IN THIS ISSUE

* SARS – FROM OUT OF CHINA
* MEDICAL FACTS ON SARS
* SARS IS COSTING BILLIONS
* THE RACE AGAINST THE VIRUS
* THE BATTLE AGAINST THE BUGS
* AN EPIDEMIC OF FEAR
* GOD IS WARNING THE NATIONS TODAY!

SARS
SEVERE ACUTE RESPIRATORY SYNDROME
The new pneumonia-like, flu-like disease

“And there will be mighty and violent earthquakes in various places . . . plagues (pestilences, malignant, contagious or infectious diseases, and deadly, devastating epidemics).”
(Y’shua the Messiah - Luke 21:11)

FROM OUT OF CHINA!
FROM ITS EARLY DAYS, the medics recognised that this was not another form of Asian Influenza, nor was it the usual pneumonia, although it resembled both. This was a brand new, mysterious and highly contagious respiratory disease that could potentially produce an enormous worldwide epidemic reminiscent of the Spanish flu epidemic of 1918-19 that killed more than 20 million people.

Faced with the alarming new epidemic, medical scientists around the world marshaled in a hi-tech attempt to contain SARS, the Severe Acute Respiratory Syndrome that first struck in the southern Chinese province of Guangdong, in mid-November 2002. By early February, the number of cases there were only 300, and only five people had died.

On Feb 21, a doctor from Guangdong visited neighboring Hong Kong and stayed at a hotel. He infected six people before he himself died on March 4.

On Feb 26, doctors in Hong Kong reported the first case of “atypical pneumonia.” Afterwards they identified the cause of the illness as being a previously unknown virus from the family of corona viruses. The new disease became known as SARS.

On March 12 the World Health Organisation gave its first global alert on SARS, as the virus took wings and rapidly spread to several other countries.

The BBC quoted a WHO official as saying: “The personal risk to any particular individual is minimal, but the risk to the public health system from this disease is enormous.” WHO has dismissed criticism that it has exaggerated the threat posed by SARS.

By mid-April the epidemic in China had moved to the capital, Beijing, and had spread to at least 13 provinces. By the end of April, SARS had spread to 30 countries, with almost 6000 cases, and 400 deaths.

The potentially devastating epidemic began to terrify the world, creating panic, particularly in the Asian region, where there was fear of a new Asian economic crisis.

**THE CHINESE LEADERS’ NIGHTMARE**

China’s leaders are worried! Chinese Premier Wen Jiabao, whose government is grappling with its first big crisis since taking office in March, said China would
control the spread of SARS and welcomed visitors. But few are likely to heed the assurance.

Fearful of a long-term impact on Asia’s fastest growing economy, Wen Jiabao, and Communist Party boss and President Hu Jintao, appeared in major hospitals and met doctors on the front lines of the battle against SARS.

Foreign health experts in Beijing believe many cases there have gone unreported.

Throughout China, people are both scared and angry at the new disease in their midst.

THE CHINESE COVERUP

The World Health Organisation had a tough time getting accurate information on the epidemic in China as several authorities had covered up the extent of the SARS situation.

A Beijing military doctor blew the whistle when he criticized the health minister for covering up the number of SARS cases. He said there were at least 140 cases in military hospitals in the capital alone.

When the under-reporting was exposed and became obvious, President Hu Jintao, ordered his officials to quit covering up.

Beijing took action against its health minister as the government owned up to hundreds of new cases of the virus. The minister, Zhang Wenkang, as well as Beijing Mayor Meng Xuenong, were removed from their top Communist Party posts.

China then started a highly publicized battle to halt the spread of SARS. Premier Jiabao called on “the whole nation” to “work closely together to win this fierce battle,” and ordered a campaign to scrub down airplanes, trains, buses, trucks, taxis and office blocks to kill the virus.

The Health Ministry now reports cases daily to WHO. But skepticism remains, and there is suspicion that the epidemic is still being under-reported.

THE BATTLE OF BEIJING

The shocking fact is that SARS has struck right under the nose of the Communist Party’s administration – Beijing, the capital of the nation.

Earlier Beijing’s authorities had admitted to only 37 SARS cases in the city. But after international pressure on China to get real, officials announced that there were closer to 700 confirmed or suspected cases in the capital.

By the last week of April Beijing reported 1,448 SARS cases in the city alone, and **100 new cases every day.**
Posters have been plastered around city streets and subways calling on people to wash their hands after wiping their noses, to drink and smoke less, and to keep face masks handy.

The government cancelled the week-long May Day holiday, fearing the movement of tens of millions of people could further spread the virus.

The cancellation of China’s national “golden week,” which was due to start on 1 May, meant forfeiting a huge boost in consumer spending. During the holiday, students usually return home, migrant workers go back to their villages, and the new middle classes go on tourist trips.

Officials have announced plans to crackdown on profiteering in areas hit by the virus. It follows reports of sharp rises in the price of medical drugs and equipment, herbal remedies and basic foods in some regions.

The city raised the fine for spitting in public - a means of SARS transmission - to 50 yuan, ($US6) - a big jump.

Teams of workers in masks and rubber gloves could be seen spraying down planes, buses, trains and transport terminals.

Police sealed off the 1,200-bed People’s Hospital of Beijing University because of multiple SARS infections. People were isolated and quarantined if they had been in contact with someone even suspected of having SARS.

In an effort to halt the escalating crisis, Beijing shut down “all entertainment businesses involving mass public gatherings” - cinemas, theatres, gyms, swimming pools and restaurants and internet cafes.

Likewise all the capital’s schools were closed for two weeks. After the two weeks, the closure was extended for at least another two weeks. The move affected more than 1.7 million children. Exams for primary and secondary school pupils were postponed indefinitely.

Streets were largely deserted. The few people who ventured out of their homes wore masks. There was panic buying, and thousands of people took trains and planes out of Beijing.

At a cathedral, a sign in English pasted on the door said mass was suspended for one month due to city rules requiring that “all congregations greater than 50 be canceled.” An accompanying sign, in Chinese only, said that services were canceled “to ensure the health of parishioners and clergy.”

