# CPQ Microbiology (2020) 3:5 Perspective



# Antiviral Drug for the RNA Virus China Coronavirus

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**Keywords:** Drug; RNA; Coronavirus

Coronavirus latest news: first London coronavirus victim took Uber to hospital [2]

# **Symptoms**

For confirmed cases of the 2019 Annual Inflammatory Virus (COVID-19), the reported illnesses ranged from mild symptoms to severe illness and death. Symptoms can include:

fever

cough

Shortness of breath

The CDC currently believes COVID-19 symptoms may appear within 2 days, or 14 days after exposure. This is based on what was previously seen as the MERS-CoV virus incubation period [3].

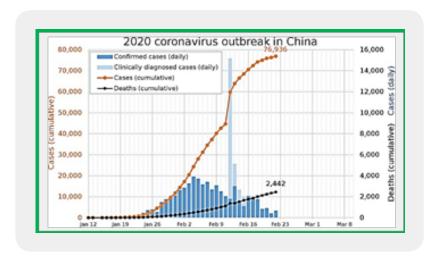


Figure 1: Coronavirus disease in China (credit ref.[4])

The latest status summary updates are available on the Coron Virus Disease 2019 (COVID-19) webpage.

# Coronavirus Cases in California Increasing: Here's What You Need to Know [5]

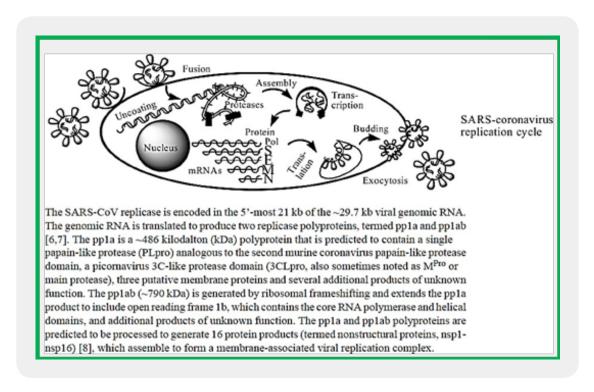


Figure 2: Coronavirus (SARS) Replication Cucle (credit ref. [6])

The Coronaviridae family contains a single species, a coronavirus, consisting of seven Species; One is a human pathogen, and the other six are associated with poultry or animal diseases. Their name comes naturally from a prominent morphological feature, the presence of Club-shaped projections with wide spaces on the outer crust of the pregnancy, giving it Mirror of solar corona. Whereas the coronal of animals and birds can be easily isolated in several cells Cultural systems, human coronavirus recovery presents a different situation. therefore, The prototype strain, 229E, was isolated in human embryonic cell cultures and appears to be Represent a subgroup among human coronaviruses (all strains subsequently isolated Human embryonic cell cultures are essentially similar to prototypes). The other subgroups Represents coronaviruses so fast in their growth requirements that theirs Isolation requires the use of human tracheal or lung organ cultures. Number of varieties Isolated in Organ Culture (OC) and OC-38 (and OC-43) Adapted for growth in kidney and monkey cell cultures and laboratory mice. As a direct result, strains 229E and OC-38 (and OC-43) because they are antigens In contrast, they became the breed of workers representing both these groups and have Widely used in studies on immunology and epidemiology of corneal virus infections. However, the difficulty of working with coronavirus causes epidemiology, Immunological, clinical, and other studies are quite difficult, explaining the paucity of Information about gastrointestinal infections in humans. Existing clinical and epidemiologic Information was examined in relevant information elsewhere [7].



Figure 3: Two epidemies caused by coronaviruses that swere stopped (credit ref. [8])

Coronaviruses are members of a. A family of wrapped viruses Replicators in the cytoplasm of the host animal cells. Corona. viruses are a diverse group of big ones, wrapped and positive Respiratory and Enteric Disease RNA Viruses in Humans and other animals. SCV full sequence analysis, 29 km long, reveals that it is a large, single large Positive-positive RNA virus (Figure 1). The first 2/3 of the SCV The genome consists of the viral replicated genes encoding 16 non-structural, mProteins. Two large polyproteins (pplab [~ 790 kDa) and ppla. [~ 490 kDa)) are initially generated from the replicator region (orf1ab and orfla) and then cling to the individual Polypeptides by two virus-encoded, pain-like proteina. ses (Accessory) Cysteine protein (also called PLP °) and 3Clike (Major) proteinase (also called 30 P ° or MPtO). Deafness Results of viral protein by viral proteins A total of 16 non-structural proteins (nsPs). Interesting to note That the expression of p. 1 ab involves the use of ribosomal Frame -1 just before the translation of pp1a ends Codon [6].

Although it is not yet clear which nsP software is essential or Replicable for the SCV, the RNA-dependent RNA polymerase (nsP12) a.nd NTPase / helica.se (nsP13) are definitely Critical components for viral replication, and as such they can Are used as potential targets for the development of SCV inhibitors. God The remainder of the SCV genome, which includes the last 1/3 part Encodes 4 structural proteins, namely spike (S), membrane (M), Envelope (E) and nucleoca.psid (N) along with 8 accessories Proteins that do not have a significant viral sequence homology Other proteins or coronaviruses. The functions of this accessory Proteins in cells are still poorly characterized [9].

There is no dispute that in recent weeks China has had to deal with one of the most recent health-related crises - stopping the spread of the corona virus. But with the many infections and the draconian closure imposed by the regime on the areas with the highest incidence of the virus, the difficulty of dealing with patients increased, as hundreds of medical staff contracted themselves or were in isolation.

Health workers are at high risk and with a higher chance of contracting the virus, but there is a lack of medical resources in view of the increased outbreak and the relatively late willingness to deal with the virus, so doctors and medical professionals cannot be waived.

Authorities in China have not specified the number of people infected with the virus alone, but reports in the Chinese media and medical journals raise the possibility that only they, with 398 hospitals and 6,000 community clinics - have hundreds of medical professionals contracted to exclude those in isolation.



Figure 4: SARS. Avian Influenza. And now a new coronavirus [10].

Many of pandemics seem to be coming out of China, leading to some pointing accusatory fingers. President Trump's trade czar Peter Navarro, for that matter, once went so far as to describe the country as a "disease incubator," which was before the recent outbreak.

But these perceptions are outdated.

While some of the most vicious outbreaks stemmed from Chinese sources, others related to China may have started elsewhere.

Old stereotypes have also contributed to disproportionate descriptions of China as a source of contagion, when in fact it has advanced further than many calf migratory countries that can flourish in developing areas.

