralian.com.au/world/coronavirus-ten-confirmed-cases-on-diamond-princess-cruise-ship/news-story/aa92fa119c19384e4c50c36eee185553>). *The Australian*. Archived (<https://web.archive.org/web/20200209225432/https://www.theaustralian.com.au/world/coronavirus-ten-confirmed-cases-on-diamond-princess-cruise-ship/news-story/aa92fa119c19384e4c50c36eee185553>) from the original on 9 February 2020.
28. McCurry, Justin; Ratcliffe, Rebecca (5 February 2020). "Coronavirus: cruise ship carrying 3,700 quarantined in Japan after 10 test positive" (<https://www.theguardian.com/world/2020/feb/05/coronavirus-cruise-ship-carrying-3700-quarantined-in-japan-after-10-test-positive>). *The Guardian*. Archived (<https://web.archive.org/web/20200206132544/https://www.theguardian.com/world/2020/feb/05/coronavirus-cruise-ship-carrying-3700-quarantined-in-japan-after-10-test-positive>) from the original on 6 February 2020. Retrieved 18 February 2020.
29. "Coronavirus: Japan reports 41 more positive cases on cruise ship, total cases on Diamond Princess now 61" (<https://www.straitstimes.com/asia/east-asia/coronavirus-another-41-on-japan-cruise-tested-positive-nhk>). *The Straits Times*. 7 January 2020. Archived (<https://web.archive.org/web/20200207013919/https://www.straitstimes.com/asia/east-asia/coronavirus-another-41-on-japan-cruise-tested-positive-nhk>) from the original on 7 February 2020. Retrieved 7 January 2020.
30. Nussey, Sam; Maxwell, Kenneth (8 February 2020). "Japan confirms 3 more coronavirus cases on cruise liner; total now 64" (<https://www.reuters.com/article/us-china-health-japan-ship/japan-confirms-3-more-coronavirus-cases-on-cruise-liner-total-now-64-idUSKCN20203Q>). Reuters. Archived (<https://web.archive.org/web/20200208090001/https://www.reuters.com/article/us-china-health-japan-ship/japan-confirms-3-more-coronavirus-cases-on-cruise-liner-total-now-64-idUSKCN20203Q>) from the original on 8 February 2020. Retrieved 8 February 2020.
31. Hodo, Chikafumi (9 February 2020). "Japan Finds Six More Coronavirus Cases on Cruise Ship" (<https://www.bloomberg.com/news/articles/2020-02-09/japan-finds-6-more-coronavirus-cases-on-cruise-ship-tv-asahi>). *Bloomberg*. Archived (<https://web.archive.org/web/20200213092541/https://www.bloomberg.com/news/articles/2020-02-09/japan-finds-6-more-coronavirus-cases-on-cruise-ship-tv-asahi>) from the original on 13 February 2020. Retrieved 9 February 2020.
32. "At least 65 more people confirmed with coronavirus on cruise ship in Japan" (<https://www.straitstimes.com/asia/east-asia/sixty-more-people-confirmed-with-coronavirus-on-cruise-ship-in-japan>). *The Straits Times*. 10 February 2020. Archived (<https://web.archive.org/web/20200210141246/https://www.straitstimes.com/asia/east-asia/sixty-more-people-confirmed-with-coronavirus-on-cruise-ship-in-japan>) from the original on 10 February 2020. Retrieved 11 February 2020.
33. Takeuchi, Ichiro (24 March 2020). "COVID-19 first stage in Japan – how we treat 'Diamond Princess Cruise Ship' with 3700 passengers?". *Acute Medicine & Surgery*. 7 (1). doi:10.1002/ams2.506 (<https://doi.org/10.1002%2Fams2.506>). PMID 32313661 (<https://pubmed.ncbi.nlm.nih.gov/32313661>). "Patients for whom emergency treatment was deemed necessary regardless of PCR results → transportation via ambulance to an emergency hospital in Yokohama City PCR-positive patients with mild subjective symptoms → transportation to medical facilities in Kanagawa Prefecture PCR-positive patients without subjective symptoms → transportation to medical facilities outside of Kanagawa Prefecture (distantly located) via DMAT vehicles, private ambulances, Self-Defense Forces (SDF) vehicles, and buses, among others."
