

# Exhibit E

# We're in a Petri Dish': How a Coronavirus Ravaged a Cruise Ship

More than three days passed before Japan imposed a quarantine. That delay and other missteps helped produce the largest outbreak of the virus beyond China.



By Motoko Rich

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YOKOHAMA, Japan — The captain came over the intercom early in the evening: A passenger who had left the ship nine days earlier had tested positive for the new coronavirus sweeping through China.

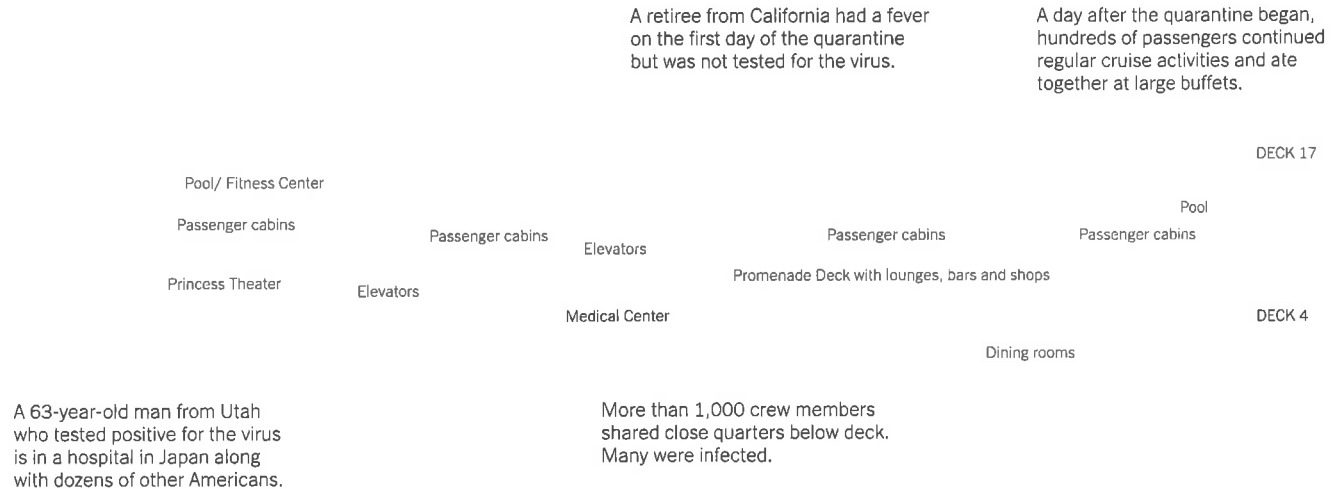
While the guests on board were unnerved, it was the final night of their two-week luxury cruise aboard the Diamond Princess. The revelry continued as the ship headed toward the port in Yokohama, Japan's second-largest city.

Passengers dined on filet mignon, attended shows in the 700-seat theater and crowded the bars and dance floors into the night. Cruise directors hastily distributed a slate of activities, including Ping-Pong, karaoke and Bollywood dance lessons, to occupy guests who would have to remain on the ship another day while public health officials screened them for symptoms.

Hoping to soak up the final hours of their romantic voyage, Tyler and Rachel Torres, newlyweds from Irving, Texas, took in a performance by a torch singer that evening. "We didn't really consider the danger of leaving the room," said Ms. Torres, 24, an occupational therapist. "And since we were on our honeymoon, we refused to waste our last moments on the cruise."

As the music played on, passengers were potentially exposed to the virus. In all, it took Japanese officials more than 72 hours to impose a lockdown after they were first notified about the case connected to the ship.

The delay by the Japanese government, along with slapdash and ineffective containment measures during the two-week isolation period, would help turn the Diamond Princess into a floating epidemiological disaster.



By Anjali Singhvi • Locations are approximate. Source: Princess Cruise Lines

Feverish passengers were left in their rooms for days without being tested for the virus. Health officials and even some medical professionals worked on board without full protective gear. Sick crew members slept in cabins with roommates who continued their duties across the ship, undercutting the quarantine.

With 634 infections and two deaths, the cruise ship represents the largest concentration of coronavirus cases outside China, meriting its own category in the data compiled by the World Health Organization.

The U.S. government this past week allowed 14 Americans who were infected to board evacuation flights with hundreds of passengers who weren't. Japanese officials have since let close to 1,000 passengers who tested negative walk free, even though experts fear some of them have been exposed and could later develop symptoms. Crew members were expected to start leaving this weekend.

On Saturday, the health minister admitted that 23 passengers had been released from the ship without taking a valid recent test and had traveled by public transit after disembarking this past week.

Now that the quarantine has ended and most of the passengers have left, the concern is that they could start spreading the virus on shore.