However, China's recent history of so-called zoonotic infections - viruses, bacteria and parasites that spread between animals and humans - has raised questions about public health practices in the world's most populous country

### Coronaviruses

Coronaviruses [11] (Co Vs; Subfamily Coronavirinae, Family Coronaviridae, Nidovirales Order) are a group of highly diverse, enveloped, positive-feeling single-stranded RNA viruses that cause respiratory, enteric, liver, and neurologic damages in a variety of severity in a variety of species. Life, including humans Vs V are divided into four types: alphacoronate virus, Betacoronavirus ( $\beta$  CoV) virus, Gammacoronavirus and Deltacoronavirus Over the past 12 years, two general illnesses reported ~ Co Vs, Acute Respiratory Syndrome Co V {SARSCo V} and the Middle East Respiratory Syndrome Co V {MERS-Co V}, have emerged, these viruses can cause serious human disease. "Lack of effective drug therapy and high comorbidity and mortality rates Both of these Co-VS as well as their potential to cause epidemics highlight the need for innovative drug discovery to treat Co V infections

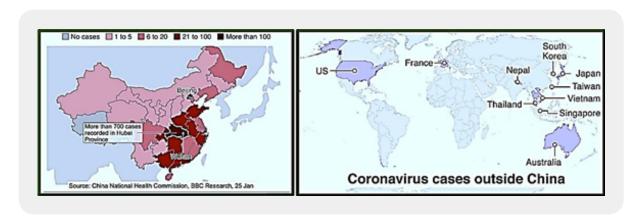
It is no coincidence that some of the worst zoonotic viral infections, viral disease outbreaks in recent years - SARS, MERS, Ebola, Marburg and likely the newly arrived 2019-nCoV virus -originated in bats [12].

During the SARS outbreak, clinicians were unaware of which treatments were required to treat SARS patients, because they hadno prior experience in dealing with this disease.

REVIEW: Development of chemical inhibitors of the SARS coronavirus: Viral helicase as a potential target [13].

The risk of zoonotic megaphone disease threatens hundreds of millions of people. Emerging infectious diseases also threaten animal and wildlife populations around the world and can cause economic damage. China and the United States - Because of their unparalleled resources, widespread involvement in emerging infectious disease-related activities, as well as national imperatives as well as geopolitical imperatives to contribute to global health security - play a crucial role in our understanding of the megalomaniacal threat mitigation efforts. Developing training and research focusing on ecological factors that drive wastewater from animal infectious diseases to humans International cooperation, especially between China and the

United States, is essential to address the full resources and scientific strength needed to add this ecological emphasis to the epidemiology strategy. Estate We examine the current state of preparedness in infectious disease occurs, the ecological and evolutionary knowledge necessary to predict the emergence of diseases, the roles China and the US are today sources of and solutions to reduce risk, and steps needed to better protect the global community from diseases Zoanotiot [14].



spokesman for the CDC patient with a confirmed case of the Coronus Virus, or COVID-19, is being treated at UC San Diego Medical Center. This is the second happy case in the county since the deadly outbreak began.

LOS ANGELES (Reuters) - A second man from Wahan, China, to a U.S. naval base near San Diego has been identified with the new coronavirus, raising the summary of US-approved cases to 14, the CDC on Wednesday.

CDC spokeswoman Anna Toro said the patient was among 232 people placed under closure at the Miramar Marine Corps Air Station [15].

The CDC said it would publish more details on the second case Wednesday evening

# Influenza (Avian) and Other Zoonotic

The "mysterious disease" will spread uncontrollably? Now it is the worst timing.

China faces an unprecedented challenge - an attempt to take over the new virus, while hundreds of millions of residents could spread it at the peak of the annual travel season.

Experts warn: "The potential for expansion is greater than before."

### **Foreword**

The corona family viruses have been familiar to science for more than 4 decades [16-18]. SARS respiratory disease has focused on the scientific interest in these viruses that are not at all harmful, but many have a bad

effect on the human respiratory system. Many also reside in animals and are transmitted to humans. You can understand why the drug remdesivir aimed at the Ebola virus has made headlines again to kill a relative - the Chinese coronavirus. It is only hoped that there is now a "tip of the wire" to destroy the Chinese virus and cure the sick.

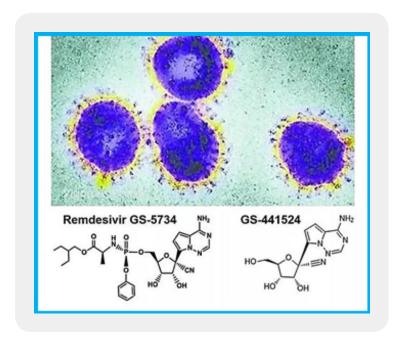


Figure 6: REMDESIVIR [19]- A cure for the Chinese coronavirus(credit ref [20])?

The drug prepared in California's Gilead Laboratories to combat your EBOILA virus and failed to do so turned out to be effective against the current Chinese corona virus.

The Chinese health authorities have applied for this material.

The substance blocks the synthesis of RNA in the cells of the cells. Already rescued one patient in the US from death and brought him back.

The material was one of hundreds of stonemasons that failed to reach their original purpose.

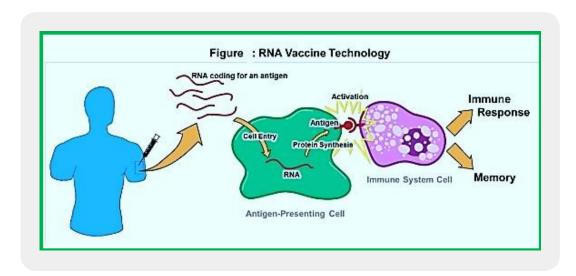
It can be learned that various antimicrobial epidemics that led to the fall of the mighty Roman Empire [21] and the fall of Rome were, at least in part, the result of these epidemics that led to the destruction and weakening of the population of the empire. This allowed the German tribes and especially the Vandals and the Langobards to plunder Rome during the reign of King Geizerik.

These epidemics must be eradicated from the face of the earth. The current epidemic of Chinese coronavirus is rampant. Although there are indications that cures for similar diseases can be somewhat effective. For example, the drug that defeated the Ebola virus [22].

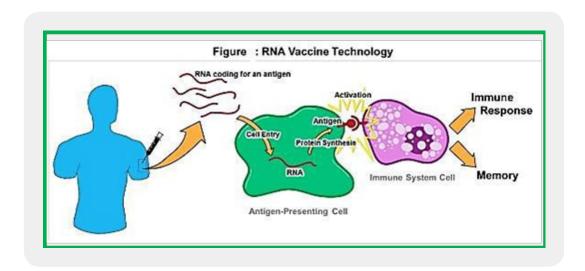
In the meantime, humanity has failed in the fight with violent, dormant and immune bacteria and rampant viruses.

The research system must take care of these antimicrobial drugs and vaccines and, in the first stage, develop appropriate antiseptics for the health facilities. Alcohol and handwashing together are like a drop of water i in the ocean.