34. "クルーズ船で新たに39人感染確認 検疫官も" (<https://web.archive.org/web/20200212000114/https://www3.nhk.or.jp/news/html/20200212/k10012281811000.html>). *www3.nhk.or.jp* (in Japanese). NHK News Web. 12 February 2020. Archived from the original (<https://www3.nhk.or.jp/news/html/20200212/k10012281811000.html>) on 12 February 2020. Retrieved 12 February 2020.
35. Feuer, William (4 February 2020). "Princess Cruises quarantines 3,700 for two weeks on ship after 10 aboard test positive for coronavirus" (<https://www.cNBC.com/2020/02/04/princess-cruises-quarantines-3700-after-10-passengers-test-positive-for-virus.html>). *CNBC News*. Archived (<https://web.archive.org/web/20200206000118/https://www.cNBC.com/2020/02/04/princess-cruises-quarantines-3700-after-10-passengers-test-positive-for-virus.html>) from the original on 6 February 2020. Retrieved 12 February 2020.

36. "44 more on Diamond Princess cruise ship test positive for COVID-19" (<https://www.japantimes.co.jp/news/2020/02/13/national/coronavirus-diamond-princess/>). *The Japan Times Online*. 13 February 2020. Archived (<https://web.archive.org/web/20200213035018/https://www.japantimes.co.jp/news/2020/02/13/national/coronavirus-diamond-princess/>) from the original on 13 February 2020. Retrieved 13 February 2020.
37. 共同通信 (15 February 2020). "クルーズ船で新たに67人感染確認 | 共同通信" (<https://this.kiji.is/601332002602402913>). *共同通信* (in Japanese). Archived (<https://web.archive.org/web/20200215084620/https://this.kiji.is/601332002602402913>) from the original on 15 February 2020. Retrieved 15 February 2020.
38. "横浜港で検疫中のクルーズ船内で確認された新型コロナウイルス感染症について(第11報)" (https://www.mhlw.go.jp/stf/newpage_09568.html). *www.mhlw.go.jp*.
39. Leung, Hillary (17 February 2020). "Inside Life on the Crew Decks on Coronavirus-Stricken Diamond Princess Cruise Ship" (<https://time.com/5784190/diamond-princess-cruise-crew-coronavirus/>). *Time Magazine*. New York. Archived (<https://web.archive.org/web/20200223005020/https://time.com/5784190/diamond-princess-cruise-crew-coronavirus/>) from the original on 23 February 2020. Retrieved 23 February 2020.
40. "横浜港で検疫中のクルーズ船内で確認された新型コロナウイルス感染症について(第12報)". *www.mhlw.go.jp*.
41. "クルーズ船 米チャーター機で328人帰国" (<https://www.news24.jp/articles/2020/02/17/10596261.html>). *日テレNEWS24* (in Japanese). 17 February 2020. Retrieved 24 May 2020.
42. "Japan cruise ship's US passengers home for further quarantine" (<https://www.bbc.com/news/world-asia-china-51524460>). *BBC News*. 17 February 2020. Retrieved 24 May 2020.
43. "新型肺炎 クルーズ船対応にルールなし 船籍国・英政府の動き見え" (<https://www.sankeibiz.jp/macro/news/200218/mca2002181800018-n1.htm>). *SankeiBiz* (in Japanese). 18 February 2020. Retrieved 24 May 2020.
44. "クルーズ船の米国人乗客、帰国の途に 退避作戦に戸惑いも" (<https://www.cnn.co.jp/world/35149473.html>). *CNN.co.jp* (in Japanese). 17 February 2020. Retrieved 24 May 2020.
45. "米政府チャーター機、米国到着 14人の感染を確認" (<https://www.bbc.com/japanese/51540561>). *BBC News Japan* (in Japanese). 18 February 2020. Retrieved 24 May 2020.
46. Cheng, Laura; Bagshaw, Eryk (22 February 2020). "Five more Australian Diamond Princess cruise passengers diagnosed with coronavirus" (<https://www.smh.com.au/national/five-more-australian-diamond-princess-cruise-passengers-diagnosed-with-coronavirus-20200222-p543bh.html>). Archived (<https://web.archive.org/web/20200224001601/https://www.smh.com.au/national/five-more-australian-diamond-princess-cruise-passengers-diagnosed-with-coronavirus-20200222-p543bh.html>) from the original on 24 February 2020. Retrieved 16 March 2020.
