



新型冠状病毒肺炎预防手册

A Handbook of 2019-nCoV Pneumonia Control and Prevention

Translate By GONG LEI&ZHAOJI

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Author Profile



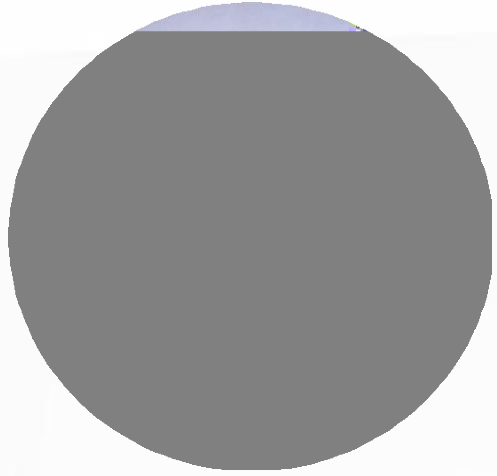
- Zhou Wang, md, chief physician of wuhan center for disease control and prevention (level 2). In 2005/2006, he was a senior visiting scholar of the university of Pennsylvania. In 2003, he was selected into the "213 talent project plan" of wuhan municipal government, and in 2015, he was selected into the "yellow crane talent plan" of wuhan municipal party committee. Of huazhong university of science and technology and wuhan university, professor, director of Chinese association of STD prevention and control of AIDS, executive director of the preventive medicine association of hubei province, wuhan branch of Chinese preventive medical association vice President and secretary general, wuhan municipal STD AIDS society director committee member, the Chinese preventive medical journal and journal of virus disease in China communications editors, etc.
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Author Profile



- Wang qiang, md, professor, school of medicine, wuhan university of science and technology.2015/2016 visiting scholar, MD Anderson cancer center, university of Texas.Now he is also the standing committee member (secretary-general) of the professional committee of oncology and microecology of Chinese anti-cancer association.Vice chairman of blood branch of Chinese anti-cancer association;Standing member of immunology branch of Chinese academy of traditional Chinese medicine, vice chairman of youth committee;Executive director of the 10th council of hubei immunology society;Member of the sixth committee of microbiology and immunity branch of hubei medical association.
- Wang qiang long engaged in infection, immunity and tumor microenvironment, Chinese university students AIDS prevention interventions work, successively undertaken by the Ministry of Education, provincial department and provincial education department and other agencies funded research projects, scientific research and technology progress prize provincial one, by the first author or corresponding author has published more than 20, including SCI/SSCI journals more than 10 papers, editor in chief of three textbooks.

Author Profile



- Hu ke, director of the second department of respiratory and critical care medicine, people's hospital of wuhan university (hubei people's hospital).Professor, chief physician, doctoral supervisor.
- He presided over 4 projects of the national natural science foundation of China and 1 sub-project of the national key research and development plan, "research on the diagnosis and treatment of copd co-occurrence and co-existing diseases".Published over 100 papers as first author or corresponding author.
- Participated in the clinical treatment of public health emergencies in hubei province since SARS in 2003.

Order

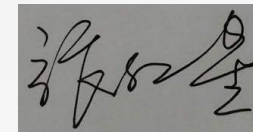
The outbreak of pneumonia caused by the new coronavirus has posed a serious threat to people's health. However, the prevention and control of such a sudden outbreak requires more scientific knowledge and the participation of the public, so that the disease can be defeated and the epidemic can be controlled.

"New coronavirus pneumonia prevention manual" to enhance the public and the relevant professional understanding and the understanding of a new type of coronavirus pneumonia and guide the individual prevention, to reduce the risk of transmission for the purpose, with concise words and clear pictures of the major problems related to the new type of coronavirus pneumonia and doubt, both focus on the current focus of attention problems, and pay attention to solve specific details in the prevention, is a new type of coronavirus pneumonia in current urgent need to prevent the spread of reader.

The new type of coronavirus pneumonia prevention manual compiled personnel perennial work in infectious disease prevention, clinical and scientific research, has a profound theoretical knowledge and rich practical experience, they write published the book in a timely manner, will be in the current new coronavirus pneumonia prevention and control of the battle, and related professionals to provide important reference for the masses, to effectively improve the ability of social prevention play an important role.

Director of wuhan health committee

January 2020

A square box containing a handwritten signature in black ink, which appears to be 'Zhang Zhongli'.

Foreword

Since the middle of December, 2019, wuhan, China in the short term appeared with fever, fatigue, coughing, breathing disorders as the main symptoms of unexplained pneumonia cases, the government, the health administrative departments at all levels attach great importance to the rapid organization for disease control and prevention institutions, medical institutions and research institutes to carry out the investigation, treatment and collaborative research and quickly determine the pathogen of this kind of cases for the new type of coronavirus, the world health organization (WHO) identified and named 2019 - nCoV, the original infection pneumonia caused by the disease known as a new type of coronavirus pneumonia.

In order to enhance the public and related professionals to this new type of disease, a new type of coronavirus pneumonia of understanding and the understanding, to guide the individual prevention, reduce the risk of transmission, the centers for disease control and prevention in wuhan city rich experience of prevention and treatment of infectious diseases expert, pathogenic organisms and immune professional researchers, and a line 3 armour hospital clinical expert, emergency has compiled "new coronavirus pneumonia prevention manual".The book is divided into six parts: understanding coronavirus, understanding the risk of transmission, early detection and early treatment, personal hygiene protection, site hygiene requirements and relevant knowledge of infectious diseases. The book is illustrated and easy to understand to answer the public's questions in the fight against the new coronavirus pneumonia.As long as we unite, overcome difficulties, scientific prevention, we will be able to control the epidemic and spread of the new coronary disease pneumonia victory.

As a result of writing time is hasty, to the new disease related problem cognition is insufficient, take care of is feeling!
Director of wuhan health committee-----Preparation group of handbook on prevention of novel coronavirus pneumonia January 2020

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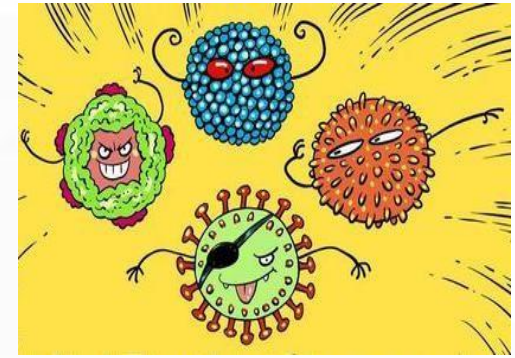
01

Learn about coronaviruses

Biological characteristics, pathogenicity, transmission route, epidemic status



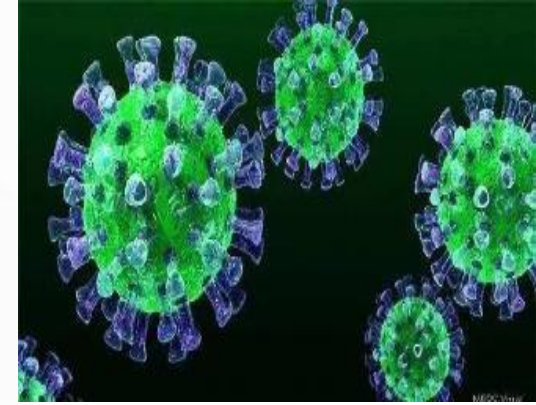
1. What are respiratory viruses ?



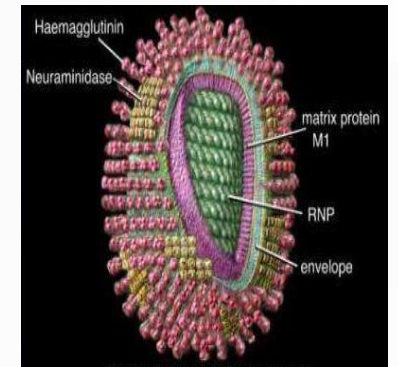
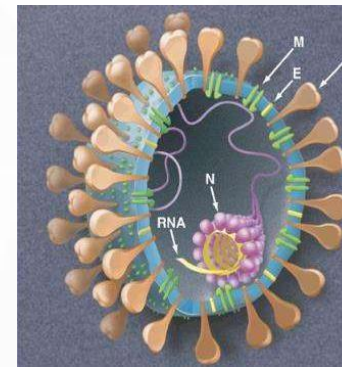
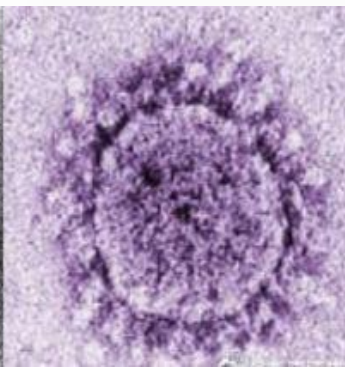
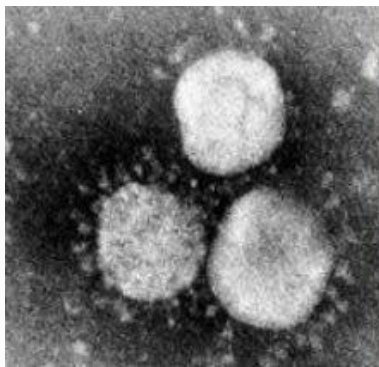
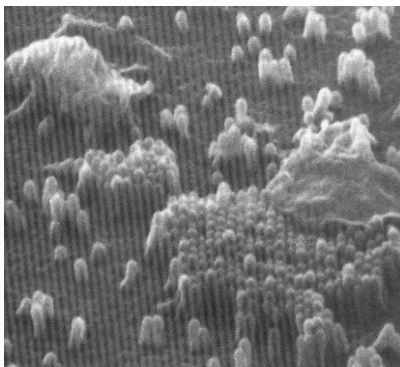
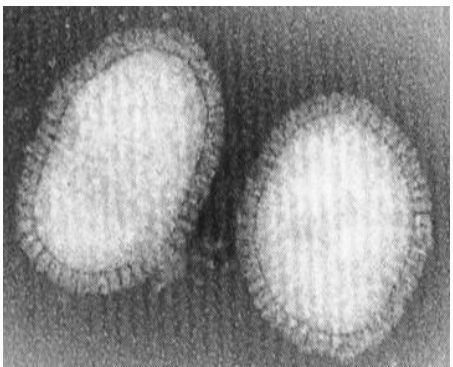
Viruses associated with respiratory infection refers to a virus that takes the respiratory tract as the portal to invade, proliferates in the epithelial cells of the mucous membrane of the respiratory tract, and causes local infection of the respiratory tract or pathological changes of tissues and organs outside the respiratory



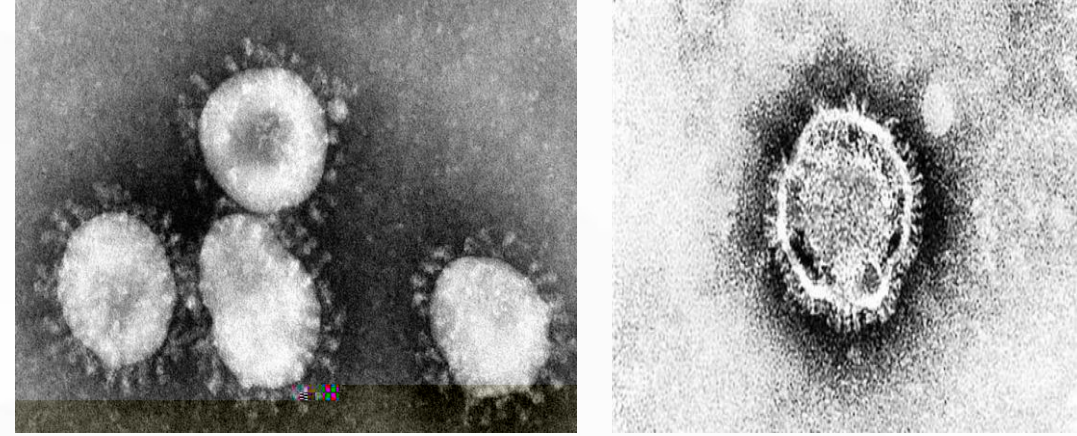
2. What are the common respiratory viruses?