Vaccination is the key to disease prevention and has been a major advancement in public health to eradicate epidemics such as smallpox or polio. The vaccines work by mimicking an infectious agent and by doing so train our bodies to respond quickly and effectively against them. Recently, a new type of vaccine, "RNA vaccines," has been developed. RNA vaccines rely on another way to mimic infection. Compared to previous vaccines, this method is more powerful, more diverse and yet equally effective. Thus, RNA immune technology promises great promise for preventing and treating a wide variety of diseases, such as influenza or cancer [23].



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"Our ambition is to bring the pathogen gene sequence to a candidate for a clinical trial in a few months - which is significantly shorter than where we are now, "stated Richard Hatchett, CEPI CEO. "This is a particularly ambitious timeline, and even if we succeed - and there is no guarantee - there will be more challenges to navigate before we can offer vaccines widely" [25].



Figure 9: LABORATORY Test Kit for China Coronavirus CDC Laboratory Test (credit ref. [26])

# Remdesivir

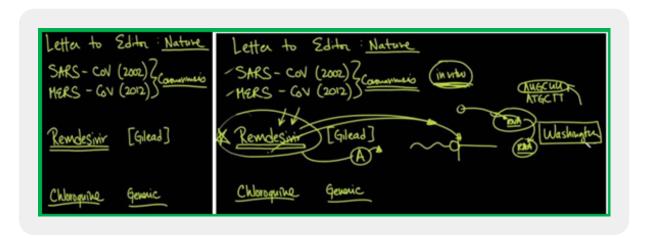
Last Ebola Virus Outbreak (EBOV) in West Africa was the largest recorded in history with over m 28,000 cases, resulting in > 11,000 deaths including > 500 Health workers.

Targeted screening and optimization of leads Effect identified 4b (GS-5734) with anti-EBOV EC50 = 86 nm In macrophages as the clinical candidate. Structure activity Relationships established that the 1'-CN group is related to C Nucleobase were critical for optimal function against EBOV and Selectivity against host polymers.

Strong electro-selective The synthesis provided sufficient amounts of 4b to allow preclinical efficacy in a non-human-initial EBOV challenge model. Daily treatment 10mg/kg once daily on day 14-14 after infection significantly affected viremia and mortality, resulting in 100% Survival of infected treated animals [Nature 2016, 531, 381-385]. Phase 2 study (PREVAIL IV) is currently underway and will be Assess the effect of 4b on viral ejaculation from asylum sites in EBOV survivors

Remdesivir (6) [27] Discovered by Gilead (California) is a nucleotide surrogate [28-29].

Remdesivir blocks RNA synthesis in the cell.



Remdesivir mimics Adenosine and blocks viral RNAS synthesis in the infected cell.

Gilead Sciences has partnered with Chinese health authorities to conduct a randomized Phase III clinical trial to evaluate the use of the antiviral drug candidate study (GS-5734) for the potential treatment of corona virus.

According to a publication published in the New England Journal of Medicine (NEJM), the drug was found to show encouraging results when given to the first U.S. patient infected with the Wuhan virus.

The US patient was re-treated for compassion on the seventh day of illness and his clinical condition was confirmed to improve on day eight.

In Beijing, China, the new placebo-controlled third phase trial of Gilad's drug will be performed at Friendship Hospital. The study should enroll 270 patients with mild to moderate pneumonia caused by the coronoid virus.

# The Hope?

Gilad is said to expedite Remdesivir's laboratory tests against 2019-nCoV samples and is working with Chinese authorities.

The company said in a statement: "Gilad is working closely with World Health Authorities to respond to the outbreak of the novel Coronavirus (2019-nCoV) through the appropriate experimental use of the compound design for our investigations.

"While there is no antiviral data for remdesivir showing anti-2019-nCoV activity at this time, data available in other coronaviruses gives us hope."

Remdesivir is not yet licensed or approved. In vitro and in vivo analysis in animal models demonstrated drug activity against Middle Eastern Respiratory Syndrome (MERS) and Severe Respiratory Syndrome (SARS), which are viral pathogens with structural similarity to the 2019-nCoV.

The Hawahan virus currently lacks specific drugs or treatments. Gilad's drug is among the first to enter clinical trials [30].

Remdesivir is a nucleotide analog protein drug that was considered as a medicine for the Ebola virus and Marburg virus infections. Remdesivir is at present not registered as drug anywhere in the world, the treatment has demonstrated activity against other coronaviruses such as Severe Acute Respiratory Syndrome (SARS) in animal models.

In his statement on the matter, Gilead noted that the first US case of 2019-nCoV led to the drug being applied for compassion after a patient in Washington state developed pneumonia and was in a terminal situation. In the Washington State 2019-nCoV case, physicians initiated intravenous therapy on Day 7 for treatment based on worsening the patient's clinical condition. There were no associated side effects with the infusion [31]



# Here Is Everything You Need to Know

# About the Coronavirus Spreading From China

China launched a World Health Organization (WHO) alert on December 31, 2019, in light of the various cases of pneumonia presented in Wuhan City [32].

The World Health Organization announced on January 9 that the outbreak was propelled by a new until now unknown type of coronavirus. The virus has been described to be associated with colds and SARS.

On January 11, authorities in China reported the first person's death due to the virus. January 13 reports that the virus has spread outside China, exactly in Thailand, according to the World Health Organization. The victim was a woman from China returning from a trip to Wuhan.

On January 20, a third death was reported as a result of the illness, in addition to confirming the infection from person to person, which previously only considered possible.

A new sort of a coronavirus, a mysterious SARS-like disease, has already spread throughout China and three other Asian countries since it first appeared in central Chinese city of Wuhan. The World Health Organization (WHO) is alerted on December 31, 2019 by Chinese authorities to a string of pneumonia-like cases in Wuhan City, a city of 11 million people.

Patients are isolated. Work has begun on identifying the source of pneumonia. The Centers for Disease Control and Disease Prevention in the United States are identifying a seafood market that is suspected to be at the outbreak center. It will close on January 1, 2020. New coronavirus

On January 9, the World Health Organization says the outbreak in Wuhan was caused by an unknown type of coronoid virus, which is a broad family ranging from colds to more serious illnesses like SARS. To date, 59 people, seven of whom are in serious condition, have been infected, according to an official toll.

First death Chinese health authorities say the first person died of the virus on January 11. They change the number of patients down to 41. Spreading beyond China On January 13, the virus is spreading beyond the borders of China for the first time with a case that sprang up in Thailand, according to the World Health Organization. The victim is a Chinese woman diagnosed with mild pneumonia who returned from a trip to Wuhan. On January 15, China's Health Commission claims, so far, no human-to-human transmission of the Wuhan outbreak has been approved, but the "cannot be ruled out" option. The next day, a first case of the virus was confirmed in Japan in someone who remained in Wuhan in early January.