47. "WHO、日本の当初判断「適切」" (<https://this.kiji.is/602594785169409121?c=39550187727945729>). *毎日新聞* (in Japanese). 19 February 2020. Retrieved 24 May 2020.
48. "動画削除は「しかる筋から船内改善と聞いた」岩田健太郎氏" (<https://www.m3.com/open/iryolshin/article/730393/>). *m3.com* (in Japanese). 20 February 2020. Retrieved 24 May 2020.
49. Feuer, William (March 23, 2020). "CDC says coronavirus RNA found in Princess Cruise ship cabins up to 17 days after passengers left" (<https://www.cnn.com/2020/03/23/cdc-coronavirus-survived-in-princess-cruise-cabins-up-to-17-days-after-passengers-left.html>). *CNBC*. Archived (<https://web.archive.org/web/20200324182923/https://www.cnn.com/2020/03/23/cdc-coronavirus-survived-in-princess-cruise-cabins-up-to-17-days-after-passengers-left.html>) from the original on 24 March 2020. Retrieved March 24, 2020.
50. Moriarty, Leah F.; et al. (23 March 2020). "Public Health Responses to COVID-19 Outbreaks on Cruise Ships — Worldwide, February–March 2020". *MMWR. Morbidity and Mortality Weekly Report*. **69** (12): 347–352. doi:10.15585/mmwr.mm6912e3 (<https://doi.org/10.15585%2Fmmwr.mm6912e3>). PMID 32214086 (<https://pubmed.ncbi.nlm.nih.gov/32214086>).
51. "All passengers and crew leave virus-hit Diamond Princess cruise ship" (<https://www.japantimes.co.jp/news/2020/03/02/national/coronavirus-diamond-princess-passengers-crew>). *The Japan Times*. 2 March 2020. Archived (<https://web.archive.org/web/20200303131406/https://www.japantimes.co.jp/news/2020/03/02/national/coronavirus-diamond-princess-passengers-crew>) from the original on 3 March 2020. Retrieved 3 March 2020.
52. Rakhmat Nur Hakim (March 6, 2020). "Sembuh dari Corona, 2 ABK Diamond Princess Akan Dipulangkan dari Jepang" (<https://nasional.kompas.com/read/2020/03/06/15253791/sembuh-dari-corona-2-abk-diamond-princess-akan-dipulangkan-dari-jepang>). Archived (<https://web.archive.org/web/20200313021459/https://nasional.kompas.com/read/2020/03/06/15253791/sembuh-dari-corona-2-abk-diamond-princess-akan-dipulangkan-dari-jepang>) from the original on 13 March 2020. Retrieved 30 March 2020.
53. Media, Kompas Cyber. "Kasus 6 di Indonesia, Pasien Covid-19 Kerja di Kapal Diamond Princess" (<https://nasional.kompas.com/read/2020/03/08/17000911/kasus-6-di-indonesia-pasien-covid-19-kerja-di-kapal-diamond-princess>). *KOMPAS.com* (in Indonesian). Archived (<https://web.archive.org/web/20200312231913/https://nasional.kompas.com/read/2020/03/08/17000911/kasus-6-di-indonesia-pasien-covid-19-kerja-di-kapal-diamond-princess>) from the original on 12 March 2020. Retrieved 8 March 2020.
54. Egi Adyatama (13 March 2020). "9 ABK Diamond Princess Sembuh, Pulang dari Jepang Malam Ini" (<https://nasional.tempo.co/read/1319324/9-abk-diamond-princess-sembuh-pulang-dari-jepang-malam-ini/full&view=ok>).
55. "「ダイヤモンド・プリンセス」が横浜港を出港 マレーシアへ" (<https://www3.nhk.or.jp/news/html/20200516/k10012433121000.html>). NHK. 16 May 2020.

56. "Coronavirus: Passengers leave Diamond Princess amid criticism of Japan" (<https://www.bbc.com/news/world-asia-51555420>). *BBC News*. 17 February 2020. Retrieved 20 May 2020.