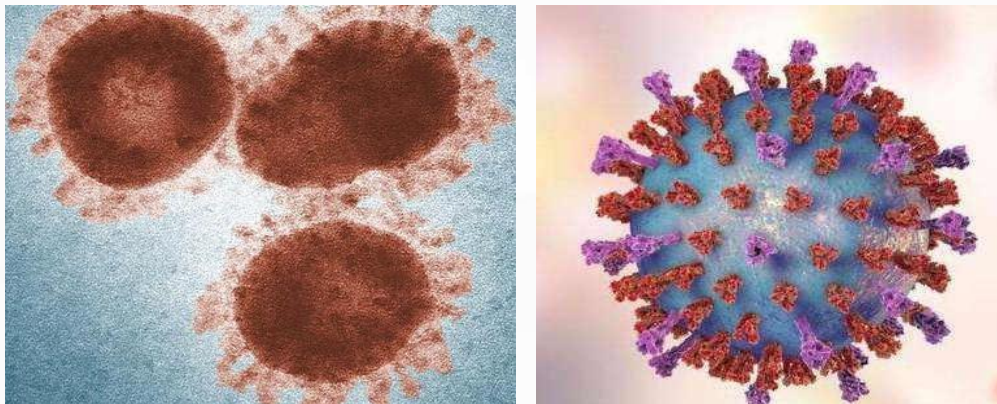
It mainly includes: influenza viruses of the family orthomyxoviridae, parainfluenza viruses of the family paramyxoviridae, respiratory syncytial virus, measles virus, mumps virus, hendra virus, nipah virus and human parainfluenza virus, rubella virus of the family paramyxoviridae, rhinovirus of the family small RNA virus, SARS coronavirus of the family coronavirus, etc. In addition, adenovirus, reovirus, coxsackie virus and ECHO virus, herpes virus can also cause respiratory infectious diseases.



3. What is a coronavirus?

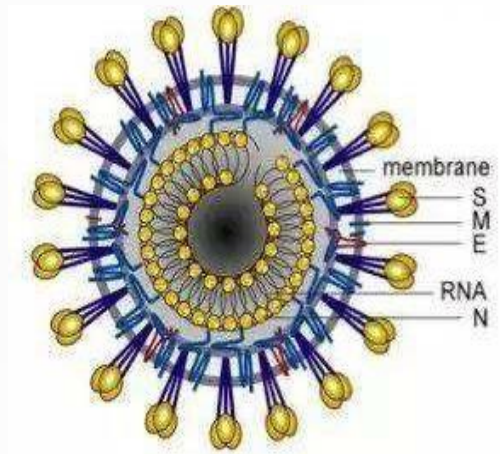


Coronavirus is a single-stranded positive-stranded RNA virus without segmentation. It belongs to the orthocoronavirinae subfamily of the Coronaviridae family of the order Nidovirales, and is divided into subfamilies of coronavirus according to serotype and genomic characteristics. α , β , γ and δ four genera. Coronavirus is a coronavirus belonging to the Coronaviridae family. It is named after a corolla virus that has protrusions that extend around.



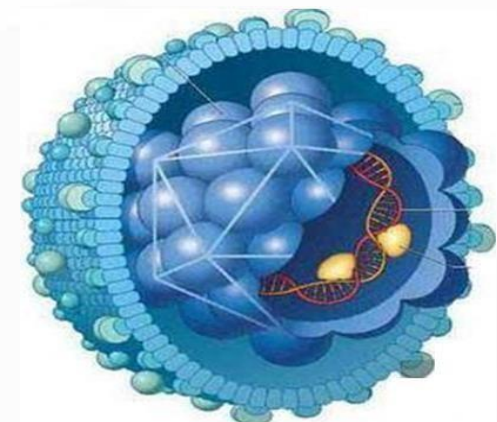
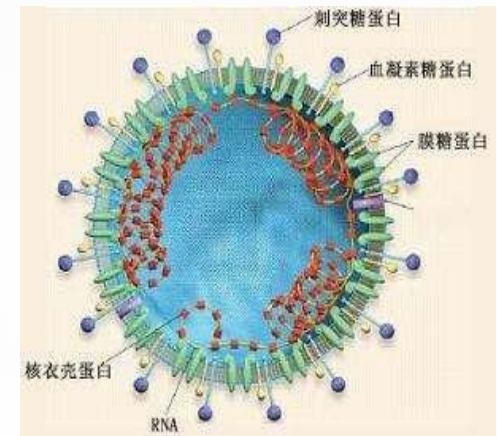
4. What is the shape of the coronavirus?

Coronaviruses are enveloped, and particles are round or elliptic, often pleomorphic, with diameters of 50-200nm.

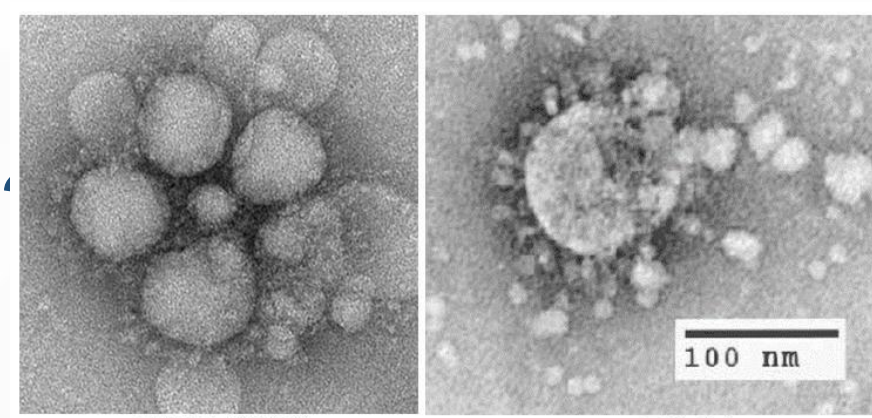


5. What is the structure of a coronavirus?

S protein is located on the surface of the virus and forms a club-like structure. As one of the main antigenic proteins of the virus, it is the main structure for typing. The recognition of physical and chemical properties of coronaviruses is mainly derived from the study of sars-cov and mers-cov.



6. How are coronaviruses classified?



MERS 冠状病毒

SARS 冠状病毒

Most of the coronaviruses infect animals. At present, there are three types of coronaviruses isolated from humans: common coronaviruses 229E, OC43, and SARS-CoV. There are six known coronaviruses in humans: 229E, NL63 of the genus Polygonum, OC43 and HPU of the beta genus, Middle East respiratory syndrome-associated coronavirus (MERS-CoV), and severe acute respiratory syndrome-associated coronavirus (SARS-CoV).). The coronavirus isolated from the lower respiratory tract of patients with unexplained pneumonia in Wuhan this time is a new type of coronavirus, named by the WHO as 2019-nCoV.

The genome sequences of the six new coronaviruses (2019-nCoV) currently known are almost identical, and in terms of gene sequence homology, the new coronavirus is closer to SARS-CoV than MERS-CoV. New coronaviruses can now be classified in the beta genus Coronavirus. This species is similar to SARS-CoV and MERS-CoV in the evolutionary tree, but not exactly the same.

7. Which wild animals carry coronavirus?

Many wild animals can carry pathogens and act as vectors for certain infectious diseases. Civets, bats, bamboo mice and badgers are common hosts of coronaviruses.

The outbreak of viral pneumonia in wuhan has a lot in common with the outbreak of SARS in guangdong in 2002. Both occurred in winter. The initial outbreak originated from the contact between live animals traded in human and animal markets, and was caused by unknown coron.

Since the evolutionary neighbors and outgroups of the wuhan novel coronavirus have been found in bats, it is speculated that the natural host of the wuhan novel coronavirus may also be bats. Like the SARS coronavirus that caused it in 2002, the new coronavirus is likely to have an unknown intermediate host vector during bat-to-human transmission.

Don't eat unquarantined wild animals or fresh food, such as meat sold at roadside stalls.



8. How do coronaviruses get from animals to people?

The new coronavirus and sars-cov viruses are all coronavirus hku9-1 in bats, and many coronaviruses associated with coronaviruses in humans are associated with bats, and many coronaviruses have natural hosts in bats. It is likely that bats are the primary host of the new wuhan coronavirus, which has completed bat-intermediate host-human transmission through evolutionary mutation. However, there may be more intermediate hosts, from bats to humans, that have not yet been identified.

Coronavirus pathways from animal to human and person to person: contact transmission and droplet transmission.

9. Which coronaviruses cause pneumonia in humans?

HKU1、SARS-CoV、MERS-CoV、2019-nCoV :

Can cause pneumonia in humans.



10. How resistant are coronaviruses?

The coronavirus is sensitive to heat and can be effectively inactivated by lipid solvents such as 56°C for 30 minutes, ether, 75% alcohol, chlorine-containing disinfectant, peroxyacetic acid and chloroform. Chlorhexidine is not effective in inactivating the virus.



11. Do you know the pathogenicity of

Coronaviruses mainly infect adults or older children and pharyngitis, and some strains can cause diarrhea and droplets and also by the fecal-oral route. It is mainly person-to-person transmission. The incubation period of the disease averages 5-7 days.