US control On Jan. 17, a second man, a 69-year-old man, died in Wuhan, according to authorities. The same day, the CDC announces that it will begin screening zand diagnosing passengers arriving from Wahan at the following three airports: San Francisco, New York's JFK and Los Angeles.

Transfer of person to person confirmed On January 20, a third death announcement and more than a hundred new cases in China, raising concerns for the annual Lunar New Year holiday beginning on January

25 and seeing hundreds of millions of Chinese people traveling nationwide. Chinese President Xi Jinping says the virus must be "firmly contained" in his first public comments on the outbreak The human-to-human transmission is "positive," says a senior Chinese infectious disease expert. Jong Nanshan tells broadcaster [33].



# Coronavirus: London Covid-19 Patient Took Uber to A&E [34]

The first person to confirm that the Coronus virus in London took Uber to a hospital and entered the A&E department.

When the patient - a woman - "presented herself" at Vishish Hospital on Sunday, they were immediately given a face mask and taken to a special area to test the virus

# CDC Testing for 2019-nCoV [35]

CDC has developed a new laboratory test kit for use in testing patient samples for a new Coronavius virus (2019-nCoV). The test kit is called "The Centers for Disease Control and Disease Prevention (CDC) 2019-Novel Coronavirus (2019-nCoV) Real- Time Reverse Transcriptase (RT) -PCR Panel Diagnostic." It is designed for use with the Applied Biosystems 7500 Fast Real-Time PCR Device with SDS 1.4 software. This test is for use with upper and lower respiratory specimens collected from individuals who meet the CDC criteria for the 2019-nCoV test. The CDC test kit is intended for use by CDC-certified laboratories and, in the United States, is licensed under Clinical Laboratory Improvement Repairs (CLIA) to perform

high complexity tests. Test kits will also be delivered to certified international laboratories, such as the Global Response System for the World Flu (WHO). The test will not be available in US hospitals or other primary care settings. Evaluations will be made available through the International Reagent Resource External (IRR) icon.

On Monday, February 3, 2020, the CDC submitted an Emergency Use Package (EUA) to the US Food and Drug Administration (FDA) to expedite the FDA's permitted use of the CDC 2019-nCoV RT-PCR real-time panel. United States. The EUA process allows the FDA to consider and approve the use of unapproved medical or diagnostic products, but may save lives during a public health emergency. US Secretary of Health and Human Services announced the 2019-nCoV virus as a U.S. public health emergency on Friday, January 31, 2020. The FDA issued the EUA on February 4, 2020.

# Cruise Ship's Coronavirus Outbreak Leaves Crew Nowhere to Hide

Yokohama, Japan - In the quarantine of the cruise ship [36] "Diamond Princess" in quarantine, more than 2,500 carefully insulated travelers. Meals are delivered to their cabins. They have permission to go on deck, six feet apart, for a few minutes a day.

Down over 1,000 living and working elbow-to-elbow crew members prepare travelers' dishes and eat simple buffet-style meals, with many of four sharing a bathroom - and sharing the risk of a possible infection from the coronavirus.

Risks to all stories grew stronger on Monday, as Japan's health ministry said an additional 65 people tested positive for the virus, nearly doubling the amount to 135. According to Princess Cruise, which operates the ship, at least 20 of them are Americans. The ship already has the largest number of radiotherapy cases outside the center of China, where more than 40,000 have been infected.

While the quarantine of the diamond princess is intended to contain the virus, the conditions facing the team may end up doing the opposite and help spread the disease, disease experts say.

# Coronavirus on Cruise 'Could Spread Room to Room Through Air Conditioning' [37]

A doctor warned that the coronavirus in the attack could spread through air conditioning in a cruise ship struck by the deadly disease. Another 44 people aboard the Diamond Princess tested positive for the Coronus virus today, bringing the total number of cases to 218, making it the biggest outbreak outside China. The cruise liner has docked in Japanese Yokohama since February 4, but questions are being asked about the lockout. Tropical Disease Specialist Dr. Richard Dowd said the virus virus could spread if air were moving in the trenches between cabins.

Recall that tonight the MS Westerdam ship, which had about 2,200 holidaymakers, reached the end of its voyage, having finally found a country that had agreed to open its doors and absorb the concerned passengers. Passengers got off at the port of Cambodia, after passing through five different countries that refused to dock in their territory.

Unlike the Diamond Princess ship, in which its passengers are still held off the coast of Japan, no Corona patient was found on board the ship docked in Cambodia. Meanwhile, more than 5,000 people have been infected in China in the past day, the total number of victims being 1,383 people [38].

12:45 pm: Egypt confirms [39] the first case, alleging the infected person is a stranger. Egypt confirmed its first virus case and said the person affected was a stranger who had been hospitalized. The Ministry of Health said in a statement that it immediately notified the world of health and took all necessary preventive measures. It did not disclose the nationality of the affected person or any other detail.

The United States will evict its citizens from the cruise ship damaged by the Japanese Diamond Quarantine obtained by quarantine in Japan, according to a statement from a US embassy on the Japanese site.

The State Department will provide charter aircraft for returning US passengers and crew to the U.S.[40] The ship is the largest cluster of contagion outside China. 67 more cases were found aboard, Japan's Health Minister Katsonovo Kato said in televised comments.

The aircraft will arrive on the evening of Feb. 16 and take passengers first to Travis Air Force Base in California, and some may be relocated to the Air Force Base for the Texas in Texas. They will undergo a two-week closure.

About 3,500 people are being held in quarantine at Carnival Corp's Diamond Princess. The latest cases bring the total infections in the ship to nearly 300, citing concerns that instead of keeping passengers, the quarantine allows the virus to spread.

# Three Israelis on Corona Ship Possibly Have Virus, Says Envoy to Japan

Three Israelis on board the quarantined cruise ship "Diamond Princess" off the coast of Japan possibly caught the virus and will be taken to shore to a hospital, said the Israeli embassy in Japan on Sunday [41].

Japan refused to allow Israeli passengers to quarantine its seashore after more than two hundred passengers were infected with the deadly coronavirus.

Foreign Minister Israel Katz expressed his opinion on Thursday. Katz added that even after the closure ended, it was unclear whether the Japanese health authorities would allow Israelis to return to their homeland immediately [42].



Figure 15: Diamond Princess in Yokahama Quaranteen (credit ref. [43])

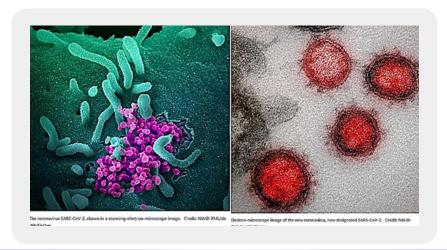
"Nobody guarantees that after the isolation period is over, the Israelis on the ship will be able to return home," he said.