57. Nicholas Ryan Aditya (April 4, 2020). "Mengapa Penumpang Kapal Pesiar Lebih Rentan Terpapar Virus Corona Dibanding Penumpang Pesawat?" (<https://travel.kompas.com/read/2020/04/04/120100827/mengapa-penumpang-kapal-pesiar-lebih-rentan-terpapar-virus-corona-dibanding>).
58. Bhattacharya, Suryatapa (19 February 2020). "'I Was So Scared': Infectious Disease Doctor's Day on Japan's Coronavirus Cruise Ship" (<https://www.wsj.com/articles/coronavirus-quarantine-on-cruise-ship-ends-healthy-passengers-cleared-to-leave-11582088083>). *The Wall Street Journal*. Archived (<https://web.archive.org/web/20200220013503/https://www.wsj.com/articles/coronavirus-quarantine-on-cruise-ship-ends-healthy-passengers-cleared-to-leave-11582088083>) from the original on 20 February 2020. Retrieved 20 February 2020.
59. McCurry, Justin (19 February 2020). "Coronavirus: Diamond Princess exodus begins amid criticism over quarantine" (<https://www.theguardian.com/world/2020/feb/19/coronavirus-diamond-princess-exodus-begins-amid-criticism-over-quarantine>). *The Guardian*. Archived (<https://web.archive.org/web/20200219171635/https://www.theguardian.com/world/2020/feb/19/coronavirus-diamond-princess-exodus-begins-amid-criticism-over-quarantine>) from the original on 19 February 2020. Retrieved 20 February 2020.
30. Normile, Dennis (19 February 2020). "Scientist decries 'completely chaotic' conditions on cruise ship Japan quarantined after viral outbreak" (<https://www.sciencemag.org/news/2020/02/scientist-decries-completely-chaotic-conditions-cruise-ship-japan-quarantined-after>). *Science*. Archived (<https://web.archive.org/web/20200220000025/https://www.sciencemag.org/news/2020/02/scientist-decries-completely-chaotic-conditions-cruise-ship-japan-quarantined-after>) from the original on 20 February 2020. Retrieved 20 February 2020.
31. Yoshida, Reiji (19 February 2020). "Expert stirs controversy with video on 'inadequate' virus controls on Diamond Princess" (<https://www.japantimes.co.jp/news/2020/02/19/national/video-covid-19-controls-diamond-princess/>). *Japan Times*. Archived (<https://web.archive.org/web/20200220091326/https://www.japantimes.co.jp/news/2020/02/19/national/video-covid-19-controls-diamond-princess/>) from the original on 20 February 2020. Retrieved 20 February 2020.
32. Sim, Walter (19 February 2020). "Coronavirus: Did Japan miss the boat in containing Diamond Princess outbreak?" (<https://www.straitstimes.com/asia-east-asia/coronavirus-did-japan-miss-the-boat-in-containing-diamond-princess-outbreak>). *The Straits Times*. Archived (<https://web.archive.org/web/20200303094739/https://www.straitstimes.com/asia-east-asia/coronavirus-did-japan-miss-the-boat-in-containing-diamond-princess-outbreak>) from the original on 3 March 2020. Retrieved 3 March 2020.
33. Hui, Mary (19 February 2020). "An expert booted off the Diamond Princess says Japan's coronavirus control is 'completely chaotic'" (<https://qz.com/1804615/japanese-expert-on-chaotic-coronavirus-infection-control-on-diamond-princess/>). *Quartz*. Archived (<https://web.archive.org/web/20200219235956/https://qz.com/1804615/japanese-expert-on-chaotic-coronavirus-infection-control-on-diamond-princess/>) from the original on 19 February 2020. Retrieved 20 February 2020.
34. "「未曾有の事態だった」、クルーズ船対応の橋本副大臣が会見" (<https://www.m3.com/open/iryolshin/article/740583/>). *m3.com* (in Japanese). 16 March 2020. Retrieved 25 May 2020.