Chinese authorities began installing thermal imaging equipment to check the temperatures of travelers moving across the southern border between Shenzhen and Hong Kong.

QUARANTINE IMPOSED
China has begun implementing draconian quarantine measures in an effort to curb the spread of the pneumonia-like epidemic. Whole villages, as well as hospitals, have been sealed off.

Beijing is a city under siege. At one time, around 16,000 of the city’s population were officially in quarantine, but **unofficially all 13 million people were under a virtual quarantine**, according to a correspondent in Beijing.

Leaving the city has now becoming increasingly difficult, as flights to other areas have been cancelled and highways blocked.

May 15. China has threatened to execute or jail for life anyone who breaks SARS quarantine orders and spreads the virus intentionally.

The Supreme Court and China’s lead prosecutor set out the punishments in an interpretation of existing laws which regulate the containment of sudden disease outbreaks and the response to disasters, China’s official news agency said.

**THE RIGHTNESS OF QUARANTINE**

The Chinese authorities are belatedly taking the right actions. All my readers are aware, I am sure, of the necessity for quarantine to stem plagues. Although it may seem harsh for a time, it is a Biblical principle - from the time of Moses.

Leprosy was such a severe infectious disease, than any person with suspicious red spots on the skin needed to be isolated for seven or fourteen days. If it was found to be non-leprous, the person would be able to return to his home. If it proved to be Leprosy, he was to be permanently isolated – for there was no cure at that time.

“If the bright spot is white on the skin of his body, and it does not appear to be deeper than the skin, and the hair on it has not turned white, then the priest shall isolate him who has the infection for seven days. The priest shall look at him on the seventh day, and if in his eyes the infection has not changed and the infection has not spread on the skin, then the priest shall isolate him for seven more days.”

“As for the leper who has the infection, his clothes shall be torn, and his head shall be uncovered, and he shall cover his upper lip and cry, ‘Unclean! Unclean!’ He shall remain unclean all the days during which he has the infection; he is unclean. He shall live alone; his dwelling shall be outside the camp.” (Leviticus 13:4-5, 45-46)

**PROTECTING CHINA’S WATER RESERVOIRS**

Chinese authorities have blocked access to all reservoirs in Beijing, in an attempt to prevent the virus reaching the public water supply. Swimming, fishing and boating on the reservoirs have been banned, adding to the list of activities already forbidden under Beijing’s stringent SARS prevention measures.
The chances that SARS could spread through drinking water are small, but the closure of Beijing’s reservoirs shows that no one in the city is taking any chances.

**RAPID SPREAD THROUGHOUT CHINA**

SARS has now spread to at least 13 provinces in China, and the strict anti-SARS measures in China’s capital are now being taken up in these provinces.

Shanxi, a poor province in the north, was one of the first to report SARS in travelers from Guangdong. It saw an alarming increase of cases since March, with the capital, Taiyuan, reporting more than 300 in April. All schools were closed until further notice.

The provinces of Guangdong, Hunan, Guangxi, Sichuan, Fujian, and Inner Mongolia are some of the other provinces most affected.

**RURAL CHINA MAY BE UNABLE TO CONTROL**

The World Health Organization says SARS will be hard to track in inland China, where the health system receives one fifth of government spending but serves 70 percent of the population.

WHO added Beijing and Shanxi to Guangdong, to the list of places it had advised travelers to avoid, and also sounded an alert about the situation in China’s second city, Shanghai. Dr Wolfgang Peiser, while visiting the city, said he believed there were tens of SARS cases there, rather than the two officially confirmed cases.

China’s communist leaders have warned local officials not to try to hide SARS cases. But correspondents say the number of infections in China may never be known.

People in China’s poor provinces tend not to visit the doctor because it is too expensive, or because there is no doctor. Health experts say the virus may therefore never be fully eradicated.

Although the Chinese government is now opening up and cooperating with international officials to control its outbreak of SARS, the World Health Organization has concerns that some of China’s provinces might not be equipped to deal with the disease.

WHO is working closely with the government to see how it can support China in dealing with the epidemic. A WHO official said, “If China is not dealing with SARS, it will be very problematic to deal with globally.”

The main areas of concern are the “poorer provinces,” because they have fewer resources and “the public health system has collapsed over the last 20 years” because the government has not adequately funded it, the WHO official said. China’s poorer areas are its 12 western provinces.
The government has said it is sending teams to all the provinces to help them deal with SARS, and the government has authorized the hiring of 2,500 people to monitor those infected and trace their contacts.

**HONG KONG DEVASTATED**

After mainland China, SARS next slugged Hong Kong, a crowded city of seven million where the health system came under intense strain.

The major outbreak of the disease was in Kowloon, where 15,000 people live in Amoy Gardens, a 19-block high-rise apartment complex. In less than a week, 250 people contracted the disease.

Up to a quarter of those infected were medical staff, and the government was trying to hire doctors and nurses from the private sector.

Hong Kong Hospital Authority chairman Leong Chehung, speaking of a worst-case scenario, told local television that health officials were preparing for up to 3,000 cases. He believed there would be sufficient manpower and facilities although intensive care units would be under pressure. (Hong Kong cases hit over 1600 by end of April 03.) Schools in Hong Kong were closed for six weeks.

**SINGAPORE BATTLES THE PLAGUE**

Singapore was soon battling to control SARS, seeking to prevent it spreading in the city state’s main hospital.

At least 100 of the first SARS cases in Singapore were linked to a woman who went to Hong Kong to shop, and came home carrying the deadly flu-like virus.

A doctor at Singapore General Hospital was confirmed to be infected, raising fears of a crack in the government’s strategy of isolating infected people. Twenty nurses at the hospital were also suspected of having SARS and were isolated.

The outbreak came after the government imposed sweeping control measures by placing more than 1,000 people under home quarantine, and closed schools.

Phone lines at Singapore General Hospital went down briefly as panicked residents flooded the switchboard checking on loved ones.