It is estimated that there are 15 Israelis aboard the Diamond Princess. Passengers have moved to the Israeli media in recent days to urge the government to secure their release from the line.

The ship is expected to remain in quarantine until February 19 - 14 days after the start of the isolation period.

In Israell, the Ministry of Health said 140 people were tested against the virus on Tuesday, but so far the results have not been positive. The ministry is working on the assumption that the virus will be discovered at some point in Israel and is preparing for this event. Kits for testing the virus were provided to hospitals in Tel Hashomer near Tel Aviv, Jerusalem, Haifa and Be'er Sheva. Meanwhile, Thai Ambassador to Israel Penpara Wangkovit on Tuesday objected to a new recommendation by the Israeli Ministry of Health to "consider the necessity" of flights to Thailand, Japan, Hong Kong, Singapore, Macau, South Korea and Taiwan. "We are not aware that other countries have issued the recommendations Israel has," she said. "When people hear about the Israeli Health Ministry's recommendation, it becomes confusing and they think it's a ban. We want people to get accurate information to avoid any confusion [44].

# Corona Virus Latest: First Infection Detected in Africa [45]



Shimon Shatzmiller (2020). Antiviral Drug for the RNA Virus China Coronavirus. *CPQ Microbiology*, *3*(5), 01-36.

Scientists are worried about a new virus that has infected tens of thousands of people and killed more than a thousand. The virus, which appeared in Chinese Wuhan City in December, is a coronavirus and belongs to the coronavirus family as the pathogen that causes a severe acute respiratory syndrome, or SARS. This causes a respiratory disease called COVID-19, which can spread from person to person.

Here is the latest news about the outbreak.

February 17 00:30 GMT - Africa's first case was discovered

The first case of the new coronavirus was reported in Africa - in a person in Egypt. The state health ministry and the World Health Organization said Feb. 15 that the case was revealed as a result of the state's plan to track down visitors coming from affected countries. The person tested positive for the virus but had no symptoms. They are currently isolated in a steady state.

Drugs found to be active in curbing the AIDS virus some inhibit the replication of the viral RNA, and could have this horrible disease that has ruthlessly killed humanity. Let us hope that the deadly corona virus will do the same. Here is a list od antiaids drugs that operate in this mechanism [46].

- Efavirenz has the trade names Sustiva and Stocrin.
- Nevirapine has the trade name Viramune.
- Delavirdine, currently rarely used, has the trade name Rescriptor.
- Etravirine has the trade name Intelence, and was approved by the FDA in 2008.

Sustiva [47]is a prescription drug used in combination with other medicines to treat HIV-1 infection. In combination HIV treatment, SUSTIVA can help lower viral loads to undetectable and has been shown to help improve the body's immune system by boosting CD4 + (T cells) counts. SUSTIVA cannot have these effects in every patient. SUSTIVA does not cure HIV or AIDS. You should continue to take HIV medication to help you control HIV infection and reduce HIV-related illnesses.

# Japanese Plague Ship:

It does not have to be great, but not a little fool to understand that if people breathe the same air in a closed place for two weeks, bacteria and viruses pass between them. The stories of the fabrics heard in the media require correction. The virus incubation period, before the US CDC says, fever and cough symptoms can last for about a month. So even the "healthy" ones coming off the ship have a reasonable suspicion that they are infected with the virus. The Sages of Zion are transferring those returning from the ship to a medical facility in the center of a bustling city, and it is hoped that the virus will not erupt, (perhaps he will be scared of Bibi and Litzman to say Regev ...). The Americans, on the other hand, concentrate all those liberated from the ship in a military camp in an isolated place. For the same reason.

What did Rishon LeZion's residents say they might get from the Corona virus? It really fits our Chalam sages .... the main thing to vote in elections .....

Medics around the world [48] are currently holding clinical trials to test HIV medication as a potential treatment for the rapidly-spreading virus. There is no definitive cure yet. Infected coronavirus patients, individuals with symptoms, doctors, and online traders in China are now asking HIV patients to give away their medication, Reuters and The Wall Street Journal reported. The coronavirus outbreak so far has killed at least 560 people and infected more than 27,000.

There are no proven treatments for the new coronoid virus, nor have others caused earlier outbreaks of SARS (Severe Acute Respiratory Syndrome) in 2002 and Mers (Middle East Respiratory Syndrome) in 2012. There are still cases of Mers. In Saudi Arabia, where they are mostly concentrated, there is already an experiment on caltera, in combination with another drug, interferon, but due to the small number of cases in March it will take a long time to reach conclusions.

"Corona Ship" for evacuation: "It was a failed experiment "

Japan is preparing to release passengers from the Diamond Princess cruise ship. Medical experts attack the decision to leave them alone on the ship: "It was an incubator, a crucible." At Tel Hashomer they are preparing for the absorption of the 12 Israelis: "Let's hope it ends after 14 days." The number of dead in China climbed to 2,000 [49].

I read about American efforts to treat the corona virus outbreak. WHO and CDC reports.

We do not know how all those TV stars are treated with the disease and how they identify the medical condition. But it seems to us that we do not have the same means that exist in America. Especially the method of diagnosis from the last days. The Americans admit that there is only one place in Atlanta where the in-depth test allows for the detection of the disease and the samples come from all over the US and it is understood that the 14-day checkpoint has been moved up to 24 days of incubation.

All of these are publicly available on the Internet. But perhaps the office of the Israeli officials is more troubling than the public health and the thesis is just a flattery?

Corona's panic: Israel is draining of masks and their prices are jumping

The virus may not have arrived here, but the Israelis are preparing and eliminating the stock of masks in stores. The major manufacturer is China, which is also facing a severe shortage.

Super-Pharm will import half a million masks - and cut their price by 150%. Customer: "Print Money Panic Here"

# Coronavirus Disease 2019 (COVID-19) Situation Summary. Updated February 16, 2020 [50]

I propose to the citizens of Israel, in particular, to keep up to date with the report of the United States Authority for the Treatment and Prevention of Infectious Diseases.

According to their reports, the current coronavirus incubation period can reach 4 weeks. Currently China is the epicenter of the disease. It should not be underestimated that in China 1.6 billion people live today, about 25% of the human population on Earth. The real outbrake is still ahead of us.

There is no cure for this virus and we do not know how to kill it. The means they are taking today are the best there are, but they probably aren't enough. Here the ship from the Yokohama "Diamond Princess" has become an incubator for disease. It seems now that the isolation on the ship was more damaging than healing. It should be taken into account that all passengers who breath the the air of the air conditioning systems are potential patients and there is a possibility that the disease will only erupt in their bodies for a few more weeks.

It is useful to internalize the in-depth approach as much as possible of the CDC. It seems to me that in Israel it is difficult for politicians to disengage from the elections and the virus is diverted to the "under the rug" position.