35. "Japan disease expert pulls videos blasting situation on virus-hit ship" (<https://english.kyodonews.net/news/2020/02/4bbd92cd4f91-breaking-news-japan-scholar-removes-videos-blasting-situation-on-virus-hit-ship.html>). *Kyodo News*. 20 February 2020. Archived (<https://web.archive.org/web/20200220065437/https://english.kyodonews.net/news/2020/02/4bbd92cd4f91-breaking-news-japan-scholar-removes-videos-blasting-situation-on-virus-hit-ship.html>) from the original on 20 February 2020. Retrieved 20 February 2020.
36. "政府、岩田教授に退去要請 船内隔離「有効」と反論" (<https://www.jiji.com/jc/article?k=2020022000615&g=pol>). *時事ドットコムニュース* (in Japanese). 20 February 2020. Retrieved 28 May 2020.
37. Yamahata, Y; Shibata, A (11 May 2020). "Preparation for Quarantine on the Cruise Ship Diamond Princess in Japan due to COVID-19" (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7216790>). *JMIR Public Health and Surveillance*. 6 (2): e18821. doi:10.2196/18821 (<https://doi.org/10.2196%2F18821>). PMC 7216790 (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7216790>). PMID 32365046 (<https://pubmed.ncbi.nlm.nih.gov/32365046>).
38. "Coronavirus: Passengers leave Diamond Princess amid criticism of Japan" (<https://www.bbc.com/news/world-asia-51555420>). *BBC*. 19 February 2020. Archived (<https://archive.today/20200220044215/https://www.bbc.com/news/world-asia-51555420>) from the original on 20 February 2020. Retrieved 20 February 2020.
39. "Update on the Diamond Princess Cruise Ship in Japan" (<https://www.cdc.gov/media/releases/2020/s0218-update-diamond-princess.html>). *CDC*. 18 February 2020. Archived (<https://web.archive.org/web/20200220004255/https://www.cdc.gov/media/releases/2020/s0218-update-diamond-princess.html>) from the original on 20 February 2020. Retrieved 20 February 2020.
70. "クルーズ船の告発動画、岩田教授を手引した高山医師が事実や誤りを解説" (https://news.biglobe.ne.jp/domestic/0220/blnews_200220_6019516149.html). *BIGLOBE* (in Japanese). 20 February 2020. Retrieved 25 May 2020.
71. "新型肺炎：岩田健太郎教授の告発に反論した高山義浩医師（沖縄県立中部病院）の正論" (<https://hi-hyou.com/archives/9250>). *批評.COM* (in Japanese). 20 February 2020. Retrieved 25 May 2020.
72. Yoshida, Reiji (20 February 2020). "COVID-19 spread on Diamond Princess before quarantine, report suggests" (<https://www.japantimes.co.jp/news/2020/02/20/national/coronavirus-diamond-princess-before-quarantine/>). *Japan Times*. Archived (<https://web.archive.org/web/20200220142701/https://www.japantimes.co.jp/news/2020/02/20/national/coronavirus-diamond-princess-before-quarantine/>) from the original on 20 February 2020. Retrieved 20 February 2020.

73. Apuzzo, Matt; Rich, Motoko; Yaffe-Bellany, David (8 March 2020). "Failures on the Diamond Princess Shadow Another Cruise Ship Outbreak" (<https://www.nytimes.com/2020/03/08/world/asia/coronavirus-cruise-ship.html>). *The New York Times*. Archived (<https://web.archive.org/web/20200312042510/https://www.nytimes.com/2020/03/08/world/asia/coronavirus-cruise-ship.html>) from the original on 12 March 2020. Retrieved 12 March 2020.
74. Essig, Blake; Swails, Brent; Wakatsuki, Yoko; Westcott, Ben (27 February 2020). "Top Japanese government adviser says Diamond Princess quarantine was flawed" (<https://edition.cnn.com/2020/02/27/asia/japan-diamond-princess-quarantine-crew-intl-hnk/index.html>). *CNN*. Archived (<https://web.archive.org/web/20200303152626/https://edition.cnn.com/2020/02/27/asia/japan-diamond-princess-quarantine-crew-intl-hnk/index.html>) from the original on 3 March 2020. Retrieved 3 March 2020.