Singapore’s Prime Minister spoke of another victim — the economy. Goh Chok Tong said the nation’s target of 2 to 5 percent economic growth this year would be revised down because of SARS. Goh canceled a trip to China because of fears over SARS.

Singapore quarantined 2,400 workers and closed its largest wholesale vegetable market for 10 days after an employee was diagnosed with SARS.
Singapore said it would close dozens of food markets and ban visits to public hospitals as a measure to contain the epidemic. And authorities threatened to jail anyone who violated SARS quarantine rules.

Singapore announced a 70% fall in visitor arrivals in the second week of April.

**TAIWAN, THAILAND AND VIETNAM**

**Taiwan** moved about 480 health workers to a military barracks after the Taipei Municipal Ho Ping Hospital was sealed due to the discovery of SARS.

More than 1,100 patients, doctors, nurses and visitors were put under quarantine after scores had been infected with Severe Acute Respiratory Syndrome. Many of those who were quarantined for up to two weeks, were furious and held placards to protest against their isolation.

After its first SARS death, Taiwan imposed a mandatory 10-day quarantine on travelers from areas affected by the virus - including mainland China, Hong Kong, Singapore, Vietnam and Toronto - but it did not announce where the travelers would stay while quarantined.

Those violating the quarantine, including foreigners, can be jailed for up to two years or fined up to $8,600, Premier Yu Shyi-kun said. With the strong measures, Taiwan hoped to contain SARS, but by mid May cases had soared to 238, and 31 people had died.

**Thailand** required anyone entering the country from an infected zone, to wear a face mask.

**Vietnam** had 64 cases and five deaths. One individual was so contagious that he passed the virus on to at least 30 health care workers.

**TORONTO’S HEALTH-CARE CRIPPLED**

**Canada** reported 23 deaths, and possibly 300 infections. Up till the time of this report, Canada is the only country outside Asia where people have died of SARS.

The SARS outbreak that had crippled Toronto’s health-care system could be on the verge of breaking out in an uncontrolled fashion, infectious disease experts warned.

While Ontario public health officials leading the fight against SARS warned that the battle has reached a critical stage, but the doctors who advise them were ready to spell out the threat in more graphic and frightening terms.

“You don’t want to cause panic, but it’s a tough time, and what we’ve seen is unprecedented,” said Dr. Donald Low, microbiologist at Mount Sinai Hospital.

“None of us has the experience to say when to stop worrying.”

While public health officials have insisted the outbreak is still under control, they are now considering electronic tracking bracelets for people who break quarantine rules.
“People are very, very frightened of this and it’s going to get worse,” said Dr. Allison McGeer, an infectious disease expert who is herself in hospital recovering from SARS.

At a news conference yesterday, provincial health officials said they are considering tough monitoring measures like electronic tracking bracelets to enforce quarantines.

Public health staff have kept a “strong surveillance” on individuals suspected of straying — including one who is under police guard at an undisclosed hospital — through phone calls, door-to-door visits and, in some cases, by hiring private security investigators to check up on potential quarantine breakers.

Since the outbreak was detected in Toronto in mid-March, some 10,000 Ontarians have been under quarantine and today about 1,500 people remain in home isolation.

Toronto’s Catholic leadership has instructed churches to amend practices, such as taking Communion wine from a communal cup and shaking hands during Mass. The Anglican diocese of Toronto has also announced sharing of Communion wine would be suspended.

INDIA. As the first cases turned up in Mumbai, Pune and Calcutta, fear began to grip the nation. To make the scare worse, pilots of Air India refused to fly if there were any staff on board who had been into the SARS-affected Asian countries.

AUSTRALIA added the virus to a list of diseases requiring quarantine, ranking the illness as dangerous as cholera and smallpox, and switched tourism promotion to non-infected countries.

Police in Australia have been given new powers to round up and quarantine suspected SARS victims. Asian students returning to Australia from SARS-affected Asian countries were told to stay in home quarantine for 10 days.

SAUDI ARABIA, home to Islam’s holiest sites, has stopped issuing pilgrimage visas to many East Asian countries because of SARS fears.

### SARS: NUMBER OF DEATHS
(UP TO JULY 31, 2003)

812 in ten countries

China, Hong Kong, Taiwan, Singapore, Canada, Vietnam, Thailand, Malaysia, Philippines, South Africa

### NUMBER OF SARS CASES WORLDWIDE
8,400 + in 34 countries

China   Hong Kong   Singapore   Taiwan   Vietnam   India
Thailand   Mongolia   Malaysia   Indonesia   Japan   Philippines
MEDICAL FACTS ON SARS

THE SARS CAUSATIVE AGENT - THE CORONA-VIRUS

World Health Organization has formally identified the viral source of Severe Acute respiratory Syndrome – a mutation of the corona-virus.

It took scientists eight days to identify the virus that causes SARS. (It took three years to identify HIV, the pathogen that causes AIDS.)

THE CORONA-VIRUS

Corona-viruses often infect animals, but normally do not cause anything more serious than the common cold, in humans. WHO scientists went early to Guangdong to try to trace the origins of the virus. They conducted studies on corona-viruses in animal populations for clues concerning the possibility that SARS might be the result of a virus transmission from animal to human; possibly a leap from pigs or poultry to humans.

WHO confirmed that a new form of the corona-virus that has leapt from animals to humans is the culprit behind the global SARS outbreak. (In SARS-stricken Amoy Gardens, Kowloon, a cat also tested positive for the corona virus.

The announcement paves the way for vaccine and treatment research. In experiments at Erasmus University in Rotterdam, Netherlands, scientists infected monkeys with the corona-virus suspected of causing SARS and found that the animals developed the same symptoms as humans.

SYMPTOMS OF SARS

* High fever of greater than 100.4° F, and may include headaches, aches, chills and breathing difficulties.

* About 10 percent get diarrhoea (in Hong Kong it was up to 66%).
* About 25 percent of victims develop pneumonia - the rest suffer only fever and cold symptoms, and mild respiratory symptoms.

* After two to seven days, SARS patients may develop a dry cough and have trouble breathing.