Japanese officials said they did the best they could in a fast-moving situation, as they tried to keep the virus from spreading within the country. After confirming the first cases among those on board, the authorities said, they moved to isolate passengers to reduce transmission. The government has said the quarantine was largely effective.

The ship operator, Princess Cruises, said Japanese authorities took the lead in testing and protocols. It added that the "focus has been and remains the safety, health and well-being of our guests and crew."

In the early hours of Feb. 2, before the ship had even docked in Yokohama, Hong Kong officials informed the Japanese health ministry about the initial infected passenger.

Recreational area    Nightclub    Bar    Pool and Fitness Center

By The New York Times ■ Satellite image by Maxar Technologies taken on Feb. 6.

A spokeswoman for Princess Cruises said the company received "formal verification" of the infection from Hong Kong on Feb. 3, and announced it to passengers on the ship that evening.

**The Coronavirus Outbreak**

What do you need to know? Start here.

Updated Feb. 10, 2020

- **What is a Coronavirus?**  
It is a novel virus named for the crown-like spikes that protrude from its surface. The coronavirus can infect both animals and people, and can cause a range of respiratory illnesses from the common cold to more dangerous conditions like Severe Acute Respiratory Syndrome, or SARS.
- **How contagious is the virus?**  
According to preliminary research, it seems moderately infectious, similar to SARS, and is possibly transmitted through the air. Scientists have estimated that each infected person could spread it to somewhere between 1.5 and 3.5 people without effective containment measures.

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Only as the parties and shows ended around 11 that night were guests advised to stick to their rooms. After the boat docked in Yokohama, medical officers boarded the ship and went door to door taking temperatures, checking for coughs and testing some passengers for the virus.

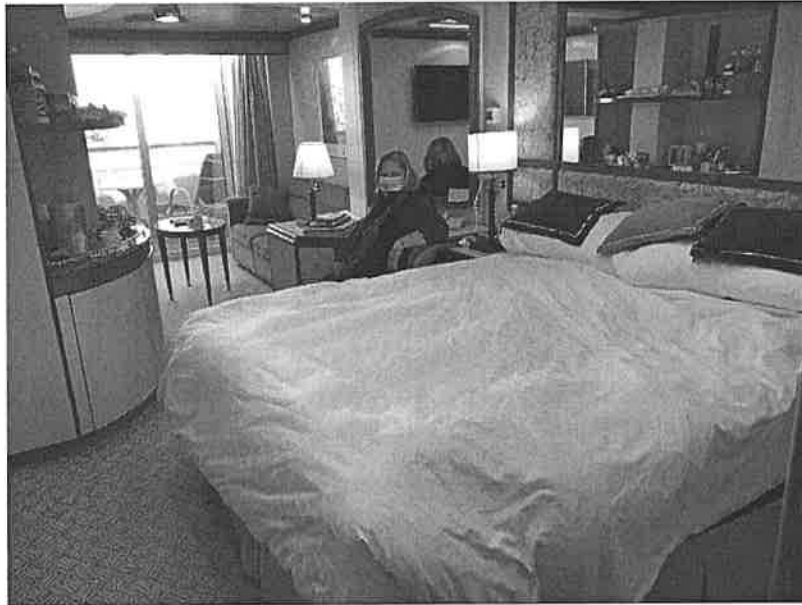
The cruise directors scratched the planned activities the next day, while the screening continued. People still mingled on board, lining up at large buffets for meals. They used communal ladles and tongs, and shared salt and pepper shakers on tables.

Promenade deck with  
lounges, bars and shops

Passengers figured their departure would be delayed by only a day or so. Many were walking up to breakfast when the captain came over the intercom again on the morning of Feb. 5.

The Japanese health ministry had now confirmed 10 cases of the coronavirus on the ship, he told them.

Guests needed to return to their rooms immediately, where they would have to stay, isolated, for the next 14 days.



Gay Courter, an American novelist, and her husband, Philip, were among the 2,666 passengers who were quarantined. Philip Courter

## Tainted Memories

Trapped in their cabins, the 2,666 passengers now had time to recall every encounter that might have exposed them to the virus in the days before the ship's lockdown.

DECK 14

Passenger cabins

There was the buffet on Deck 14, where guests were urged to wash their hands before joining the line, though hygiene habits varied widely, some passengers recalled. Now they wondered why the buffet had remained open even after the ship's officers learned about the infected guest.

Memories of art auctions, afternoon high teas, quiz nights and mahjong games all took on a sinister hue.

"Everything looks tainted in retrospect," said Sarah Arana, 52, a medical social worker from Paso Robles, Calif., who left on an American evacuation flight.

A Princess spokeswoman said that the crew had carried out "routine environmental cleaning and sanitizing" using disinfectant that is "known to quickly kill coronaviruses in 30 seconds."

Passengers worried about their excursions on shore. The infected passenger had taken a bus tour in Kagoshima, a city in southern Japan.