75. McFall-Johnsen, Morgan (28 February 2020). "How the 'failed' quarantine of the Diamond Princess cruise ship started with 10 coronavirus cases and ended with more than 700" (<https://www.businessinsider.com/how-diamond-princess-cruise-ship-coronavirus-quarantine-went-wrong-2020-2>). *Business Insider*. Archived (<https://web.archive.org/web/20200302195829/https://www.businessinsider.com/how-diamond-princess-cruise-ship-coronavirus-quarantine-went-wrong-2020-2>) from the original on 2 March 2020. Retrieved 3 March 2020.
76. Ratcliffe, Rebecca; Fonbuena, Carmella (6 March 2020). "Inside the cruise ship that became a coronavirus breeding ground" (<https://www.theguardian.com/global-development/2020/mar/06/inside-the-cruise-ship-that-became-a-coronavirus-breeding-ground-diamond-princess>). *The Guardian*. Archived (<https://web.archive.org/web/20200308062956/https://www.theguardian.com/global-development/2020/mar/06/inside-the-cruise-ship-that-became-a-coronavirus-breeding-ground-diamond-princess>) from the original on 8 March 2020. Retrieved 8 March 2020.
77. Patton, Elaina (11 March 2020). "A Cruise-Ship Crew Member Describes a Failed Effort to Contain the Coronavirus" (<https://www.newyorker.com/news/as-told-to/a-cruise-ship-crew-member-describes-a-failed-effort-to-contain-the-coronavirus>). *New Yorker*. Archived (<https://web.archive.org/web/20200315080257/https://www.newyorker.com/news/as-told-to/a-cruise-ship-crew-member-describes-a-failed-effort-to-contain-the-coronavirus>) from the original on 15 March 2020. Retrieved 12 March 2020.
78. Bendix, Aria (March 17, 2020). "The earliest coronavirus cases on the Diamond Princess cruise ship likely spread via workers who prepared food, a new investigation found" (<https://www.businessinsider.com/diamond-princess-coronavirus-outbreak-investigation-food-workers-2020-3>). *Business Insider*. Archived (<https://web.archive.org/web/20200324182022/https://www.businessinsider.com/diamond-princess-coronavirus-outbreak-investigation-food-workers-2020-3>) from the original on 24 March 2020. Retrieved March 24, 2020.
79. Vera, Amir; Erdman, Shelby Lin (March 24, 2020). "Nearly half of Diamond Princess cruise ship passengers and crew who had coronavirus were asymptomatic when tested, CDC report says" (<https://edition.cnn.com/2020/03/24/us/diamond-princess-cruise-ship-asymptomatic-tests/index.html>). *CNN*. Archived (<https://web.archive.org/web/20200324182020/https://edition.cnn.com/2020/03/24/us/diamond-princess-cruise-ship-asymptomatic-tests/index.html>) from the original on 24 March 2020. Retrieved March 24, 2020.
30. Rocklöv, J.; Sjödin, H.; Wilder-Smith, A. (2020). "COVID-19 outbreak on the Diamond Princess cruise ship: estimating the epidemic potential and effectiveness of public health countermeasures" (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7107563>). *Journal of Travel Medicine*. **27** (3). doi:10.1093/jtm/taaa030 (<https://doi.org/10.1093%2Fjtm%2Ftaaa030>). PMC 7107563 (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7107563>). PMID 32109273 (<https://pubmed.ncbi.nlm.nih.gov/32109273>).
31. "Epidemic Calculator" (<http://gabgoh.github.io/COVID/index.html>). *gabgoh.github.io*. Archived (<https://web.archive.org/web/20200329161621/http://gabgoh.github.io/COVID/index.html>) from the original on 29 March 2020. Retrieved 29 March 2020.
32. "クルーズ船112人治療で「院内感染」ゼロ!「自衛隊中央病院」はなぜ奇跡を起こせたのか" (<https://www.dailyshincho.jp/article/2020/04300801/?all=1>). *週刊新潮* (in Japanese). 30 April 2020. Retrieved 24 May 2020.
33. "クルーズ船下船の乗客に陽性反応 船内検査では陰性" (<https://www.asahi.com/articles/ASN2Q7HF0N2QUTIL01L.html>). *朝日新聞* (in Japanese). 22 February 2020. Retrieved 28 May 2020.