**HOW IS IT SPREAD?**

SARS appears to be spread by close contact, but to what extent it is spread in the air, is currently unknown. The known symptoms include body aches, slight temperature spikes, headaches and coughs. Within two days the symptoms become worse, which prompts those with the symptoms to eventually go to the hospital.

Scientists believe that the current strain is transmitted primarily through droplets coughed out of the lungs, but it can also be spread through touch, infected surfaces, and quite likely by rats, cockroaches, and flies.

An expert has warned that infection could be spread, not only through coughs and sneezes, but also through faeces and sewage. This raises the possibility of an outbreak being transmitted through tainted water supplies or contaminated food.

**PRESENT TREATMENT**

Doctors are mainly relying on a combination of antivirals such as ribavirin, immunosuppressant steroids, and a serum containing antibodies taken from recovered SARS patients.

Treatment now used in Hong Kong - a mix of anti-viral drugs and steroids - has seen good response in 80 to 90 percent of patients.

Scientific teams are racing to produce a vaccine against the new strain, but have warned that this may take years, especially as the SARS virus is constantly changing form. Experts say that even when it is developed, a vaccine may offer only limited and temporary protection.

Doctors hope that the virus will lose its potency as it is passed on second- or third-hand, and that the community in general will develop immunity to the disease.

**THE FATALITY RATE**

Earlier it was said the disease had a mortality rate of about 4 to 6 percent, roughly the same as Measles. But the death rate could be significantly higher, according to a British expert’s research. Professor Roy Anderson says the virus could kill between 8% and 15% of victims.

According to Prof Anderson media speculation about SARS had exaggerated the problem facing the world. He said the higher mortality rate was not the most important issue, as many other health factors could influence a patient’s death. “Although SARS may still be in its early stages, its infection rate and death toll so far is very small in comparison to other 20th century viral pandemics.”
(In 1918, the unusually virulent Spanish Flu killed at least 20 million worldwide.)

“If SARS was a highly transmissible agent that was spreading like wildfire around the world, then of course there would be huge cause for concern, but it is not,” Anderson said. “The concerns lie in the large populous regions of the world: Asia.”

**SIGNS OF HOPE**

It appears that the epidemic is being contained in developed countries through very good containment and monitoring practices.

Officials have taken comfort that SARS has not spread as easily as other viruses, such as influenza. By comparison, tens of thousands die every year in the United States alone from various strains of influenza.

Common pneumonia kills at a much higher rate than SARS - up to 50 per cent when it is spread amongst the ill or elderly at hospitals. Most victims have a good chance of recovery.

**SARS VIRUS MUTATING RAPIDLY NOW ATTACKING INTESTINES AND ORGANS**

Every virus is capable of mutating. Although the virus contains a large amount of genetic information, every time it is “replicated” inside a cell, tiny genetic “mistakes” are made. Some of these may harm the success of a virus, or may leave it unchanged - or on the other hand, make it better at infecting and replicating in humans.

Natural selection means the “mistakes” that end up benefiting the virus, will lead to the creation of strains that are more virulent, or more easily transmitted from human to human.

The Beijing Genomics Institute reported that the virus is “expected to mutate very fast and very easily.” Other experts have warned that, once established, it could be particularly hard to stop SARS causing problems.

Scientists say the SARS virus is constantly changing form which will make developing a vaccine difficult.

According to a leading Hong Kong microbiologist, SARS is now attacking the intestines as well as the respiratory system. The change indicates the virus has mutated as many experts feared. Initially patients were suffering with just respiratory failure, but kidneys and other organ failures have now become common in SARS victims.

An increasing number of those infected with SARS are suffering from diarrhoea. As many as two thirds of the residents who contracted SARS in the outbreak at the Amoy Gardens had diarrhoea.

**NEW FINDINGS ON SPREAD OF SARS**
5 May 03. The latest WHO report says that although coughing and sneezing remain the chief means of spreading the infection, the virus can stay alive for at least four days in diarrhoea or sewage. Faeces may be a more important means of spreading the SARS virus than originally thought.

One study found that the SARS virus can live for up to 24 hours on any surface.

Japanese researchers had found that the SARS virus had so far stayed alive for four days in cells on plastic surfaces at a temperature of 40 degrees F. This is fridge temperature, so the virus can survive four days in a refrigerator.

The virus was also tested at minus 112 degrees for four days and it was unaffected. But this was no surprise because many viruses survive easily in cold temperatures.

The SARS virus can not only survive winter. It thrives in winter months!

Research has added weight to the theory that leaky sewage pipes were the source of infection in a particularly severe outbreak at the Hong Kong apartment complex, where more than 300 people became ill.

Hong Kong University scientists confirmed that common disinfectants such as formaldehyde, ethanol and acetone can kill the virus in five minutes. Disinfecting toilets in hospitals and homes where people have had contact with SARS helps to solve the problem.

**SOCIAL AND ECONOMIC CONSEQUENCES**

**SARS IS COSTING BILLIONS**

The biggest impact of the SARS pandemic may not be from massive deaths but the social trauma, disruption, and economic consequences, including the cost of containment measures.

The virus has spread across the globe causing panic, and affecting the way people think and plan. The cause of SARS is still not clearly understood. Many theories abound: that it is a mutated cold virus; that it is a bio-terror weapon in the making; or that it is a population-control mechanism.

In the United States fears are that the disease may spread like wildfire there just as it has throughout Asia. The grim economic toll has rippled through the region.

Analysts are comparing the potential effect of SARS to the devastating Asian financial crisis of 1997, as world economists warn the virus will have a major impact on economic growth rates in East Asia.

The global economic consequences, are already estimated at $50 billion.

Many Asian-Pacific countries, including Australia, report falls in tourism. And with airlines canceling flights, tourists staying at home, and shops and restaurants empty
in SARS hot spots like Hong Kong and Singapore, Asian governments are facing their greatest challenge since the 1997-1998 regional economic crisis.