The 2019-nCoV, a measure of how bad a virus is, in terms of lethality and infectivity. The new coronavirus rate is uncertain, but its high risk may be lower than SARS and controllable state.

12. What is the immunity of coronavirus

The patient's immunity after the disease is not strong against the same type of virus re-infection.

13. Severe acute respiratory syndrome ---

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SARS-CoV Can cause severe acute

respiratory syndrome (**severe acute respiratory syndrome, SARS**) 。 The main symptoms of SARS are fever, cough, headache, muscle pain, and respiratory infection. Most SARS patients are self-healing or cured, with a fatality rate of about 14%, especially those over 40 or with underlying diseases such as coronary heart disease, diabetes, asthma and chronic lung disease.

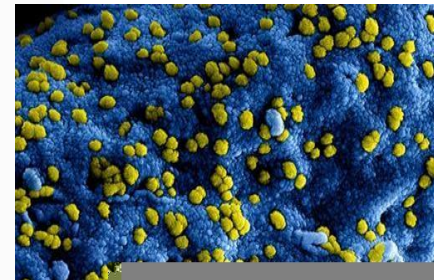


14. Middle East respiratory syndrome (MERS) coronavirus

--- The case fatality rate is higher than SARS.

MERS was a concentrated outbreak in Asia in 2015-2016 and bears too much resemblance to SARS, which broke out in 2003. Both of them are respiratory tract infections caused by coronavirus, and both are more acute. So, what's the difference? (1) the two have different propagation speeds. In the two years between the first case of MERS in September 2012 and May 2015, there were about 1,143 confirmed cases. Since the first SARS case was discovered in 2003, there have been 8,422 confirmed cases in 32 countries and regions worldwide in about six months. They are not infectious. MERS is not thought to spread easily from person to person, but SARS can spread quickly from person to person.

They are different. Although MERS is less contagious than SARS, it has a much higher fatality rate. Fewer than 10% of SARS cases are confirmed; Among MERS patients, the death rate was nearly 40 percent, much higher than that of SARS.



15. What is a novel coronavirus? Why is this virus circulating?

The coronavirus causing the epidemic is a variant of a novel coronavirus (genus genera), named 2019-ncov by WHO. On January 10, 2020, the first 2019-ncov genome was sequenced, followed by five subsequent viral genome sequences.

Due to the antigenic variation of the coronavirus, the new coronavirus was produced, and the population lacked immunity to the mutant virus strain, so the new coronavirus pneumonia could be caused.





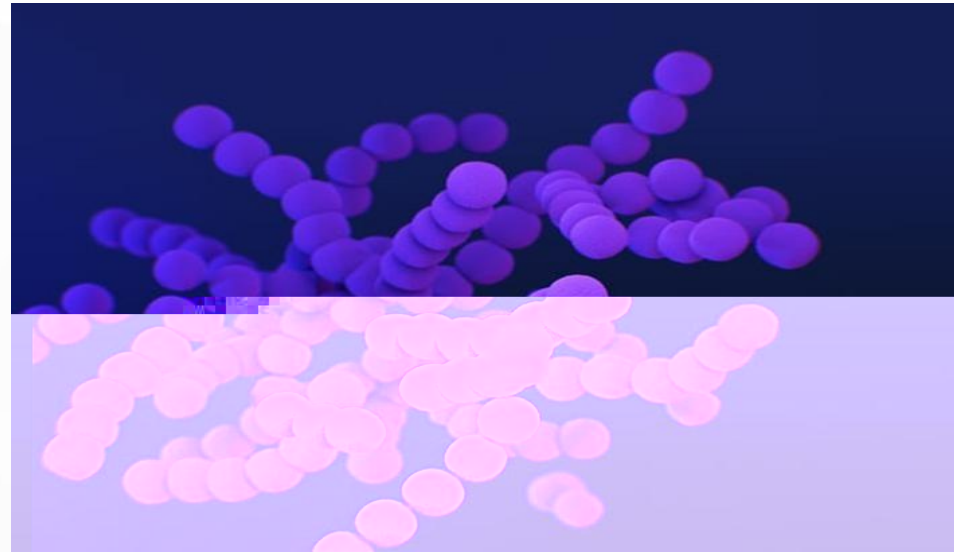
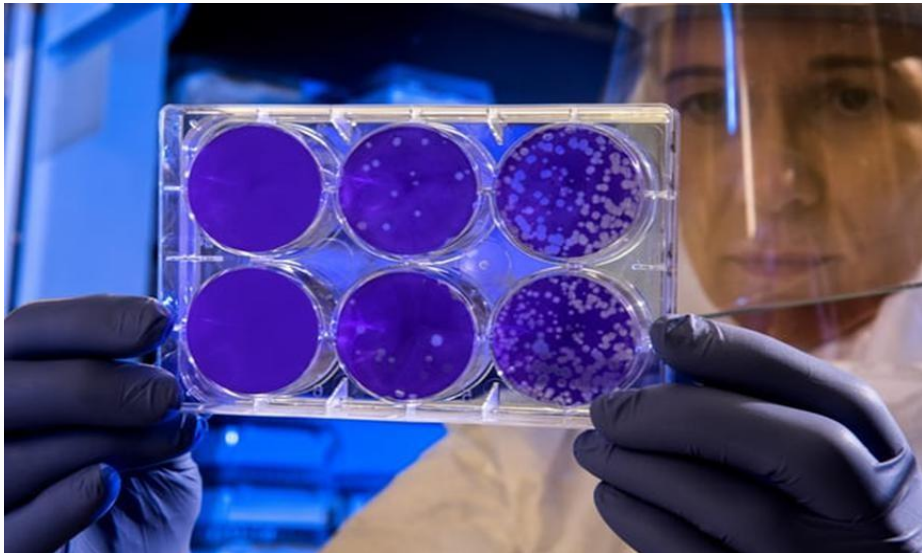
02

Understanding communication risk

Community acquired pneumonia, source of infection, route of transmission, prevention

16. What is community acquired pneumonia?

Community acquired pneumonia(CAP) refers to Infectious inflammation of the lung parenchyma (including alveolar walls, the broad interstitium of the lungs) that occurs outside the hospital, including pneumonia with a defined incubation period of pathogen infection that occurs during the mean incubation period after the hospital.



17. What are the clinical diagnostic criteria for community-acquired pneumonia?

- 1 The onset of the community
- 2 Pneumonia-related clinical manifestations:
 - Recent cough, sputum or existing respiratory illness, with or without purulent sputum/chest pain/dyspnea/hemoptysis;
 - Fever;
 - Signs of lung consolidation and/or rales with dampness;
 - WBC $> 10 \times 10^9/L$ or $< 4 \times 10^9/L$, with or without neutral nucleus shifted to the left.
- (3) imaging: chest X-ray showed new patchy invasive shadows, leaf/segment consolidation, or interstitial changes, with or without pleural effusion. Any one of the above 1-4 items plus imaging, except non-infectious diseases can be diagnosed.



18. What pathogens cause common community-acquired pneumonia?

Bacteria are the main cause of community-acquired pneumonia. Streptococcal pneumonia is one of the most common bacterial pneumonia in the community. But the most common pathogens that cause acute respiratory disease are viruses, or bacteria-virus co-infections. In particular, acute respiratory diseases caused by novel pathogens, such as novel coronavirus, can cause epidemics or pandemics.

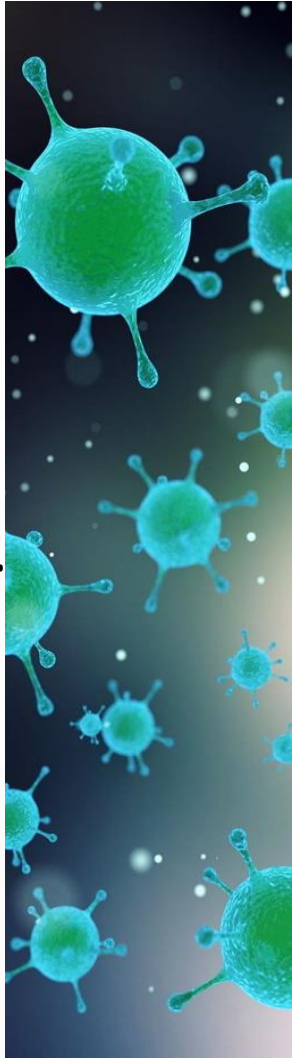
Pathogens: *Mycoplasma pneumoniae* and *Streptococcus pneumoniae*.

Others: *Haemophilus influenzae*, *Chlamydia pneumoniae*, *Klebsiella pneumoniae* and *Staphylococcus aureus*; *Pseudomonas aeruginosa* and *Acinetobacter baumannii* are rare.

Special population: gram-negative bacteria such as *Klebsiella pneumoniae* and *Escherichia coli* are more common.

Virus detection rate in Chinese adult CAP patients is 15%-34.9%, with influenza virus taking the first place, others including parainfluenza virus, rhinovirus, adenovirus, human parainfluenza virus, respiratory syncytial virus and coronavirus.

Patients who tested positive for the virus were associated with bacterial or atypical pathogen infection between 5.8% and 65.7%.



19. How does community-acquired pneumonia form interpersonal cycles?

All agents that cause community-acquired pneumonia are theoretically at risk of human-to-human transmission. Path of pathogen transmission from source of infection to susceptible population: droplet transmission, contact transmission, airborne transmission.

In winter, due to factors such as climate and population movement (chunyun), local outbreaks of respiratory diseases are prone to occur. Mainly through the patient cough, sneeze and other droplets spread directly .



20. What are the risk factors for community transmission of pneumonia?



Autumn and winter are the seasons when respiratory viruses such as influenza are prevalent, and infections can occur, especially in the upper respiratory tract, which is difficult to distinguish from the early symptoms of the new coronavirus pneumonia. The main infectious sources of community-acquired pneumonia are patients, their families, visitors and their living environment. The distribution and outcome of community-acquired pneumonia are related to:

Environmental status: air pollutants, indoor crowding, humidity, indoor hygiene, season, temperature;
Accessibility and effectiveness of health care services and preventive measures to control transmission of infection: vaccines, access to health care facilities and isolation capacity, etc.;
Host factors: age, smoking status, host infectivity, immune status, nutritional status, previous infection or other pathogen infection, body base status;
Pathogen characteristics: including mode of transmission, infectivity, virulence factors, and microbial biomass (inoculum).

21. How can community-acquired pneumonia be prevented?

Infection source control:

When coughing or sneezing, cover your mouth and nose with your hands or other materials (handkerchiefs, tissues, cloth mouth covers or surgical masks) to reduce the spread of droplets. After contact with respiratory secretions, hand hygiene and frequent hand washing should be performed immediately.

Personal prevention:

A reasonable diet, adequate nutrition and oral health can help prevent pneumonia.