34. "クルーズ船の60代乗客が感染 陽性→2度の陰性→陽性" (<https://www.asahi.com/articles/ASN375RLFN37UBUB00B.html>). *朝日新聞* (in Japanese). 7 March 2020. Retrieved 28 May 2020.
35. "豪乗客2人が帰国後陽性 陰性のクルーズ客、下船終了へ" (<https://www.nikkei.com/article/DGXMZO55906320R20C20A2AM1000/>). *日本経済新聞* (in Japanese). 21 February 2020. Retrieved 28 May 2020.
36. "ルポ 豪華客船「船内隔離」14日間の真実" (<https://bungeishunju.com/n/n49b0c5bedd39>). *文藝春秋digital* (in Japanese). 10 March 2020. Retrieved 28 May 2020.
37. Moriarty, Leah F. (27 March 2020). "Public Health Responses to COVID-19 Outbreaks on Cruise Ships — Worldwide, February–March 2020". *MMWR. Morbidity and Mortality Weekly Report*. **69** (12): 347–352. doi:10.15585/mmwr.mm6912e3 (<https://doi.org/10.15585%2Fmmwr.mm6912e3>). PMID 32214086 (<https://pubmed.ncbi.nlm.nih.gov/32214086>).
38. "Japan: novel coronavirus patients on Diamond Princess 2020" (<https://www.statista.com/statistics/1099517/japan-coronavirus-patients-diamond-princess/>). *Statista*. Archived (<https://web.archive.org/web/20200401070030/https://www.statista.com/statistics/1099517/japan-coronavirus-patients-diamond-princess/>) from the original on 1 April 2020. Retrieved 31 March 2020.
39. <http://archive.is/9bMYm>
30. <https://news.sky.com/story/coronavirus-british-passenger-from-diamond-princess-cruise-ship-dies-11945226>

31. "British man dies from coronavirus in Japan" (<https://www.bbc.com/news/uk-51677846>). *BBC News*. 28 February 2020. Archived (<https://web.archive.org/web/20200229030801/https://www.bbc.com/news/uk-51677846>) from the original on 29 February 2020. Retrieved 29 February 2020.
32. "Two Diamond Princess passengers infected with coronavirus die as Japan reports new cases" (<https://www.japantimes.co.jp/news/2020/02/20/national/coronavirus-deaths-diamond-princess/>). *Japan Times*. 20 February 2020. Archived (<https://web.archive.org/web/20200220091331/https://www.japantimes.co.jp/news/2020/02/20/national/coronavirus-deaths-diamond-princess/>) from the original on 20 February 2020. Retrieved 20 February 2020.
33. Buckland, Kevin (23 February 2020). "Third death from Japan cruise ship as health minister vows to set virus strategy" (<https://www.reuters.com/article/us-china-health-japan/third-death-from-japan-cruise-ship-as-health-minister-vows-to-set-virus-strategy-idUSKCN20H04R>). Reuters. Archived (<https://web.archive.org/web/20200223134933/https://www.reuters.com/article/us-china-health-japan/third-death-from-japan-cruise-ship-as-health-minister-vows-to-set-virus-strategy-idUSKCN20H04R>) from the original on 23 February 2020. Retrieved 23 February 2020.
34. "Fourth Diamond Princess cruise ship passenger has died, reports" (<https://www.usatoday.com/story/travel/2020/02/25/four-more-diamond-princess-cruise-ship-passengers-have-coronavirus/4872259002/>). *USA Today*. Archived (<https://web.archive.org/web/20200226225531/https://www.usatoday.com/story/travel/2020/02/25/four-more-diamond-princess-cruise-ship-passengers-have-coronavirus/4872259002/>) from the original on 26 February 2020. Retrieved 26 February 2020.
35. "クルーズ船の香港の男性が死亡 乗船者で7人目:朝日新聞デジタル" (<https://www.asahi.com/articles/ASN3774W0N37ULBJ005.html>). *朝日新聞デジタル* (in Japanese). Archived (<https://web.archive.org/web/20200308072043/https://www.asahi.com/articles/ASN3774W0N37ULBJ005.html>) from the original on 8 March 2020. Retrieved 7 March 2020.