The most severe impact is on China’s economy. Many United States firms such as Dell, Coca-Cola, Shell, and Nike are refusing to go into the country for fear of contracting the virus.

In Hong Kong, 60,000 restaurant and hotel workers have either lost their jobs or are on unpaid leave. Unions say the jobless rate may hit eight percent.

The IMF said Vietnam’s rapid economic growth would be curbed by the spread of SARS, but not as severely as Hong Kong and Singapore.

Singapore, with the world’s fourth-highest number of cases and at least 27 deaths, backed temporary wage cuts and shorter work weeks for the tourist sector.

Australia has been warned by the International Labor Organisation that it will shed 227,000 tourist-related jobs this year.

China, Hong Kong, Singapore, Taiwan and Vietnam face losing 30% of their travel and tourism employment.

**AIRCRAFT REELING**

Warnings have been issued by many countries against non-essential travel to SARS-affected countries; and scheduled forums, sports events, and other big programs have been cancelled.

Airlines are reeling because of the fear of SARS, and many have been compelled to slash flights to affected countries. Hong Kong-based carrier Cathay Pacific says it has cut 45% of its flights. The airline has seen its reservations plunge by 75% in the last 12 months.

Although there were five cases of SARS on planes – out of millions of passengers – and all cases occurred early in the crisis before screening procedures began, many people have cut back on their travel to places like China and Hong Kong. There is still fear of contracting SARS on planes, or in transit lounges.

TV footage of passengers going in or out of airports and having instruments put into their ears to take their temperatures, help to increase the fears of travelling.

**THE RACE AGAINST THE VIRUS**

The following item has been submitted by Mark, Endtime News. It not only gives information about the war on SARS, but it is a good example of how the prophecy of Daniel, about speed and knowledge, is being fulfilled today:

“Many will run back and forth, and knowledge will increase.”

(Daniel 12:4)
7 April 03. In the three weeks after the World Health Organization first declared a mysterious new respiratory disease from Asia was a “worldwide health threat,” SARS spread across the globe with alarming speed, infecting several thousand people on four continents.

No less astonishing was the speed with which hundreds of scientists in a dozen countries scrambled - aided by networked “virtual laboratories” and Internet-based “grand rounds” - to mount a counter-offensive against the emerging disease.

Dr. Julie Gerberding, director of the Centers for Disease Control and Prevention, said the global collaboration had already “produced unprecedented scientific and epidemiological discoveries with unprecedented speed,” including the identity of a prime suspect - a previously unknown corona-virus.

“The race is on,” she said. “The stakes are high, and the outcome cannot be predicted. If the virus moves faster than our scientific, communications and control capacities, we could be in for a long, difficult race.”

The virus may have a head start. The agent blamed for SARS is thought to have spread in southern China for several months before it was recognized. Hurrying to catch up, at least 10 teams of more than 250 experts from the CDC have been working around the clock to help contain the outbreak, determine how it spreads, develop ways to detect it and find out how to combat it. Worldwide, hundreds of other doctors and public health officials are wrestling with the same problems.

Tests on the virus have been limited to eight labs, including the CDC, that have P-3 facilities, a level of biological containment used for all but the most infectious microbes. With so many people involved and such an urgent mission, technology has enabled far-flung laboratories to coordinate and share information almost instantaneously.

“It has been remarkable,” says Dr. Steven Ostroff, deputy director for the CDC’s National Center for Infectious Disease. “We can now share an image of the virus under an electron microscope with almost anyone who needs it. And instead of physically packing and shipping tissue samples, we can get and receive test results electronically.”

Major achievements from the global effort so far include:

• Tentative identification of the virus responsible for SARS. At least eight labs have found evidence of a previously unknown corona-virus in SARS patients. While it is possible that more than one agent causes SARS, the CDC says the “preponderance of evidence” implicates the corona-virus, a family of viruses that cause many common colds.

• Development of two antibody tests that will enable health officials to definitively tell which patients with severe respiratory illness have been infected by the suspect corona-virus. Until now, cases have been diagnosed on the basis of general symptoms common to many respiratory ailments: high fever, dry cough, aches and
pains. Because the new test, expected to be available before end of April, detects a patient’s immune response to the suspect virus, some cases of what is thought to be SARS may be eliminated.

- Authorities have already shared what they know about the virus with pharmaceutical companies so they can begin research on a vaccine. As that effort proceeds, the National Institutes of Health and the U.S. Army’s Medical Research Institute of Infectious Diseases at Fort Detrick, Md., also are screening hundreds of drugs potentially useful in treating SARS.

Sequencing of the virus’s genetic material, a step that will provide a blueprint of its genetic makeup, is proceeding rapidly.

(15 April. U.S. and Canadian scientists said they had independently mapped the genome of the new virus blamed for causing SARS, raising hopes a test could be developed so treatment can be given as soon as possible.)

“We’re working as hard as we can to get to the bottom of the problem and get it under control,” said Dr. James Hughes, director of the National Center for Infectious Diseases. “We still don’t know the original source of this virus, but the sequence of the virus will tell us that.”

OLD BUG, NEW TRICK

The subject of this global scrutiny is a member of a family of viruses whose dozen or so known species, until now, were thought to cause severe disease only in cattle, pigs, rodents, cats, dogs and birds. Until last month, corona-viruses — named for the distinctive halo of appendages in their outer envelope — have been linked in humans only to mild respiratory infections, primarily the common cold.

Viruses, so biologically primitive that they cannot reproduce on their own outside a living cell, have been called “a piece of bad news wrapped in a protein.” Of the millions that probably exist, only 1,000 or so are known, and even fewer have been linked to human disease.

Primitive though they may be, viruses have one advantage over higher life forms. They reproduce at a prodigious rate. And the swift emergence of each new generation provides ample opportunity for mutations that endow old bugs with new tricks.

Researchers now fear that may be what happened to the corona-virus in November in southern China. The outbreak went virtually unnoticed until mid-February.