Moderate exercise, improve immune capacity;

Stop smoking and limit alcohol, psychological balance;

Maintain indoor ventilation (ventilation can be facilitated by natural ventilation and exhaust fans;

Get vaccinated.

秋冬季常见呼吸道传染病预防



22. How does indoor air, floor disinfect?



Alcohol: alcohol can denature and solidify the protein of bacteria. 75% medical alcohol can be used to sterilize the skin.

Steam box: 20 minutes from boiling to achieve disinfection purposes, suitable for disinfection of tableware, clothing and wound dressing gauze.

Boil: 100°C can also denature the protein of bacteria, need to sterilize sterilization of the articles need to be soaked in the water. optimum

Used for small items such as cutlery, certain toys, baby bottles, etc.

Natural ultraviolet ray: natural ultraviolet ray is sunshine, sterilization effect can not be ignored however. Suitable for air, clothing, plush toys, bedding, etc.

Clean air: keep the indoor air clean, ventilation is necessary, especially in autumn and winter weather, do not ignore because of the cold ventilation.

Potassium permanganate solution: use 5‰ potassium permanganate to disinfect tableware, vegetables and fruits. After soaking for 1 minute, rinse again with clean drinking water.

Bleach: bleach inactivates the enzymes of bacteria and kills them. It is a very effective disinfectant. Use 1-3% bleach in tables, chairs, beds, floors, walls, etc. (bleach and water), wipe with a cloth to achieve disinfection purposes.

Disinfectant: the disinfectant contains chlorine, which can effectively sterilize and sterilize. After being directly diluted, the disinfectant can be sterilized and sterilized in a plastic pot. However, food and cutlery should be avoided. Suitable for desk, chair, bed, wall, floor, etc.

23. Who are susceptible to the new coronavirus?

People are generally susceptible. The new type of coronavirus pneumonia can occur in both immunocompromised and normal populations, which is related to the amount of virus exposure. If you are exposed to a large number of viruses at one time, you can get sick even if your immune system is functioning normally. For people with poor immune function, such as the elderly, pregnant women or people with hepatic and renal dysfunction, the disease progresses faster and is more severe.

Infection depends largely on exposure, not on the risk of infection being lower in resistant populations. Children have less exposure and lower risk of infection; In the same way, older people, people with chronic diseases, and people with poor immune systems are more likely to be infected.



24. What are the epidemiological characteristics of this new outbreak of coronavirus pneumonia?

Most of the early cases were exposed to the south China seafood market in wuhan, and some of the cases were family clustering. Human-to-human and medical staff infection has occurred and community transmission has been evident in wuhan.

The new coronavirus is already deadly and the fatality rate is not yet determined, but its high risk may be lower than that of SARS, and it is in a preventable and controllable state. However, population flow will accelerate the transmission and increase the difficulty of prevention and control.



25. What are the transmission pathways of the novel coronavirus?

The main modes of transmission are by droplets, by contact (including self-inoculation due to hand contamination) and by respiratory aerosols of different sizes in close proximity.

In the early stage, most of the cases admitted to hospitals had a history of exposure to south China seafood market in wuhan, and some of the cases were family clusters, leading to high risk of infection among medical staff. From the current definition of acute respiratory infectious diseases, close - range droplets transmission should be the main route.



26. Can the new coronavirus spread from person to person?

At present, more than 95 percent of new coronavirus pneumonia cases are related to wuhan, have been to or from wuhan. Judging from the incidence sequence of some clustered cases and the situation of medical staff infection, human-to-human transmission is very obvious, and there is a certain range of community transmission.



27. What is droplet transmission?

Droplet: a water-containing particle with a diameter of $> 5\mu\text{m}$

Droplets can pass a certain distance (generally 1 m) into the susceptible mucosal surface. Because the droplet particles are larger, they will not be suspended in the air for a long time.

Production of respiratory droplets:

Cough, sneeze, or talk

Perform invasive respiratory procedures, such as sputum aspiration or bronchoscopy, trachea tube insertion or turning over, back patting, etc., and cardiopulmonary resuscitation;

Pathogens transmitted by droplets:

Influenza virus, SARS coronavirus, adenovirus, rhinovirus, mycoplasma, group A streptococcus and meningococcus (neisseria), etc.



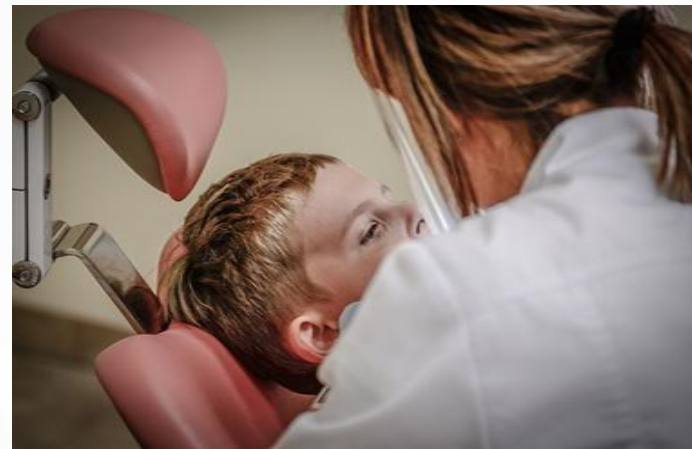
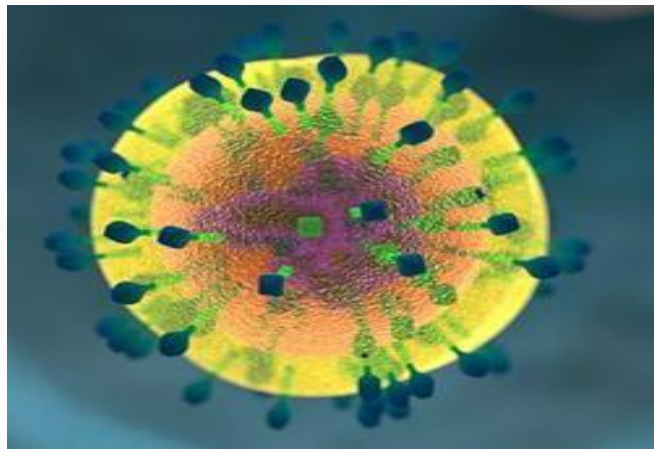
28. What is air travel?

Aerosol propagation. Airborne particles: particles thought to be less than 5µm in diameter that can spread over long distances and remain infectious. Airborne pathogens can also be spread by contact. Airborne pathogens include:

Specific airborne transmission: mycobacterium tuberculosis, aspergillus

Through a variety of ways, but the main airborne transmission: measles virus, varicella zoster virus

Usually by other means, but in special cases (such as aerosol production operations - endotracheal intubation/incision, open airway attraction) through air transmission: variola virus, SARS coronavirus, influenza virus, norovirus, etc.



29. What is contact transmission?

Direct contact: pathogens are transmitted by direct contact with mucous membranes or skin

Blood or blood fluids enter the body through mucous membranes or damaged skin (mainly in viral transmission)

Transmission is caused by direct contact with secretions containing certain pathogens, such as scabies.

MRSA (benzole/methicillin-resistant staphylococcus aureus)

VRE (vancomycin resistant enterococcus)

C.difficile



30. What is a suspect informant?

It refers to the processing, selling, handling, distribution or management of wildlife, articles and the environment that have been exposed to the new coronavirus and have not been properly protected at the time of exposure.



31. What is a close contact?

One of the following contacts after the onset of the case (observation and confirmed case) :

Persons who live, study, work or have close contact with the case;

Medical personnel, family members or other personnel who have similar close contact with the case without taking effective protective measures during diagnosis, treatment, nursing or visiting;

Cases and other patients in the ward and accompanying staff;

Travel on the same vehicle as the case and have close contact with personnel;

Persons who are considered qualified after investigation by field investigators.



32. Why to close contact person medical observation 14 days?

The incubation period of the new coronavirus pneumonia is about 7 days on average, the short one is 2-3 days, and the long one is 10-12 days.

At present, it is necessary to adopt strict medical observation and other preventive public health measures for close contacts. This is a responsible attitude towards public health and safety and also a common practice in the international community. Referring to the incubation period of other diseases caused by coronavirus, the relevant information of this new coronavirus case and the current situation of prevention and control, the medical observation period of close contacts was set as 14 days, and the close contacts were observed at home.





03

Early detection and early treatment

Early clinical symptoms, case
identification and clinical treatment

33. What clinical manifestation does new coronavirus pneumonia patient have?

The onset of the new coronavirus pneumonia is mainly characterized by fever, which can be combined with mild dry cough, weakness, obstruction of breath and aspiration, diarrhea and other symptoms.

Half of the patients developed dyspnea within a week. In severe cases, the disease progressed rapidly, with acute respiratory distress syndrome, septic shock, hard-to-correct metabolic acidosis and bleeding within a few days

Dysfunction. Some patients with mild symptoms, but no fever. Most patients have a good prognosis, while a few are in critical condition or even die.

Laboratory tests showed that the total number of white blood cells in the early stage of the disease was normal or decreased, the lymphocyte count was decreased,

In some patients, liver enzymes, muscle enzymes and myoglobin were elevated. In most patients, c-reactive protein and erythrocyte sedimentation rate were elevated, and procalcitonin was normal. In severe cases, d-dimer is elevated.



34. Do you know about laboratory tests for new coronavirus pneumonia?

The novel coronavirus was identified by real-time fluorescence rt-pcr. Specimens of the upper and lower respiratory tracts, such as bronchi or alveolar lavage, and deep cough sputum, were collected from each case, as well as serum from the onset and 14 days after onset.

In the early stage of the disease, the total number of white blood cells is normal or decreased, the lymphocyte count is decreased, and liver enzymes, muscle enzymes and myoglobin are increased in some patients. In most patients, c-reactive protein and erythrocyte sedimentation rate were elevated, and procalcitonin was normal. In severe cases, d-dimer is elevated.



35. Do you know the chest imaging features of patients with new coronavirus pneumonia?

In the early stage, multiple small plaque shadows and interstitial changes appeared, which were obvious in the peripheral lung, and then developed into multiple ground glass shadows and infiltration shadows in both lungs. In severe cases, lung consolidation, even "white lung", and pleural effusion was rare.



36. Do you know how to identify and observe new cases of coronavirus pneumonitis clinically?

Both of the following two

Epidemiological history: history of travel to wuhan, or direct or indirect contact with relevant markets in wuhan, especially farmers' markets, in the two weeks prior to the onset of the disease.