I believe that the Israeli government ministers really want the recovery of those infected with the coronavirus as well as the doctors and scientists. But those who stayed on the ship "DIAMOND PRICESS" probably already carry the damn virus in their bodies. Just don't do a lot of crap, like the hospitalization in the bustling heart of a big city in Israel.

But at present there is no cure, but a prayer of prayers and assistance from the Creator. Although detaining was demanded by reserchersin publication over the Last 70 years, the cure for corona in humans has not yet been found. Researchers and Physicians try anything related to RNA viruses, including the entire arsenal of AIDS drugs [51]. But Bibi's righteous spellbinding spell doesn't help either. Maybe a miracle will happen?

China trials anti-HIV drug on coronavirus patients.

# Coronavirus Claims Lives of Two Passengers From Diamond Princess Cruise Ship, Japanese Media Says

February 20, 2020 at 5:57pm GMT + 2

The Coronavirus virus took the lives of two Diamond Princess passengers on Thursday, Japan's public broadcaster NHK reported in its first approved deaths on ships.

Shimon Shatzmiller (2020). Antiviral Drug for the RNA Virus China Coronavirus. *CPQ Microbiology*, *3*(5), 01-36.

The Japanese man and woman, both said to be in their 80s, left the ship last week and were hospitalized. Both passengers reportedly had basic conditions.

Meanwhile, Chinese leader Xi Jinping is finding an increasingly confident comment that the country can control the outbreak of the virus and manage the economic and social downfall, as some Chinese health experts expect a peak in infections at the end of the month.

Chinese leaders, eager to start economic activity, dismantled some highway barriers as businesses began to reopen. However, as of Wednesday, restrictions on personal mobility remain substantial, suggesting warming from rising infections.

China reported Wednesday that the rate of new cases continues to decline, but international experts, including Anthony Pauchi, director of the National Institute of Allergy and Infectious Diseases, say they are wary of declaring that the rate of infection worldwide is slowing [52].

I propose to take the CDC corona reports very seriously about the killer virus. [53]. Here already - 4 of the 12 Israelis have been diagnosed with the disease. And tonight in all the media, and enough with the bluffs, "Israeli geniuses," according to Bibi, cannot do this murdering virus.

The relatively low resolution of routine laboratory tests for the corona virus allows it to hide from physicians' wounds. Each CDC developed a good method of identification.

Unlike the AIDS virus that is transmitted through the donor and recipient blood, the corona virus is transmitted through the air. All the passengers of the DIAMOND PRICESS must be regarded as infected with this virus because they breathe air from the ship's merge system, where the dead viruses wanted.

# Mers-Cov Infection Treated With a Combination of Lopinavir /Ritonavir and Interferon Beta-1b (Miracle) [54,55]

And about the Israelis 3 of the 12 Israeli passengers were diagnosed with the current resolution of the tests as being infected with the virus. We wish them complete medicine, as with all passengers. (https://www.cdc.gov/coronavirus/2019-ncov/about/testing.html)

But all those declared healthy can also be infected with the virus, except that the diagnostic method - too crude and does not allow the detection of the necessary resolution.

Therefore, their neighbors should be in true isolation and not in the heart of a bustling city. The air transmits the virus and not the fear of Bibi and Litzman and Miri .....

We are awash with the election schedule, but the "lurking in the room"

Let us hope theat the 'SHEBA hospital' Physicians know the magic (how to harness the virus).

Show more sharing options SCIENCE

Misinformation about the coronavirus abounds, but correcting it can backfire

Doctors fight coronavirus outbreak with drugs that target HIV, malaria and Ebola [54,55]

# The Outbreak in China of the Corona Epidemic

The problem is a world-wide and unsettling one, especially assuming that only the beginnings and delusions of diagnostic methods only encourage those who reject it.

Here come Israel and women who were in solitary confinement on the Diamond Princess, the virus infected ship.

The doctors, who rely on their hospital lab tests, declare that people are not infected with the virus. But as is known to everyone, via the Internet, today, that improved diagnostic measures have been developed that "ill" those who use conventional methods to identify "as healthy". And here the virus returns as a Trojan Horse to our provinces. The same mistake the Trojans made with the horse: he checked the hores and had faith in their checking results, but it was not good enough.... and also, the hero hampion Hector could not help for the "created dish" was their end...

Too much information? The researchers are trying everything, drugs for Ebola, AIDS .... and all the antiviral drugs in their various mechanisms of action and mechanisms of cure. As we all know, also as Troj's champion Hector fights the Greek champion

Achilles heroically - but Achilles won the confrontation, because he had the devine shield, immune to all weapons of man So in the Greek tradition, the Iliad of Homer.

.... But we go with Samson, the judge Hero who loved Delilah: "Let my soul die with the Philistines" !!! and have to learn: The enemy of the "BEST" is the BETTER FROM THE BEST", as The Trojans realized finally. And like The fast GUN Drawer from the wild west said: you are fast, but one day you will realize that there is one gunman faster than you...and then it will be too late.....

Bibi: as Shakespeare wrote: (We are fed up with your Bluffing:) "Beware the ides of March!!!!"

Corona disease has not yet arrived in Israel, but it is already becoming a "not in my neighborhood" fight: In an urgent petition to the Magistrate's Court, the Rishon Lezion municipality is demanding a restraining order against health officials who are working to make Gerabanki geriatric hospital a corona virus center.

# The Municipality of Rishon Lezion Goes to Fight Against Corona Hospital

Corona disease has not yet arrived in Israel, but it is already becoming a "not in my neighborhood" fight: In an urgent petition to the Magistrate's Court, the Rishon

Lezion municipality is demanding a restraining order against health officials who are working to make Gerabanki geriatric hospital a corona virus center.

"The Corona virus is terrorizing the world, its rapid infection rate has already put many thousands into the hospital circle - and it is precisely now in the Ministry of Health that they chose to establish a Corona hospital in the heart of a fourth-largest residential neighborhood in Israel," the Rishon Lezion municipality says. , At the risk of the elderly patients living there, their families and a quarter of a million residents. "China Tightens Wuhan Lockdown in 'Wartime' Battle With Coronavirus [56].

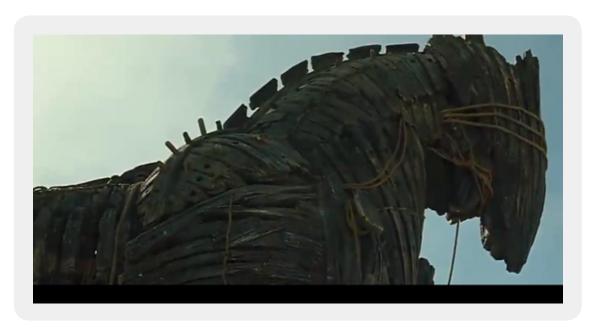
With infections doubling every four days and more than 600 deaths, China intensified its response in Wuhan, with house-to-house temperature checks and mass confinements at quarantine centers [57].