On Feb. 11, 03, the Chinese Ministry of Health advised the World Health Organization in Geneva of an outbreak of “atypical pneumonia” in southern China. Public health experts say the delay not only underscores the need for more candor by Chinese authorities but for faster reporting of emerging diseases.
Because flu researchers around the world had been anticipating the seasonal emergence of a new flu strain in Asia, they assumed the first SARS cases - and reports of a new bird flu virus called H5N1 that had been attacking people - marked the start of a new influenza cycle.

**A SHIFT TO HIGH GEAR**

On Feb. 21, 03, however, the complexion of the crisis changed when a man infected with SARS traveled from Guangdong to Hong Kong to visit his family and took a room on the ninth floor of the Metropole Hotel.

From that point, the race between the virus and its adversaries shifted into high gear. Within weeks, as cases of severe pneumonia mounted rapidly in Hong Kong, genetic tests of patients' blood made it clear this was no flu bug.

As reports of similar illnesses in Vietnam, Taiwan and Canada trickled in, it was also clear the virus was adept at international travel. Impoverished areas of Asia have served as efficient incubators for emergent diseases before.

“This is a classic example of an East Side, West Side situation,” says Nobel laureate Joshua Lederberg, a Rockefeller University geneticist.

“You have a less than perfect health care system, and people and animals living side by side under crowded conditions - all within reach of a major international airport. It's perfect for the global spread of a disease.”

Certain by March 14 that this wasn't the flu, WHO assembled a network of 12 labs in 10 countries. The CDC activated its new emergency operations center in Atlanta to lend support and sent field teams to investigate SARS clusters in several countries.

On March 15, while most of the world was anxiously watching the march toward war in Iraq, WHO began warning doctors and travelers that SARS was a global threat. But what was causing it?

By March 18, a Hong Kong hospital and a German research lab were reporting that the infectious agent appeared to be a paramyxovirus, one of a group of viral pathogens that cause measles, mumps and canine distemper. By the next day, another Hong Kong lab was reporting that the principal suspect was more likely a corona virus.

On March 22, as the number of SARS cases worldwide reached 360 - 22 of them in the United States - the CDC rushed a culture of infected tissue to Joseph DeRisi at the University of California, San Francisco, for analysis.

DeRisi's laboratory, opened only in January, used a revolutionary new microchip array - a catalog of more than 1,000 known viruses etched into a computer chip - to compare the mystery virus to known viruses.

Within 24 hours, DeRisi had found a previously unknown corona virus. The CDC confirmed his findings the next day.
Hard work lies ahead. The corona-virus may be only one of a number of agents causing SARS. (Any of 100 assorted viruses can cause what most people call a “common” cold.)

To prove a corona-virus is the culprit, researchers must satisfy three key tests. The virus has to be found in the tissue it destroyed, in this case the lower lungs. It must be grown in a culture outside its host. And it must be shown to be capable of infecting healthy tissue.

For the global network and technology assembled to deal swiftly with SARS, the current crisis is also a test of preparedness.

POTENTIAL VACCINE

POSTSCRIPT: in November 2003, Chinese researchers were ready to begin, in December, human trials on an experimental SARS vaccine that injects the dead virus into medical subjects so their immune systems can recognize it and hopefully attack it, a government drug official. - AP / 24 Nov 03

THE BATTLE AGAINST THE BUGS

Mankind has been in a battle against bugs since the Fall; that is, the day when sin entered the world through Adam and Eve’s disobedience.

“Therefore, just as sin entered the world through one man, and death through sin, so death spread to all men, because all sinned.” (Romans 5:12)

Throughout the millennia, generations of men have lived in fear of epidemics. Some of the plagues of the past have been beyond our imagination. These include:

430 BC. The Plague of Athens. The disease and death toll is unknown, but it ended the Athenian rise as a world power.

165-180 AD. The Antonine Smallpox Plague left 5 million in the Roman Empire dead.

542-543 AD. The Justinian Plagues in Constantinople was the first outbreak of bubonic plague in Europe, and killed one third of the population of the eastern Mediterranean.

1330s. Bubonic Plague, along with civil war, halved the population in north China.

1347-50. The Black Death – Bubonic plague killed about 20 million – one third of the population.

1520-1618. Smallpox, introduced by the Spanish, reduced the Mexican population from 20 million to less than 2 million.
1618-48. During the “30 Years War,” European population fell from 16 million to 6 million through disease and starvation.

1650-60s. Recurrences of bubonic plague in Europe killed 420,000.

1829-32. Cholera epidemic in Europe killed 7000 in London alone.

1847-61. Cholera killed one million Russians.

1875. Measles killed one quarter of the population of Fiji.

1918-19. Spanish Influenza left 20 million dead worldwide.


1984-2003. AIDS has already killed millions (including a half million in US). Every year 2 to 3 million people die from AIDS. 42 million worldwide are now living with HIV.

AN EPIDEMIC OF FEAR

Although medical science has made tremendous achievements, including the elimination of Smallpox, the battle against bugs has increased, and the world is held in the grip of fear through disease.

Witness the reeling airlines, as countless potential passengers stay at home.

In the 1960s the American surgeon-general optimistically announced the end of infectious disease in the Western World. But with Heart Disease, Cancer, Cholera, TB and Sexually-Transmitted Diseases increasing; and with many of the regular killers like Malaria, Influenza, Dengue, Hepatitis, and Measles not conquered; and such diseases such as Foot & Mouth and Mad Cow Disease; and with new diseases such as Ebola, AIDS and SARS spreading, fear around the world is increasing.

We now have what some are referring to as the New World Biological Order.

With the mass media heavily reporting on biological weapons; with the nations' buildup for germ warfare; and with the possibility of terrorists being equipped with weaponized plagues, the world is in panic. Theories that diseases are being deliberately engineered, add to fears caused by the “natural phenomenon” of mutating, rampaging viruses.

There are fears of chemical ‘diseases’ – Nerve Gas, deadly poisons like Ricin and Botulism, and of course, Nuclear Radiation - witness Hiroshima, and Chernobyl.