Clinical manifestations: fever; It has the characteristics of viral pneumonia. The total number of white blood cells in the early stage is normal or decreased, or the lymphocyte count is decreased. After 3 days of standardized antibacterial drug treatment (according to the guidelines on diagnosis and treatment of community-acquired pneumonia in Chinese adults (2016 edition) issued by the respiratory branch of the Chinese medical association and the guidelines on diagnosis and treatment of community-acquired pneumonia in children (2019 edition) issued by the national health commission, there was no significant improvement or progressive aggravation of the disease



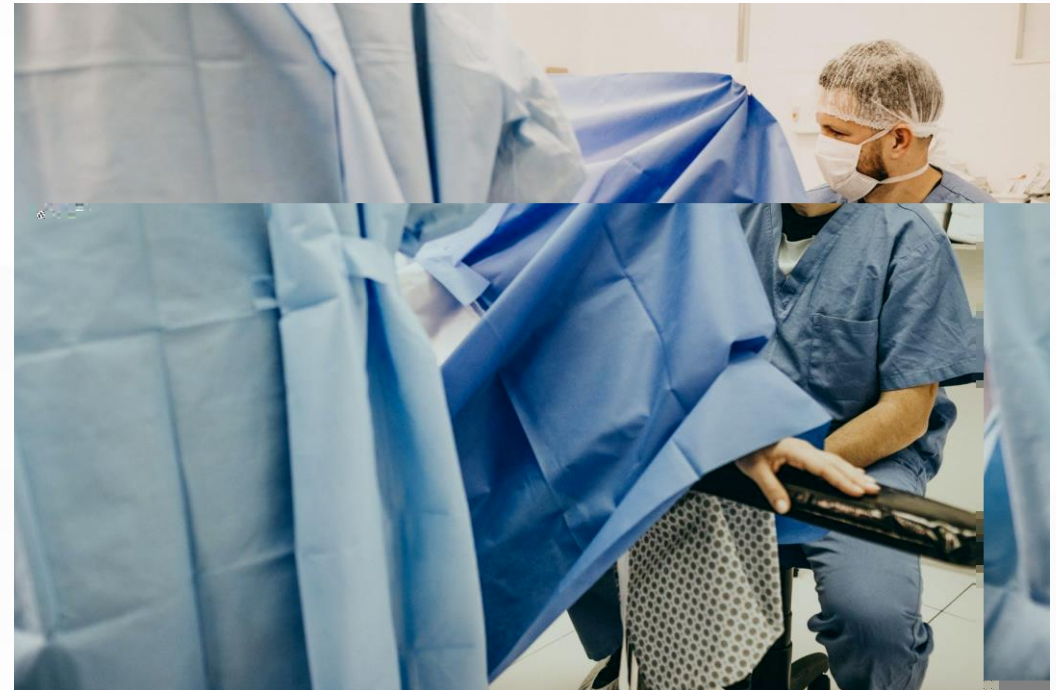
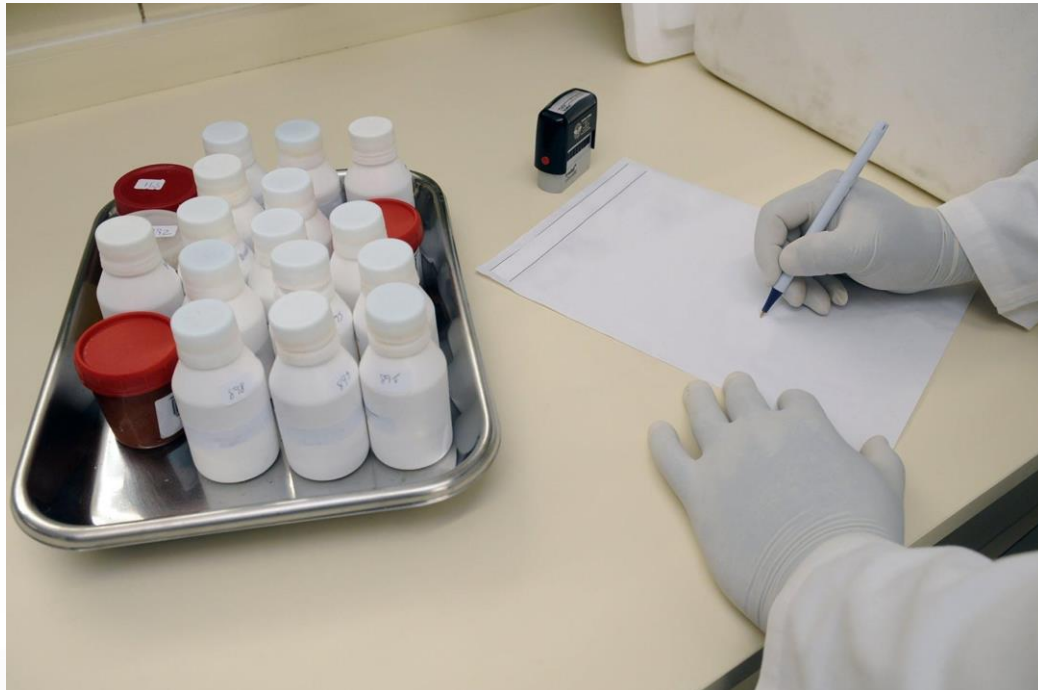
37. Do you know how to diagnose new coronavirus pneumonia in clinic?



On the basis of observing the case, collecting sputum, pharynx swab and other respiratory tract samples for viral nucleic acid gene test can make the pathogen diagnosis.

38. How to diagnose critically ill cases clinically?

A critical case is one in which the patient's vital signs are unstable, the condition changes rapidly, the function of two or more organ systems is unstable, and the development of the disease may endanger the patient's



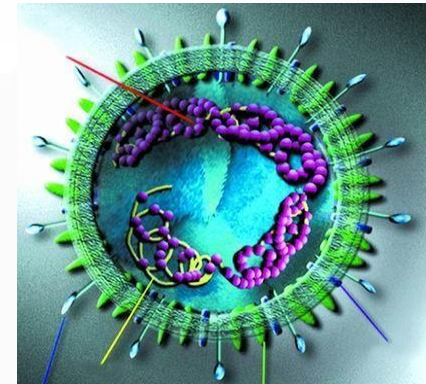
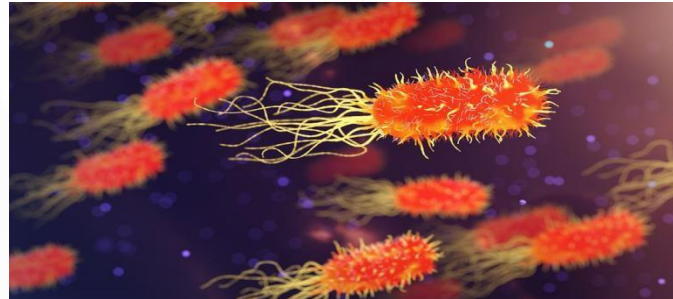
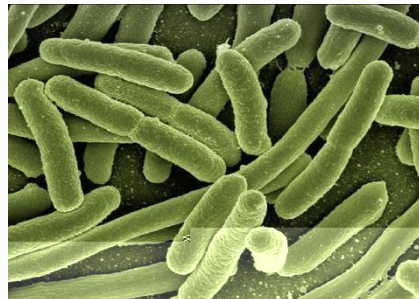
39. What diseases should the new coronavirus pneumonia differentiate from?

Bacterial pneumonia

Common symptom is cough, cough phlegm, or original respiratory tract symptom aggravates, appear purulent sex phlegm or blood phlegm, accompanying or not accompanying chest pain. Generally not infectious, not an infectious disease.

Severe acute respiratory syndrome (SARS)/MERS

With the discovery of new coronavirus and MERS SARS coronavirus is comparable to the belong to the coronavirus family, but the genetic evolution analysis shows they belong to different branch of the group, it is not SARS, nor MERS virus, the virus gene sequences of differences is larger, the current survey show that the virus is interpersonal communication ability and weak pathogenicity than SARS.



40. What should I do if I am informed by CDC that you are a close contact?



In accordance with the requirements for medical observation that occupy the home, don't panic, don't go to work, don't go out, do good self condition observation, set the stage of community doctors follow-up, if there is clinical manifestations such as fever, cough, report to the local institution of disease prevention and control, under the guidance to the designated medical machine structure for screening, diagnosis and treatment, etc.



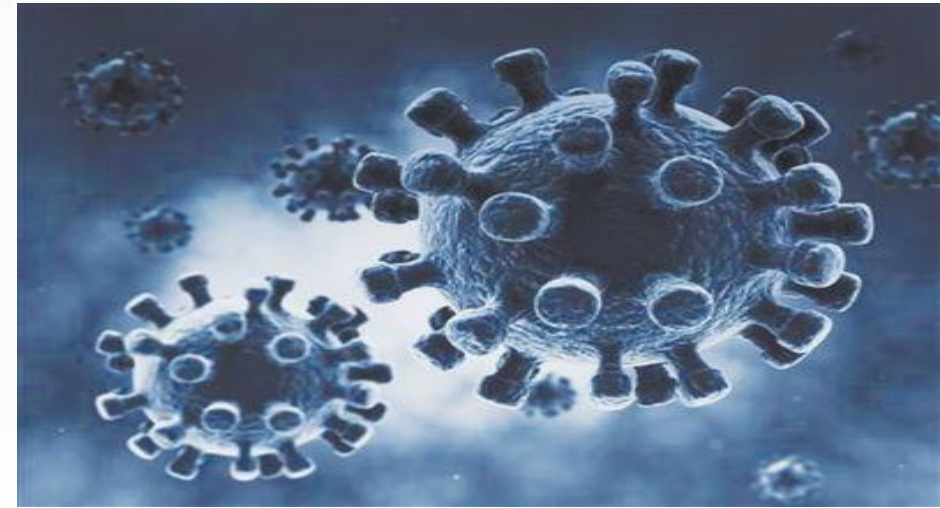
41. Do you know why influenza virus causes influenza to circulate easily?

Influenza viruses are spread mainly through airborne droplets, contact between susceptible people and infected people, or contact with contaminated objects. General autumn and winter season is its high hair period. Human influenza is mainly caused by a circulating virus and b influenza virus. Influenza a viruses often undergo antigenic mutations, which can be further divided into subtypes such as H1N1, H3N2, H5N1 and H7N9. When new influenza subtypes emerge, the population generally lacks immunity to them, so it is easy to cause a pandemic.



42. Do you know the similarities and differences between SARS and the new coronavirus pneumonia?

The new coronavirus, the MERS coronavirus and the SARS coronavirus are all coronaviruses, but they are not the same.



43. What are the early symptoms of new coronavirus pneumonia? How to recognize and judge?

General symptoms:

Fever, fatigue, dry cough, gradually dyspnea, some patients with mild symptoms, but no fever.