Wuhan, China - Chinese authorities on Thursday took increasingly radical measures in Wuhan to try to stop the spread of the deadly coronavirus, order house-to-door searches, concentrate patients and store them in huge closure centers.

The urgent, impromptu measures come amid a severe humanitarian crisis in Wuhan, exacerbating the tactics left by this city of 11 million with the coronavirus virus death rate of 4.1 percent as of Thursday - astonishingly higher than the rest of the state of 0.17 percent.

With the elevation of patients to makeshift closures, with minimal medical treatment, a growing sense of abandonment and fear caught Wuhan, igniting the feeling that the city and the surrounding Hubei province are sacrificing it for the greater China.

The tough new moves in Wuhan, the epicenter of the outbreak, clearly signaled the ruling of the ruling Communist Party that it failed to gain control of the virus epidemic, which overpowered the country's health system and threatened to paralyze China, the world's most populous. The second largest state and economy.



# The Corona Arrived in Israel: A Passenger From the Ship Was Infected With the Virus

The concern has materialized: For the first time since the spread of the virus from China, a patient has been identified in Israel. One of the 11 cruise ship passengers sticks in Corona, she is staying in solitary confinement in Tel-Hashomer. The Ministry of Health noted that this was not an infection that occurred in Israel [58].



Figure 19: Getting the Wooden Horse into troy (credit ref. [59])

New Outbreaks Itakly and Korea [60]

Meanwhile, in the world, the rate of the spread of the virus is also concerned outside China. The World Health Organization chairman said: "If we succeed, we can prevent a serious crisis, but if we miss the opportunity we can find ourselves in a real problem." to a certain extent.

Northern Italy yesterday reported a rise in the number of infected people from 3 to 19, most of them in the rich province of Lombardy. The Minister of Health announced the cancellation of school, work, and other mass public events for fear of rapid infection.

The first case to be found in the country was a 38-year-old man who came into contact with a man who returned from China without the symptoms of the disease, he was hospitalized in serious condition. The patient's wife, and another member of his, were tested and found positive for the virus as well. Also among the infected are medical staff: five doctors and nurses. "In other parts of the world, isolation has been shown to be particularly helpful in preventing the spread of the virus," a senior in the Northern District explained. "However, we must not panic."

# Cases of coronavirus outside China SOUTH KOREA ODaegu South Konea 204 US 15 Philippines 3 Sri Lanka 1 Singapore 85 Iran 13 Russia 2 Sweden 1 Thailand 35 France 12 Spain 2 Brael 1 Talana 24 UAE 9 Belgium 1 Lebanon 1 Malaysia 22 UK 9 Camboda 1 Australia 17 Canada 8 Egypt 1 Germany 16 India 3 Finland 1 \*\*Igure includes 634 cases on board a cruise ship

# Coronavirus: South Korea 'Emergency' Measures as Infections Increase

Figure 20: The spread of the coronavirus 22 Feb 2020 (credit ref.[61])

In South Korea, too, there is a serious fear of the outbreak of the virus. 204 people have been infected so far in Corona, most of them in the city of Dego. Local authorities closed all shopping malls, restaurants and congregations in the city, and its streets, as well as in nearby Chengdu, are empty of man. The mayor has called the situation deteriorating since a patient in Corona reached a prayer ceremony and apparently spread the virus, "an unprecedented crisis."

### What About China and Elsewhere?

The latest figures from China indicate 2,236 people on the death toll from the disease and a total of more than 75,000 infections.

The virus has now hit the state prison system, with more than 500 prisoners confirmed infected. They include 230 patients in a women's prison in Wuhan, Hubei County, where cases were first discovered. Other cases were found in jail in eastern Shandong Province and southeastern Zhejiang Province.

About 36 people in a hospital in Beijing also tested positive.

Senior officials were fired for failing to manage the outbreak. Coronavirus outbreak cost airlines almost \$ 30 billion

- 1. Do cruise ships really 'smell petri dishes'?
- 2. Are there defects in the virus testing?
- 3. Watching Dead Visitors Without Care in Wuhan

The virus has also spread worldwide with more than a thousand cases and a number of deaths in the rest of Asia, Europe, the Middle East, the US and Africa.

Shimon Shatzmiller (2020). Antiviral Drug for the RNA Virus China Coronavirus. *CPQ Microbiology*, *3*(5), 01-36.

# There Are Deep Concerns Laboratory Tests Are Incorrectly Telling People They Are Free of the Coronavirus. [62]

Are coronavirus tests flawed?

Yesterday I watched the movie 55 DAYS IN PEKING. Starring DAVID NIVAN. The Sino-British opium wars in the mid-19<sup>th</sup> century. What about the corona of those days? [63]



Stories in several states claim that people experience up to six negative outcomes before they are finally diagnosed.

Meanwhile, officials at the epidemic center, Hubei Province, China, began counting people with symptoms and did not use tests for final approval.

As a result, nearly 15,000 new cases were reported in one day - a quarter of all cases in this pandemic [61].

What are these tests and is there a problem with them? They work by searching for the virus's genetic code.

They work by searching for the virus's genetic code.

A sample was taken from the patient. Then, in the lab, the virus's genetic code (if it is there) is generated and copied over and over again, making tiny quantities large and detectable.

These "RT-PCR" tests, which are widely used in medicine to diagnose viruses such as HIV and influenza, are usually highly reliable.

These are usually very strong tests, with low false-positive rates and a low false- negative rate, "says Dr. Nati McDermott, King's College London.

# First Death in Italy From the Virus, a Leap in South Korea

A 78-year-old man from northern Italy has died after being infected with Corona. In China, 109 people have died in the last day - but in the country they report a decline in the number of people infected. In South Korea, the number of patients doubled a day and reached 433, a closure was imposed at military bases. Four Iranians have already died, a senior official in the Tehran municipality has been infected [64].



At least nine out of hundreds of people infected with coronavirus in South Korea over the past few days have visited Israel in the past two weeks, the Health Ministry confirmed on Saturday [65].

Litzman's Health Ministry spreads panic over coronavirus but does little else

At least nine out of hundreds of people infected with coronavirus in South Korea over the past few days have visited Israel in the past two weeks, the Health Ministry confirmed on Saturday.

Litzman's Health Ministry spreads panic over coronavirus but does little else

**Opinion:** No other country in the world had implemented steps taken by the health minister, who has shown amateurism and pandering to public opinion by declaring quarantine measures he apparently cannot enforce without the use of informants and announced compensation for those affected without explaining how.