There are fears that our miracle medicines – antibiotics – are losing their power because of overuse, and due to the ability of the bugs to mutate and fight back more vigorously.
Sensational stories of plague in the news-media could well convince us that we are already as good as dead! But certainly the world is moving through a very dangerous stage in the war on disease - the world of the virus, the bugs, and bacteria.

There are fears in the medical and scientific communities of a super epidemic of influenza – or some new disease (“the big one”) - that could spread around the world as fast as jumbo jets, and possibly wipe out hundreds of millions.

It’s true that the news media are inclined to exaggerate in their reporting – sensational news sells! It’s true the world is not about to be wiped out by disease – not at present. It’s true that medical science is making amazing breakthroughs in some areas.

But it is also true that plagues are scheduled for the endtimes – and the conditions in society, in the environment, and in the nations, indicate that the Day of the LORD is near. The prophetic scriptures warn of what is ahead.

“And there will be mighty and violent earthquakes in various places, and plagues, (pestilences, malignant, contagious or infectious diseases, and deadly, devastating epidemics).” (Y’shua the Messiah - Luke 21:11)

“And now this will be the plague with which YHWH will strike all the nations who have gone to war against Jerusalem; their flesh will consume away while they stand on their feet; their eyes will consume away in their sockets; and their tongue will consume away in their mouths.” (Zechariah 14:12)

**THE PLAGUES OF REVELATION**

“And no one was able to enter the temple until the seven plagues of the seven angels were ended. Then I heard a loud voice from the temple saying to the seven angels, ‘Go, pour out the seven bowls of the wrath of God upon the earth.’

“The first angel went and poured out his bowl upon the earth, and loathsome and malignant sores broke out on the people who had the mark of the beast and who worshipped his image.

“The second angel poured out his bowl on the sea, and it turned into blood like that of a dead person; and every living thing in the sea died.

“The third angel poured out his bowl into the rivers and the springs of waters; and they became blood. And I heard the angel of the waters saying, ‘You are righteous, O LORD, You who are and were, and forever shall be, the Holy One, because You have so judged, for they have poured out the blood of Your set-apart people and prophets, and You have given them blood to drink as they deserve.’ And I heard another from the altar saying, ‘Yes, O YHWH El Shaddai, LORD God Almighty, true and righteous are Your judgments.’
“The fourth angel poured out his bowl upon the sun; and the sun was given power to scorch men with fire. And men were scorched with fierce heat; and they blasphemed the Name of God (Yahweh) who had control over these plagues; but they did not repent and give Him glory.

“The fifth angel poured out his bowl upon the throne of the beast; and his kingdom was plunged into darkness. Men gnawed their tongues in agony. And they cursed and blasphemed the God of heaven because of their anguish and their sores; and they refused to repent of their wicked deeds.”

(Revelation 15:8 – 16:1-11)

**GOD IS WARNING THE NATIONS TODAY!**

It is quite clear from the prophecies that the above plagues are judgments sent by Almighty God. They are coming in the period called The Great Tribulation, of which MRC has been warning for many years. And of course, the Bible has been warning for much longer!

The day of Tribulation is drawing near, and what we see today, in epidemics like SARS, is a foretaste, a warning of the Day of the Plagues of Revelation.

In the days of Moses, plagues and diseases were connected to man’s disobedience to the Word of God.

“If you are not careful to observe all the words of the teaching which are written in this book, to reverence this glorious and awesome Name, Yahweh your God, then Yahweh will bring extraordinary plagues on you and your descendants, even severe and lasting plagues, and miserable and chronic sicknesses.

“He will bring back on you all the diseases of Egypt of which you were afraid, and they shall cling to you. Also every sickness, and every plague which is not written in the book of this Law, Yahweh will bring on you until you are destroyed. And whereas you were as the stars of heaven for multitude, you shall be left few in number, because you did not obey the voice of Yahweh your God.” (Deuteronomy 28:58-62)

Disease entered the world because of man’s sin and corruption. And it has multiplied, until today we have a ferocious, unending battle against bugs. A recent report from the UK says:

**EXPLOSION OF SEX INFECTIONS OVERWHELMS HEALTH SERVICE**

Soaring rates of sexually transmitted infections are overwhelming the British National Health System and are threatening the health of a generation of young people.

Pressure on the sexual health services has intensified in the last decade, fuelled by changing sexual behavior. Cases of Gonorrhea have risen 86 per cent in five years,
and those of Chlamydia have doubled. Syphilis is making a return, and the rate of HIV infection rose to its highest level last year.

The impact of the rise in diseases has been seen in a doubling of the number of people attending clinics in the last decade to more than one million a year. Traditionally, patients receive immediate treatment to minimize the risk of passing their passing infections on to new sexual partners, but the “open access” service has collapsed in parts of the UK. The average waiting time for an appointment nationwide is now two weeks. In that time a disease can be passed on.

The Commons Health Select Committee has concluded that it is in crisis, with a shortage of resources, facilities and staff. The committee chairman, said: “Frankly, the whole sexual health service is a shambles.”

We are living in a generation when most people are shocked by rape and sexual abuse of youngsters, but they are quite accommodating of any other forms of immorality.

The words ‘fornication’ and ‘adultery’ shock very few these days! Many young people today don’t even know the meaning of those two words. But they do know a lot about consensual sex, de facto relationships, gay rights, one night stands, condoms and abortion.

We are now living in much the same way as the people of 3000 years ago …

“In those days there was no king in Israel; and every man did as he himself saw fit.” (Judges 17:6)

**WHAT IS THE MOST HIGH SAYING TO US?**

Do not doubt for a moment that God looks down, and sees our corruption and wickedness today. The LORD said to King Asa:

“For the eyes of Yahweh search the whole earth to manifest His strength on behalf of those whose hearts are in right relationship with Him. But you have acted foolishly in this; therefore, from now on you will have wars.” (2 Chronicles 16:9)

The Almighty is sending us warnings today in the form of wars and terrorism; with bush fires and drought as in Australia; and 298 tornadoes in one week in US; and elsewhere, in floods, earthquakes, cyclones, storms, pestilences on crops and cattle, plus plagues and epidemics.