Gay Courter, 75, an American novelist from Crystal River, Fla., who once set a murder mystery on a cruise, dwelled on the ship's last stop, in Naha, the capital of Okinawa. As people disembarked, public health officials took their temperatures — a measure that was becoming more commonplace as the virus spiraled in China.

Looking back, Ms. Courter wondered if the coronavirus had already started to spread. With her husband, Philip, and a group of friends, she ate noodles and fried sweet potatoes at an outdoor stall.

"In my heart, I regret doing that," she said, "because it was such a crowded place and there were people from the ship crawling around the town."

Each day, more cases emerged: 10, another 10, then a spike of 41.

What distressed passengers most was a sense that information was being withheld. Hours would pass between when the health ministry leaked new cases to the media and the people on board were notified.

Passengers took to counting ambulances lined up on the pier to guess how many new infections would be announced that day. Japanese guests hung banners off balconies, with one reading, "Serious lack of medicine, lack of information."

## 'No road maps'

Policies and protocols shifted as the quarantine wore on.

On the second day, health officials began letting those in windowless cabins out for fresh air breaks. It wasn't until the next day that passengers were warned to keep more than six feet away from anyone else. Mr. Torres, a nurse who has since evacuated with his wife, noticed that others were not always vigilant about wearing masks on deck.

On the fifth day, passengers were issued heavy-duty N95 masks and advised to wear them when they opened their doors to accept deliveries of meals and amenities from the crew.

Halfway into the quarantine, the Japanese government announced that some people would be eligible to continue their confinement onshore — those 80 or older with underlying medical conditions or windowless cabins.

The changes didn't inspire confidence. Passengers were waiting days for prescriptions to be filled for chronic conditions like diabetes and high blood pressure. People were running out of toothpaste and clean underwear.

Tadashi Chida, a passenger in his 70s, sent a handwritten letter to Japan's health ministry complaining that the crew seemed overwhelmed and that quarantine officers were not attending to those with symptoms.

"The ship is out of control," Mr. Chida said, adding that his wife had waited nearly a week for medication.

"An outbreak is happening," he said. "We have no road maps."

Yoshihide Suga, the chief cabinet secretary to Prime Minister Shinzo Abe, said this past week that the country's authorities had "made the maximum consideration to secure the health of passengers and crew."

At first, health officials didn't test everyone, saying they lacked the resources. Instead, they focused on high-risk individuals: those who had direct contact with the infected passenger, and later older and symptomatic people.

Some passengers had trouble getting medical attention, even when they started to show possible symptoms. On the first full day of the quarantine, Carol Montgomery, 67, a retired administrative assistant from San Clemente, Calif., called the infirmary, saying she had a fever and wanted to be tested.

She was told that it was up to the Japanese health ministry, and that no tests were available on board. After a day passed, her husband, John, called the U.S. Embassy in Tokyo and tried to convince an official that everybody needed to be tested.

"We're in a petri dish," Mr. Montgomery said. "It's an experiment. We're their guinea pigs."

Ms. Montgomery eventually persuaded the ship's medical office to let the couple leave their cabin for an exam. A doctor gave them flu tests, which came back negative. The doctor prescribed an antibiotic for Ms. Montgomery's urinary tract infection.

They still did not get tested for the coronavirus. The couple later evacuated with the Americans.

John Haering, a retired railway operations manager from Tooele, Utah, called the medical office when his temperature rose sharply. He was told that if it wasn't an emergency, he would have to wait.

At one point, someone came to the door with a clipboard, he said, asked for his temperature and left. Inside the cabin he shared with his wife, Mr. Haering, 63, sweated it out, taking cold showers and swallowing the last of their Tylenol supply as his temperature climbed to 104 degrees Fahrenheit.

Four days later, after his fever had broken, officials in hazmat suits showed up at the couple's door, ordered Mr. Haering to pack a bag, and loaded him into an ambulance, leaving his wife on the ship.

The next day, a doctor at a hospital about 40 miles from the port told him he had tested positive for the virus. He remains in the hospital, while his wife, Melanie, is now in quarantine on a U.S. military base.

## Shared bathrooms and buffets

Through it all, crew members were working overtime, sometimes as long as 13-hour shifts. They prepared and delivered meals three times a day to 1,500 staterooms. They dropped off towels, bedsheets and extra treats for guests: Sudoku puzzles, origami papers, beauty masks and, on Valentine's Day, chocolates.

The crew members, who numbered 1,045, had to remain on the job even as they faced the greatest risk of infection. All told, 85 crew members have tested positive for the virus.

Below deck, they shared close quarters, with as many as four to a bathroom. They ate their own meals buffet-style.

Most crew members  
stayed on decks 2 and 3.