# "There Is a Real Risk That the Virus Will Spread in Israel": The New Guidelines [66]

After discovering that South Korean tourists staying in Israel were infected with the virus, the Ministry of Health acknowledged that it was a "large and complex event" due to the assessment that hundreds of Israelis were in contact with the group.

Chairman of the Association of Internal Departments: "Not prepared to handle a large amount of contagion." How is the day of the election prepared?

- Corona eruption extensive coverage in Ynet
- 90 students in isolation: "Parents under pressure, do not know what to do"
- South Koreans infected with Corona visited Israel
- Flying with the Corona Carriers to Seoul: "I put on a mask"
- Contracted Corona and developed symptoms after about a month
- The passengers got off, the crew anxious: on the Corona ship
- Ukraine: Attacking buses with evacuees from China

The Association of Public Health Doctors of the Medical Association said: "We very much hope that the tourists are infected only after returning to South Korea. In any case, the work assumption should be that the virus is already circulating in Israel." It is also stated that at this stage it is necessary to expand the testing laboratories and carry out further tests to detect the virus in Israel. According to the union, a thorough reevaluation of the health system and all systems for the spread of the virus in Israel is required, based on the principles of public health and strengthening the public health system.

So far it is known that at least 60 middle school students in Kiryat Haim, along with five teachers and a security guard and another 30 eighth-grade students from Be'er Sheva, were in the vicinity of the tourist group, as well as twenty employees of the Israel Nature and Parks Authority who apparently came into contact with the group members in Caesarea and the Tel Bar National Park. Seven, and two farm workers at the David Dead Sea Hotel who cleaned the rooms where the Korean tourists stayed. Professor Sigal Sadecki from the Ministry of Health said last night that hundreds of Israelis were in contact with this group. She made it clear that the public should cooperate, and to the extent that there are people who need to be in home isolation be careful not to jeopardize those around them.



# Stop Blaming the Mezuzahs

Corona's default line of work is disturbing

May develop into a disaster worse than the 1973 (Phaschala) Yom Kippur

This should be addressed and not continue with the "election plot"

"The Fifth Dimension" - the new spin in Bibi's spin mask. Instead of worrying about the deadly virus victims.

But dozens of children, teenagers and boys, have been exposed to the virus and their lives are in real danger that does not have healing today. And there is no way to stop the virus that spreads through the air, through the sewer system and the "still leaning"

And the Korean tourists passed our country to and fro. And there is the fear of being infected with this satanic virus more and more...

Please set up immediately a national, apolitical emergency headquarters and not be made up of Bibi's "poodles" to handle and curb the disaster that is about to happen!!!!

And improvise!!!!!

Yes, Bibi, the one with his eyes in his head and not "bathed in an election rage" like you could see it coming closer, but his hand is shorter as a savior.

And Sheba doctors are not magicians, they are scientists and medical professionals. And their range of operations is also limited by the lack of knowledge about the perpetrator.

Please, release the residents of the center of the country from the terror of the Corona facility in Tel-Hashomer and transfer the injured to a sandy facility in Nitzana as a destination. But to a sparsely populated area.

Yes, it costs a lot of money so sell the plane with headquarters !!!!

And take care of everyone in Israel. Humans, Jews and minorities alike.

# Fear of an outbreak in the Palestinian Authority

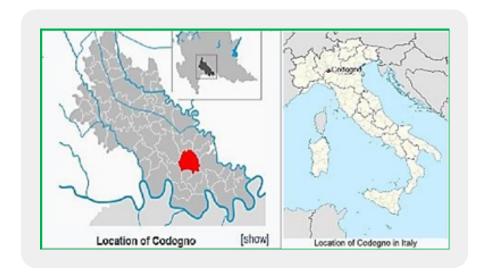
# Alarm in the Holy Land After Visit by Pilgrims With Coronavirus

JERUSALEM, Feb 22 (Reuters) - Israeli and Palestinian authorities sought to quell fears of a potential local outbreak of the coronavirus after learning that South Korean pilgrims who had toured some of the holy land's most popular sites were later found to be carrying the virus [67]

The nine tourists, who tested positive for coronavirus after returning to South Korea, earlier this month visited holy sites including Jerusalem's Church of the Holy Sepulchre and the Cave of the Patriarchs in the Israeli-occupied West Bank, according to Israel's Health Ministry.

The ministry published the group's itinerary and said it was carrying out an "epidemiological investigation" to track any potential spread. It ordered anyone who was in close contact with the group to report it to the ministry and to stay at home for 14 days while monitoring their health.

# Corona in Italy



Some 50,000 residents in Codogno, [68] southwest of Milan, and nearby towns have been advised to remain indoors. Public gatherings including Sunday masses and football matches have been suspended, and schools and shops have been closed down.

### Corona's First Case was Identified in Lebanon

The virus is also spreading in the Middle East. This is a 45-year-old girl who came to Iran from Iran and is in solitary confinement. Suspect for two more cases in the state. In the meantime, China is trying to deal with the plague of infections in prisons.



Figure 25: CORONA VIRUS WUHAN SPREADING (cr4edit ref. [69])

Turkey and Iran and Israel and Italy and South Korea. These are all just neurotic.

All over the world, the plague is taken seriously "But our life" means that everything is fine with us

Hundreds of students in funny isolation, parents are allowed to go out and work and the suspicious children who got to Coronavirus from the Korean tourists stay home in personal isolation.

But the Israelis feel good smiling (in command?) And we, and we, and we ......

We'll get the blow. Undoubtedly, those who show responsibility (WHO) are silent, do not lie and do not boast that the situation is bad and worse.

But my life love mom really !!!!



## Coronavirus Virus Outbreak: Israel Blocks the Arrival of Seoul

Israel has brought back up to 130 South Korean travelers on a flight from South Korea following the outbreak of the Coronavirus.

It allowed only 12 Israeli passengers to depart on the arrival of Korea Airlines flight to Tel Aviv on Saturday.

Israel bans visitors to South Korea and Japanese after finding infection with the Coronovirus among some South Korean tourists who visited Israel last week [70].

# One More "Diamond Princess" Ex Passenger Was Identified as the Carrier of the Virus [71]

After a first Israeli woman was diagnosed on a blue earth in Corona on Friday, another Princess Diamond passenger was identified as the carrier of the virus. Sheba Medical Center clarifies: The infection did not happen in Israel

A second Corona patient in Israel: A laboratory test revealed that another passenger of the "Corona ship" was infected with the Corona virus. The laboratory is working to confirm the findings. The patient is still in isolation at Sheba Hospital, and the medical center said the infection did not occur in Israel.

This increases the number of carriers in Israel to two, after it became known on Friday that one of the ship's passengers returning to Israel had also been infected with the virus. Beep is hospitalized for the isolation of four other Israelis, who were diagnosed with the viruses even before returning to Israel.

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