**What is God saying?** His word to every one of us, is …

“Believe in the Master, Y’shua the Messiah (that is, give yourself up to Him), and you will be saved; (and this applies both to) you and your household.” (Acts 16:31)

Many may have been ignorant in the past, but …
“Having overlooked the times of ignorance, God now commands all people everywhere to repent (that is, to change direction, and to believe in the Saviour, Y’shua, who has already paid the penalty of our sins), because He has fixed a day in which He will judge the world in righteousness through the Man whom He has appointed, having furnished proof to all by raising Him from the dead.” (Acts17:30-31)

**JESUS SUFFERED AND DIED TO SAVE US FROM OUR SIN AND DISEASE!**

“Y’shua, being reviled, did not revile in return; while suffering, He did not threaten, but kept trusting Himself to Him who judges righteously. And He Himself bore our sins in His body on the tree, so that we, having died to sin, might live to righteousness - by whose stripes you were healed.” (1 Peter 2:23-24)

And “God has raised up this Y’shua, and we are all witnesses to this.” (Acts 2:32)

“And there is salvation in no one else; for there is no other name under heaven that has been given among men, by which we must be saved.” (Acts 4:12)

“Whoever will call upon the Name of Y’shua the Master will be saved.” (Romans 10:13)

“You are all sons of God through faith in the Messiah, Y’shua.” (Galatians 3:26)

“The LORD is … patient toward you, not wanting anyone to perish, but for everyone to come to repentance. But the Day of Yahweh the Lord will come (unexpected) like a thief in the night…” (2 Peter 3:9-10)

“Repent therefore; return to God and be converted - be changed, so that your sins may be wiped out, and in order that times of refreshing may come from the Presence of the Lord; and that He may send Y’shua, the Messiah who was foreordained and proclaimed to you - He who must remain in heaven until the period of restoration of all things, about which God spoke by the mouth of His holy prophets from the most ancient times.” (Acts 3:19-21)

My reader, if you are not yet a child of God; if you have not yet believed in the Lord Jesus (Y’shua) and received Him as your personal Saviour; if you have not yet received the forgiveness of your sins, then I urge you, do not delay!

Today the Saviour is waiting with arms wide open to receive you. He knows all about you, and nothing takes Him by surprise. He loves just the same, and He has already paid the penalty of your sins. Now He offers you His pardon, and He will
give you a new life – eternal life. That is the gift He is offering you. Will you receive it? Will you receive the Saviour as your personal Saviour today?

How do you do that?

By praying sincerely to God, and expressing your faith in Him. You can pray in words like this . . .

**DECISION PRAYER**

**Heavenly Father,** I come to You in the Name of the Lord Jesus Christ (Y’shua, the Messiah). I come just as I am, a sinner needing your salvation, and seeking Your grace and forgiveness of my sin.

I believe that the Lord Jesus is Your provision for my salvation. I believe that when He died on the cross at Calvary, He paid the penalty of all my sin. I believe that He rose from the dead, and is the Living Saviour.

Lord Jesus, I believe in You, and I trust You to save me. I receive You this very moment as my Saviour, my Master, and my God. Thank You Master for the great price You paid to save me from eternal hell.

Thank You Father for forgiving my sin, and for making me Your child. Thank You for writing my name in Your Book of Life.

Now Master I submit my life into Your keeping, and ask that You deliver me from all wrong, and from my sinful habits, and make me what You want me to be. By Your grace and power, from this day on, I will follow You as Your faithful servant.

Thank You Master. Thank You Father for hearing my prayer, in Y’shua’s Name. Amen.

Signed ...........................................  date ..........

Reader, if this is your prayer, please sign and keep the prayer with you as a reminder of your decision today. And I’d be glad if you would drop me a note, telling me of your decision, so that we may pray for you and send you some literature to help you. Write to me, Don Stanton, at one of the MRC addresses on our contact page.

**A FINAL WORD**
WHAT IS GOD SAYING TO HIS PEOPLE TODAY?

“If I shut up the heavens and there is no rain, or if I command the locust to devour the land, or if I send pestilence among My people, and My people who are called by My Name humble themselves and pray, and seek My Face and turn from their wicked ways, then I will hear from heaven, will forgive their sin and heal their land.” (2 Chronicles 7:13-14)

This message is to God’s people! The “world” is searching for answers; the scientists, the ecologists, and medical researchers are all doing their best to find the answers.

But it is for God's people to humble themselves and pray, and seek God’s Face, and to turn from their wicked ways, so that our people will be saved and healed!

IT’S TIME THAT 2 CHRONICLES 7: 13-14 WAS PROCLAIMED FROM EVERY PULPIT!

Pastor! Preacher! When did you last preach on this verse, or any verse like it?

“Be patient, brethren, until the coming of the Master. See how the farmer waits expectantly for the precious ‘fruit of the earth,’ waiting patiently until the land receives the early and late rains. You too be patient.

“Establish your hearts, for the coming of the Master is near. Do not complain against one another brethren, so that you yourselves may not be condemned. Look! The Judge is standing right at the door!” (James 5:7-9)

Oh brethren, we need to humbly and urgently seek the Face of Yahweh our Sovereign Master, and turn the hearts of the people back to Him in truth and holiness!

We need a revival of righteousness; a vision of the lost; a passion for souls; a burden to intercede, a burden to save souls, a willingness to stand in the gap; and a renewed sense of awe of Almighty God as we come into His Presence.

The Almighty, Yahweh said, (and it was not meant only for ancient Israel):

“I will make an everlasting covenant with them: I will never draw back from doing good to them; and I will put awe of Me in their hearts so that they will not turn away from Me.” (Jeremiah 32:40)

“O Yahweh, there is none like You. You are great, and Your Name is mighty in power. Who would not stand in awe of You, O King of the nations? Indeed it is Your due! For among all the wise men of the nations, and in all their kingdoms, there is none like You.” (Jeremiah 10:6-7)
And all the people said Amen!
And did nothing about it!

*Be doers of the Word, and not hearers only!*