Serious:

Acute respiratory distress syndrome, septic shock, difficult to correct metabolic acidosis, bleeding and coagulation dysfunction

Most of the patients are mild and moderate, with good prognosis.



44. Is there a specific drug or vaccine to treat the new coronavirus pneumonia?

Currently, there are no specific antiviral drugs for the new coronavirus, and the treatment is mainly symptomatic and supportive. Avoid blind or inappropriate antibiotic therapy, especially in combination with broad-spectrum antibiotics.

There is no vaccine available for the new disease. Developing a new vaccine could take years.



45. Can we now quickly detect new coronavirus infections?

On the basis of meeting the criteria for suspected cases, sputum, pharynx swabs, lower respiratory tract secretions and other specimens were tested by real-time fluorescence rt-pcr for positive 2019-ncov nucleic acid, and the diagnosis was confirmed .



46. What if you think you are infected with a novel coronavirus and need clinical treatment?

If you think you have a new coronavirus, you should seek medical attention.

WHO has issued guidelines for the clinical management of severe acute respiratory tract infections caused by suspected novel coronavirus infections. There are currently no specific treatments for diseases caused by novel coronaviruses. However, many health problems can be dealt with symptomatically, so they need to be treated according to the patient's clinical situation. In addition, assisted care for an infected person can be very effective.



47. How to choose treatment sites for novel coronavirus pneumonia?

The critical cases should be admitted to the ICU as soon as possible.



48. How is new coronavirus pneumonia treated?

Rest in bed, strengthen supportive treatment, pay attention to water and electrolyte balance, maintain internal environment stability

According to the disease monitoring indicators.

According to the change of oxygen saturation, timely give effective oxygen treatment measures

Antiviral therapy: currently no effective antiviral drug

Antimicrobial therapy: strengthening bacteriological monitoring

When there is evidence of secondary bacterial infection, anti-bacterial drugs should be promptly applied

TCM treatment: dialectical treatment according to symptoms



49. What are the criteria for clinical isolation and discharge?



Discharge index is the first condition is stable, fever situation is improved. The second is the obvious improvement of pulmonary imaging, no organ dysfunction. The patient's breathing is stable, consciousness is clear, communication is normal, diet is normal, body temperature returns to normal for more than 3 days, respiratory symptoms are significantly improved, two consecutive negative breath and aspiration channel pathogen nucleic acid test (interval of at least 1 day), can be released from isolation and discharged or transferred to the corresponding department for treatment of other diseases according to the condition.

50. What are the transfer principles for transporting patients

Transport patients should use special vehicles, and do transport personnel personal protection and vehicle disinfection .



51. How do medical personnel do good hospital infection control?



Medical personnel shall, in accordance with the standard precautionary principle and according to the possible transmission risk of medical operations, do a good job in hospital infection control such as personal protection, hand hygiene, ward management, environmental disinfection and waste management, so as to avoid the occurrence of hospital infection.

Pre-inspection triage: wear overalls, caps, surgical masks, etc.

Outpatient service, emergency service, fever clinic and isolation ward: wear work clothes, work cap, surgical mask, etc. Wear latex gloves when coming into contact with blood, body fluids, secretions or excreta; In case of endotracheal intubation, airway care, sputum aspiration and other aerosol or spillage operations, wear N95 mask, face screen, latex gloves, impermeable isolation clothing, and protective clothing and respiratory head cover when necessary. For patients admitted in isolation, the visitation system should be strictly implemented. If necessary, the visitation personnel should be guided to carry out personal protection according to relevant regulations.



04

Personal hygiene protection

52. How to prevent respiratory tract infection in winter and spring?



Wash your hands frequently. Wash your hands with soap or hand sanitizer and running water instead of a dirty towel. Wash hands immediately after touching respiratory secretions, such as after sneezing.

Maintain good respiratory hygiene. Cover your mouth and nose with a tissue or towel when coughing or sneezing. Wash your hands after coughing or sneezing. Avoid touching your eyes, nose or mouth with your hands.

Enhance physical fitness and immunity. Balanced diet, moderate exercise, regular work and rest, to avoid excessive fatigue.

Keep the environment clean and ventilated. Open the window several times a day to keep the air fresh

Minimize activities in crowded areas and avoid contact with respiratory tract infections.

If respiratory tract infection symptoms such as cough, runny nose, fever, etc., should rest at home, early seek medical advice.

53. How to protect yourself from the new coronavirus infection?

The coronaviruses are mainly spread by droplets. Wear surgical masks correctly.

Do not cover with your hands when sneezing or coughing.

Wash hands correctly and promptly;

Improve immunity, try to avoid crowded and closed places. Exercise more, regular work and rest, improve their immunity is the most important means to avoid infection.



54. Do you know what types of masks are available?

The paper mask
Cotton masks
Activated carbon mask
Sponge masks
Surgical masks
N95 respirator

预防武汉新型冠状病毒肺炎
戴什么口罩才有用？

 “纸”口罩 ❌	 活性炭口罩 ❌
 棉布口罩 ❌	 海绵口罩 ❌
 医用外科口罩 ✅	 N95口罩 ✅

55. Do you know how to use a mask properly?



Usage of surgical masks:

Whether disposable masks, or surgical masks, in fact, there are two sides, take disposable masks, the color is dark is the front, the front should face out, and there is a surgical mask nose clip metal strip

The one facing the face should be the opposite side of the mask, which is the lighter side. In addition, the part with the metal strip should be above the mask and not worn backwards. After making clear the front, back, top and bottom of the mask, wash your hands first. After making sure the mask is correct, hang the two ends of the rope on your ear.

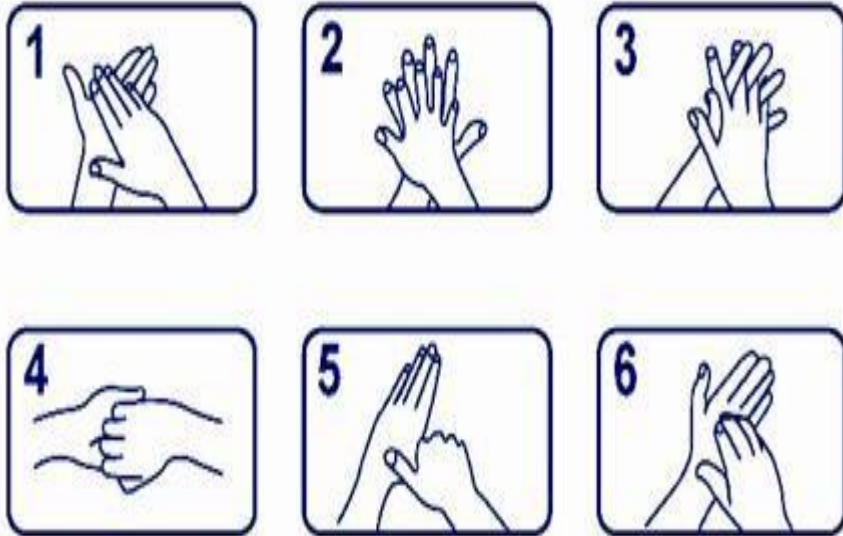
The last step is also the metal strip problem mentioned above. After wearing the mask, you need to press the metal strip on both sides of the bridge of the nose with both hands to make the upper end of the mask close to the bridge of the nose. Then you need to stretch the mask downward to make the mask cover the nose and mouth without wrinkles.

56. The role of hand washing in preventing respiratory diseases?

Transmission by hand contact includes water/food transmission, blood/blood products transmission, air droplets transmission, gastrointestinal transmission, direct or indirect contact transmission, etc. Studies show that proper hand washing is one of the most effective ways to prevent diarrhea and respiratory infections.



57. Have you learned the proper way to wash your hands?



In the first step, rub the palms of your hands together.

Step 2: cross hands and rub finger seams (palms and back, hands crossed and folded, left and right hands exchanged five times)

The third step, palm hand hand rub finger seam (palm relative ten fingers crisscross, rub five times)

Step 4: rub palms with fingertips, same as hands (fingertips on palms)

Step 5: hold the thumb of the other hand in one hand and rub

Step 6: rub the palms of your fingers or the wrists of one hand holding the other hand.

58. Somebody in the home appears pneumonic symptom, how should take care of?



Isolate the patient from the rest of the family at a distance of at least 1m

Cover your mouth and nose with a mask when caring for patients. Discard the mask after use

Wash hands thoroughly with soap after contact with the patient, and keep air in the patient's living space

59. What should I do if I feel infected with a novel coronavirus?

It is necessary to go to the local designated medical institutions in time for screening, diagnosis and treatment for suspected new coronavirus infection. When seeking medical treatment, it is necessary to truthfully and in detail describe the disease situation and treatment process, especially the recent travel and residence history of doctors in wuhan, the contact history of pneumonia patients or suspected patients, and the contact history of animals.

It should be noted that surgical masks should be worn throughout the treatment to protect yourself and others.



60.

Four cornerstones of health

Reasonable diet

A moderate amount of sports

Quitting alcohol

Psychological balance



61. How do we eat when new coronavirus pneumonia is prevalent?

Do not eat diseased animals and their products; To buy chilled poultry from regular channels, cook poultry thoroughly when consuming poultry meat, eggs and milk. Separate cutting boards and knives for handling raw and cooked food. Wash your hands between raw and cooked food.

Even in areas with outbreaks, meat is safe to eat if it is thoroughly cooked and properly handled during food preparation

o



62. In the face of the new coronavirus, what principles should be followed in physical exercise?

Follow the three principles: comprehensive exercise, gradual, and consistent.

Comprehensive exercise, one is to make every part of the body, every system as far as possible to get exercise; Second, it is to point to as far as possible widen practice project and form, in order to develop each

Physical fitness. Step by step, refers to the intensity of exercise should be from small to large, on the basis of the body gradually adapt to constantly improve the requirements; Learning movement, Mastering technology is from easy to difficult. Perseverance means to form a habit, practice untiring, until life.

63. Do you know how smoking and drinking reduce human immunity?

When smoking, can cause the nicotine in human body blood to contain quantity to increase, cause vasospasm easily, bring about the hypoxia of short sex of local organ official, especially the oxygen content of respiratory tract and inside viscera official decreases, easy bring about the human body to fight disease to be able to weaken, alcohol also is such. Promote smoking and alcohol restriction.



64. Do you know psychological balance can improve human immunity?

Focus on psychological factors

Pay attention to the psychological balance: psychological balance, physiological balance, to delay the aging of the brain and immune system.

Learn to self-regulate emotions and respond to various stimuli correctly: positive life events increase IgA levels of immune globulin white; on the contrary, in the face of exam pressure, students' immune response indicators, such as NK cell activity and lymphocyte proliferation, decrease.