36. "70-year-old Canadian man who was on Diamond Princess cruise ship dies" (<https://mainichi.jp/english/articles/20200321/p2g/00m/0na/050000c>). *The Mainichi*. 21 March 2020. Archived (<https://web.archive.org/web/20200321102747/https://mainichi.jp/english/articles/20200321/p2g/00m/0na/050000c>) from the original on 21 March 2020. Retrieved 21 March 2020.
37. "新型コロナ集団感染 クルーズ船の日本人乗船者1人死亡" (<https://www3.nhk.or.jp/news/html/20200410/k10012381221000.html>). *NHK* (in Japanese). 10 April 2020. Retrieved 15 April 2020.
38. "Diamond Princess Itinerary" (<http://crew-center.com/diamond-princess-itinerary>). Archived (<https://web.archive.org/web/20200216123833/http://crew-center.com/diamond-princess-itinerary>) from the original on 16 February 2020. Retrieved 18 February 2020.
39. "横浜港に寄港したクルーズ船内で確認された新型コロナウイルス感染症について" (https://www.mhlw.go.jp/stf/newpage_09276.html). *www.mhlw.go.jp*.
40. "横浜港に寄港したクルーズ船内で確認された新型コロナウイルス感染症について" (https://www.mhlw.go.jp/stf/newpage_09340.html). *www.mhlw.go.jp*.
41. "横浜港に寄港したクルーズ船内で確認された新型コロナウイルス感染症について(第4報)" (https://www.mhlw.go.jp/stf/newpage_09398.html). *www.mhlw.go.jp*.
42. "横浜港で検疫中のクルーズ船内で確認された新型コロナウイルス感染症について(第5報)" (https://www.mhlw.go.jp/stf/newpage_09405.html). *www.mhlw.go.jp*.
43. "横浜港で検疫中のクルーズ船内で確認された新型コロナウイルス感染症について(第6報)" (https://www.mhlw.go.jp/stf/newpage_09419.html). *www.mhlw.go.jp*.
44. "横浜港で検疫中のクルーズ船内で確認された新型コロナウイルス感染症について(第8報)" (https://www.mhlw.go.jp/stf/newpage_09425.html). *www.mhlw.go.jp*.
45. "横浜港で検疫中のクルーズ船内で確認された新型コロナウイルス感染症について(第9報)" (https://www.mhlw.go.jp/stf/newpage_09542.html). *www.mhlw.go.jp*.
46. "横浜港で検疫中のクルーズ船内で確認された新型コロナウイルス感染症について(第10報)" (https://www.mhlw.go.jp/stf/newpage_09547.html). *www.mhlw.go.jp*.
47. "横浜港で検疫中のクルーズ船内で確認された新型コロナウイルス感染症について(第12報)" (https://www.mhlw.go.jp/stf/newpage_09606.html). *www.mhlw.go.jp*.
48. "横浜港で検疫中のクルーズ船内で確認された新型コロナウイルス感染症について(第13報)" (https://www.mhlw.go.jp/stf/newpage_09640.html). *www.mhlw.go.jp*.
49. "横浜港で検疫中のクルーズ船内で確認された新型コロナウイルス感染症について(第14報)" (https://www.mhlw.go.jp/stf/newpage_09668.html). *www.mhlw.go.jp*.
40. "横浜港で検疫中のクルーズ船内で確認された新型コロナウイルス感染症について(2月26日公表分)" (https://www.mhlw.go.jp/stf/newpage_09783.html). *www.mhlw.go.jp*.
41. "横浜港で検疫中のクルーズ船の乗客・乗員に係る新型コロナウイルス感染症PCR検査結果について" (https://www.mhlw.go.jp/stf/newpage_09997.html). *www.mhlw.go.jp*. 5 March 2020.

Retrieved from "https://en.wikipedia.org/w/index.php?title=COVID-19_pandemic_on_Diamond_Princess&oldid=963618842"

This page was last edited on 20 June 2020, at 20:42 (UTC).

Text is available under the [Creative Commons Attribution-ShareAlike License](#); additional terms may apply. By using this site, you agree to the [Terms of Use](#) and [Privacy Policy](#). Wikipedia® is a registered trademark of the [Wikimedia Foundation, Inc.](#), a non-profit organization.