They manned phone lines as frantic guests called looking for answers to endless questions. They swabbed the decks and guardrails after each fresh air break for passengers. They did guests' laundry. For certain tasks, they did not wear gloves, and they reused face masks for more than the recommended day.

There were also new duties: guarding the hallways at night to ensure that passengers didn't leave their rooms. When infected passengers were sent to hospitals, crew members had to carry their luggage.

"The emotional, psychological and physical stress that we are going through now is really hard," said a woman who worked in the kitchens, speaking on the condition of anonymity for fear of losing her job. She has since tested positive for the virus.

Even after some crew members came down with a fever, they continued to share rooms with other workers. "My cabin mate is staying with me," said one person on the housekeeping staff who was consigned to his room when he developed a fever. "But he is working."

"What's the point of isolation?" he asked. "We are stuck in a box which is already contaminated."

The virus has also ravaged public health officials who knew they were walking onto a contaminated ship. Hundreds of these officials, many of them bureaucrats with little experience in managing infectious diseases, helped with screenings and administrative tasks. Some did not wear full protective gear, and six contracted the virus.

Health ministry officials reluctantly allowed Kentaro Iwata, an infectious disease specialist, onto the ship late in the quarantine. Dr. Iwata was alarmed by the lack of control measures, even among the medical staff. In videos he posted on YouTube, he said he had observed a nurse at the ship's medical center receiving ill crew members without wearing a mask.

"She said she was already infected, and so she was completely giving up," he said in the videos. He took down his YouTube posts after coming under criticism for violating the chain of command on the ship.

## Plastic sheeting and tape

To pass the time in captivity, passengers spent long hours streaming movies or posting on social media. They did calisthenics and watched the onboard magician perform tricks on closed-circuit television.

As the infections continued to mount, boredom turned to fear. On private Facebook groups, passengers said they were desperate to leave, with their families using the hashtag #getthemoffthatboat. They questioned the effectiveness of the quarantine, fretting that the virus could pass between rooms through the ventilation system.

After American passengers raised concerns with the embassy, an official at the Centers for Disease Control and Prevention wrote that there was "no current evidence to suggest that the virus spreads between rooms on a ship through the air-handling system." The best course, the official said, was for passengers to wait out the quarantine in their rooms.

A week and a half later, American officials reversed their position. The U.S. government announced that it was evacuating them before the end of the quarantine and would confine them for an additional 14 days on bases in California and Texas. A letter to American passengers said that "the Department of Health and Human Services made an assessment that passengers and crew members onboard are at high

risk of exposure.”

The evacuation turned problematic. While the 328 passengers and crew members were on their way to the airport in Tokyo, American officials learned from Japanese health authorities that 14 of them had tested positive for the coronavirus.

They waited for hours on the tarmac as C.D.C. experts debated with officials from the State Department and the Department of Health and Human Services about what to do. It took so long that some passengers had to get off and urinate against the side of the buses.

Officials from the State Department and the Department of Health and Human Services ultimately decided to take them all. They put the infected at the back, separating them on two planes with only 10-foot plastic sheeting and tape.

As the passengers boarded, Ms. Courter was standing next to a woman as she was being told she had tested positive. “We were less than three feet away,” Ms. Courter said. “And I remember thinking, ‘I just spent two weeks to avoid anyone who is positive, and now here is one breathing right in front of me.’”

Other countries followed the lead of the United States in organizing charter flights for their citizens and new 14-day quarantines. Still, that left many to just walk off the ship at the end of the quarantine in Yokohama, including a large number of Japanese passengers, who made up half of those on board.

The night of Feb. 18, the health ministry began clearing passengers to leave, giving all certificates saying they had tested negative for the coronavirus and posed “no risk of infection.” Nearly 1,000 walked free over the next three days, some boarding city buses, others climbing into taxis.

Experts have questioned whether those passengers truly pose no risk to the general public. Some could develop symptoms later after having tested negative.

Just two days after leaving the ship on Wednesday with a negative test result, a woman in her 60s developed a fever and tested positive for coronavirus on Saturday.

The day after news emerged that the 14 passengers who had tested positive were being flown to the United States, President Trump was furious, said two American officials. The decision to fly them into the country had taken him by surprise.

On Thursday, Linda Tsukamoto, 63, a retired retail manager from Marina del Rey, Calif., who decided not to take one of the American flights, was released from the ship. She will not be allowed back into the United States for at least another two weeks, so she checked into a hotel in Tokyo.

She said that hotel staff members were wearing masks, and that there were signs warning guests of the risk of the coronavirus.

“I will stay in most of the time,” she said, “to stay safe after this long journey.”

Reporting was contributed by Eimi Yamamitsu, Makiko Inoue and Hisako Ueno from Tokyo; Ben Dooley and Edward Wong from Washington; and Elaine Yu from Hong Kong.