To develop an optimistic, cheerful and tolerant character, to laugh often. Healthy people over the age of 100 have something in common: they are open-minded, easy-going and kind-hearted. They love work and sports.

Want to learn absolute: have joy to be able to jump or sing a song, have trouble not to be stuffy in belly, can pour out to the friend or cry a.

Good relationships: boost immunity, health and longevity. Studies have shown lower NK cell activity in lonely first-year medical students, separated or divorced women.

Adjust interpersonal relationship: in terms of regulating emotions, it is important to control anger, which seriously affects immune function. Cultivate good communication habits, keep a good mental outlook, pay attention to etiquette, pay attention to communication skills, to listen to more, more appreciation, more patience.



65. What are the prevention and control measures of the new coronavirus pneumonia?

The patient was first identified.

Isolation: home or hospital isolation for minor cases;

Standard preventive measures;

Preventive measures against airborne transmission;

Precautions against contact and droplets: wash hands frequently and wear a mask when going out;

Room ventilation;

Cleaning and disinfection: the new coronavirus is sensitive to heat, at 56°C for 30 minutes, 75% alcohol, chlorine-containing disinfectant, hydrogen peroxide disinfectant, chloroform and other lipid solvents can effectively inactivate the virus.





05

Site hygiene requirements

66. How to prevent new coronavirus infections at farmers' markets?

Avoid contact with farm animals or wild animals without protection.

Wear a mask in crowded places.

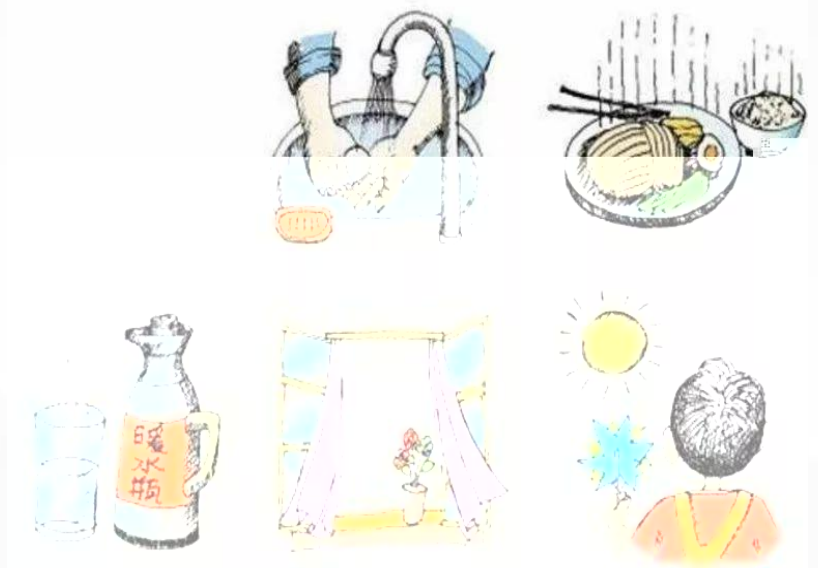
Cover your nose completely with a tissue or sleeve or elbow bend when coughing or sneezing. Immediately throw the used paper towels into the closed garbage box; After coughing or sneezing, wash your hands with soap and water or an alcohol-based hand sanitizer.

Wash hands after going home. If you have fever and other respiratory symptoms, especially persistent fever, go to the hospital in time.



67. How to prevent transmission of novel coronavirus at home?

Enhance health awareness, moderate exercise, early to bed and early to rise, do not stay up late can improve their own immunity;
Maintain good personal hygiene. Cover your mouth and nose with a tissue when coughing or sneezing. Wash your hands thoroughly and often without touching your eyes, nose or mouth with dirty hands.
Room ventilation and keep clean and tidy;
Avoid close contact with people with respiratory symptoms (such as fever, cough or sneezing, etc.) if possible;
Try to avoid crowded and confined places, such as must wear a cover;
Avoid contact with wild animals, poultry and livestock;
Stick to a safe diet of cooked meat and eggs;
Pay close attention to fever, cough and other symptoms.



68. How to prevent new coronavirus infection in the theater?



During epidemics of infectious diseases, public places with dense population and poor air circulation should be avoided, especially children, elderly people and people with low immunity. Wear a hood if necessary; When you cough or sneeze, cover your mouth and nose completely with a tissue, and immediately throw the used tissue into a closed garbage box to prevent the spread of germs.

69. How can public transport facilities such as buses, subways, ships and planes prevent transmission of the new coronavirus?

Buses, subways, ships, planes and other places are crowded, can wear masks to reduce the risk of exposure to pathogens. When you cough or sneeze, cover your mouth and nose completely with a tissue, and immediately throw the used tissue into the sealed garbage box to prevent the spread of germs.



70. How to prevent new coronavirus infection in the workplace?

Maintain continuous ventilation in the workplace; Do not spit on the ground, you can spit on the paper first, when convenient, and then throw it into the closed garbage box, when you cough or sneeze, with a tissue will completely cover the mouth and nose, and immediately put the used tissue into the closed garbage box, to prevent the spread of germs; Maintain personal hygiene and wash hands frequently; Parties should be avoided during the epidemic season.



71. How to prevent new coronavirus infection in hospital?

Go to the hospital to see a doctor, when visiting a patient, especially go to the hospital of hair popular diagnosis or respiratory department to see a doctor should wear a mask; Avoid close contact with people with respiratory symptoms (such as fever, coughing or sneezing) if possible;

Maintain good personal hygiene by covering your mouth and nose with a tissue when coughing or sneezing;

Wash hands with soap and water or an alcohol-based hand sanitizer without touching eyes, nose or mouth with dirty hands;

Immediately throw the used paper towels into the closed garbage box;

Pay close attention to fever, cough and other symptoms, such as the symptoms must promptly seek medical attention nearby.



72. How can medical personnel protect themselves against new coronavirus infections?



Medical personnel shall follow the standard precautionary principle in the work of diagnosis and treatment, and strictly implement hand hygiene, disinfection, isolation, personal protection and other measures;

Surgical masks should be worn in contact with all patients. Wash hands or sanitize hands before wearing the mouth cover and after removing the mask.

Medical personnel enter or leave the development of hot (urgent) rashes, in accordance with the relevant requirements, the correct wear and take off protective equipment.

73. Do you understand that doctors and nurses in hospitals are at high risk for the new coronavirus?

Because medical workers have more contact with patients than with people, they are at high risk for new coronavirus infections. WHO advises health workers to adhere to appropriate infection control measures.



74. Do you know how to know the doctor of fever clinic, nurse to wear protective clothing to receive a patient?

Medical personnel are the main force for epidemic prevention and control. Medical staff to do a good job of personal protection, in order to better help the majority of patients.

In order to ensure the health of medical staff, the prevention and control measures of various hospitals should be strengthened to strictly control hospital infection, strengthen the protection of medical personnel, care for medical personnel, strengthen the daily monitoring of the health of medical personnel, in order to effectively timely detect and treat suspected cases.



06

Knowledge of infectious diseases

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75. Working in fresh markets, how do you prevent new coronavirus infections?

Wash your hands with soap and water after handling animals and animal products

Disinfect equipment and work area at least once a day

Wear protective clothing, gloves and face protection when handling animals and fresh animal products

Take off your protective clothing after work, clean it daily and leave it in the work area

Keep family members away from unwashed overalls and shoes



76. How to prevent new coronavirus infection by purchasing fresh food from fresh market?

Wash hands with soap and water after handling animals and animal products;

Avoid touching eyes, nose or mouth;

Avoid contact with sick animals and diseased meat;

Avoid contact with stray animals and waste water in the market;



77. When do you need to wash your hands in your daily life?

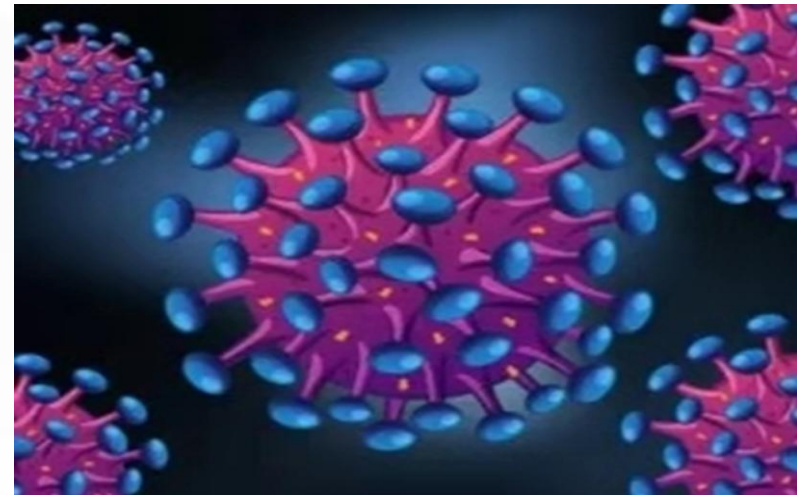
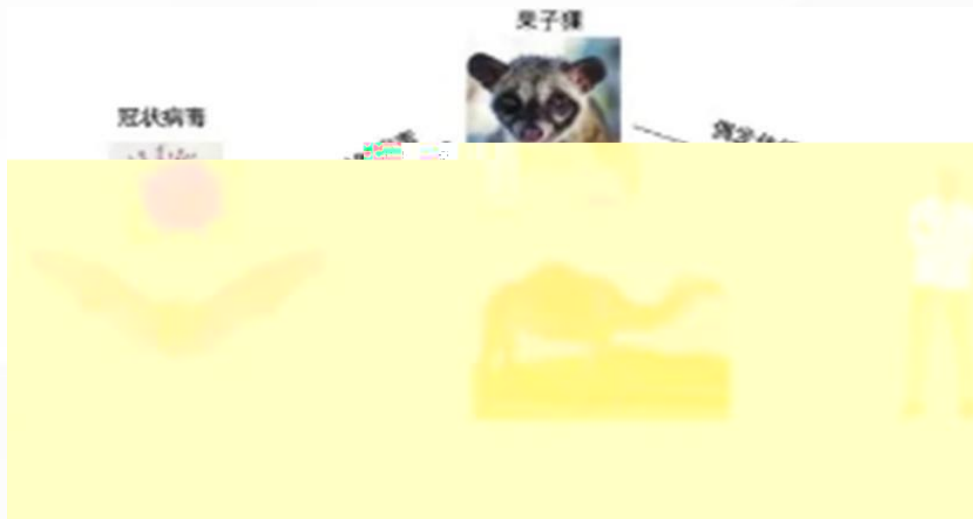
After coughing or sneezing
In caring for the sick
Before, during and after food preparation
Before eating
After using the toilet
When hands dirty
After contact with animals



78. How dangerous is the new coronavirus?

The new coronavirus is very different from the SARS coronavirus and the MERS coronavirus. Although the new coronavirus is a close relative of SARS, it does not yet exhibit the dreaded properties of SARS.

Wang peizhong, an epidemiological virologist who worked on SARS prevention and control in the early years, said, "when scholars judge the harmfulness of a virus, they usually consider two factors: lethality and infectivity. Compared to SARS, the 2019-ncov is mild in both respects."



79. The weather is cold, the door window is closed for a long time in the home, how is the family ventilated excuse me?

When the weather is cold, the door window of the home closes for a long time, together with the activity of personnel, cook wait for behavior, can bring about indoor environment to pollute concentration to increase gradually, accordingly, should open window appropriately ventilated take a breath.

At present, the domestic and foreign ventilation and ventilation without clear provisions, so it is recommended that ventilation and ventilation should be based on the indoor and outdoor environment. When the outdoor air quality is good, it can be ventilated in the morning, middle and evening, each time for 15-30 minutes; When outdoor air quality is poor, ventilation frequency and time should be reduced appropriately.



80. Coronavirus volume is very small, wear a mask to be able to block?

Masks work. The mask ACTS as a "carrier" to stop the virus from spreading, rather than directly blocking it. There are two common modes of respiratory virus transmission: close contact and aerosol transmission. What we call "aerosols" are usually droplets of the patient to which we are exposed. Wear a mask properly, it can effectively block the droplet

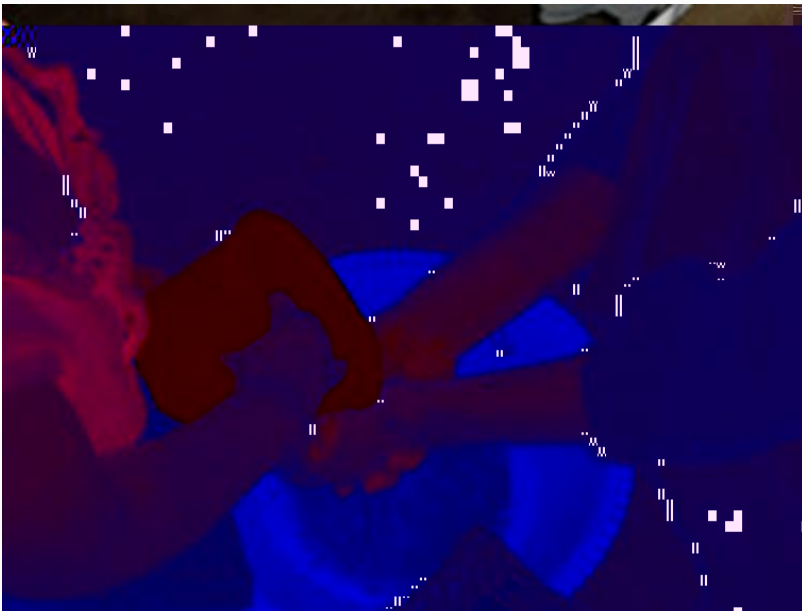
, which prevents the virus from entering the body directly.

KN95 or N95 masks do not have to be worn, and regular surgical masks can also block most of the virus that sticks to the droplets from entering the respiratory tract.



81. The coronavirus is so bad, can soap and water wash your hands?

Useful. Frequent hand washing is one of the definite measures to prevent infection of rhinovirus, coronavirus and other viruses. By fully applying soap and rubbing, it can effectively remove dirt and microorganisms from the skin surface, while running water can also minimize the irritation to the skin. For this reason, authorities such as the national centers for disease control and prevention, the WHO and the U.S. CDC recommend washing hands thoroughly with soap and water.



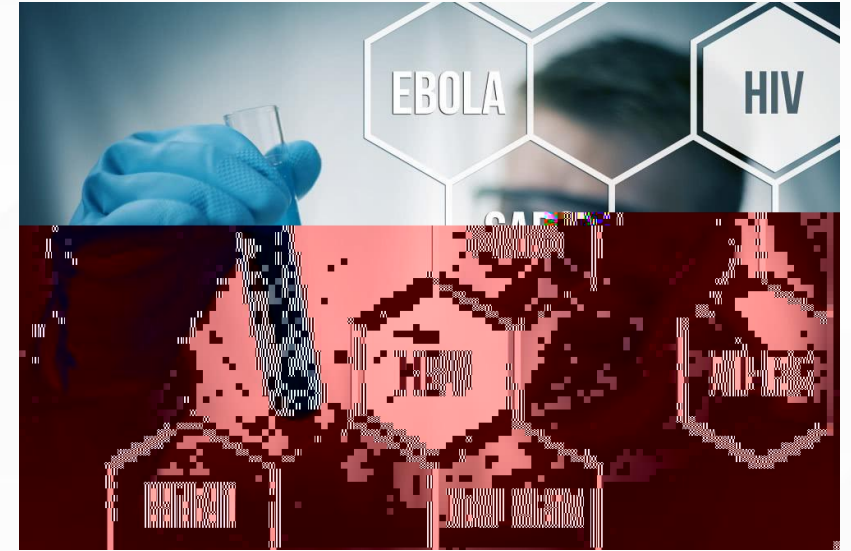
82. There is no water outside the journey, not convenient to wash hands, how to do?



Clean your hands with an alcohol-based disinfectant. Human coronaviruses are not resistant to acid or alkali and are sensitive to organic solvents and disinfectants.⁷⁵ alcohol inactivates the virus, so alcohol-containing disinfection products of a certain concentration can be used as an alternative to washing hands with soap and running water.

83. What is legal contagion?

Some infectious diseases, epidemic prevention departments must timely grasp its incidence, timely take measures, so that the discovery of time and time to report to the local epidemic prevention department, known as the law.





84. Guidelines and principles for the prevention and treatment of infectious diseases?

The state adopts the principle of putting prevention first in the prevention and treatment of infectious diseases, combining prevention and treatment with classified management and relying on science and the masses.



85. Can internet-based medical alcohol rubbed on cotton flakes reduce the risk of infection?

Can have certain prevention effect. Coronaviruses are sensitive to organic solvents and disinfectants. 75% alcohol, ethyl ether, chloroform, formaldehyde, chlorine disinfectant, peroxyacetic acid and ultraviolet rays can inactivate the virus.

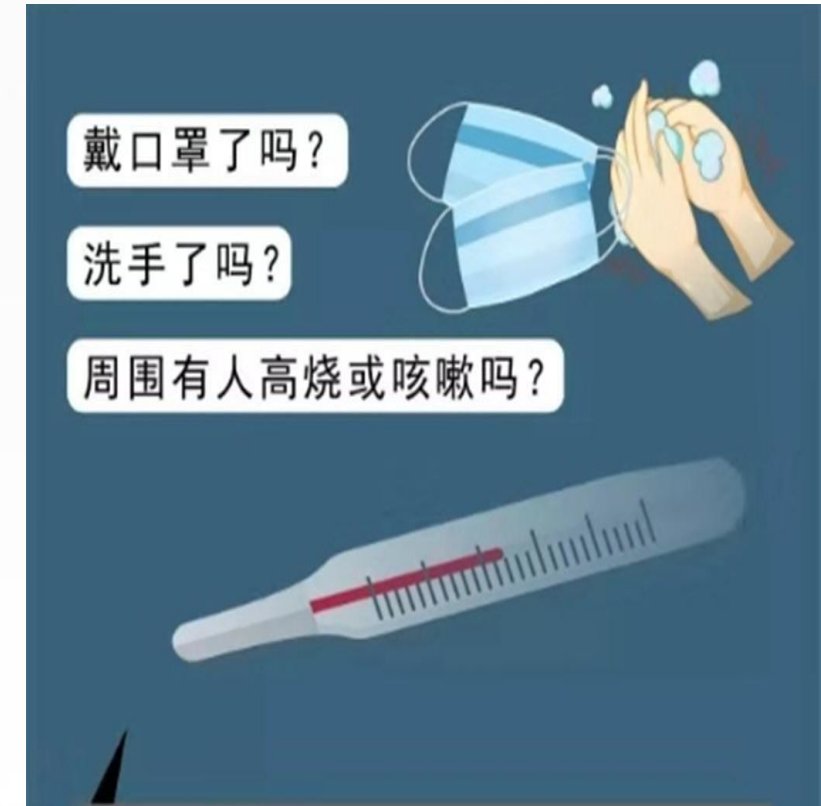


86. Are masks always effective?

No matter what type of mask, the protective effect is limited, be sure to change it regularly, preferably every 2 to 4 hours.

87. I wear a mask glasses are foggy, how to do?

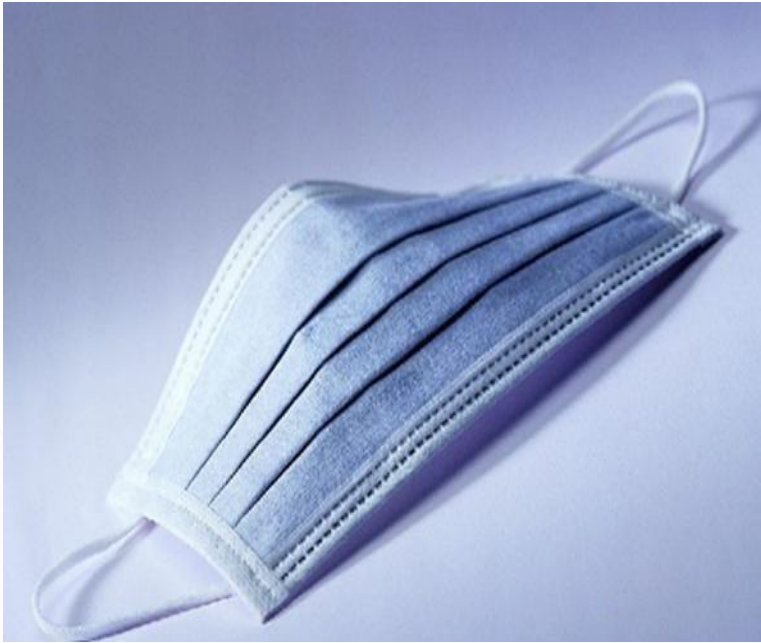
The correct way to wear a mask: wash your hands before wearing it, and make sure it fits your face, front and back, to form a closed environment. Let the air pass through the mouth cover instead of the gaps around.



88. If you need to wear a mask for protection, how to choose a mask?

Option 1: surgical mask. Follow the standards for surgical masks. Nursing masks, cotton masks, sponge masks are not recommended.

Option 2: N95 medical protective mask. Biological and haze of the two, please choose biological 1860 or 9132



89. What are the characteristics of different types of masks?

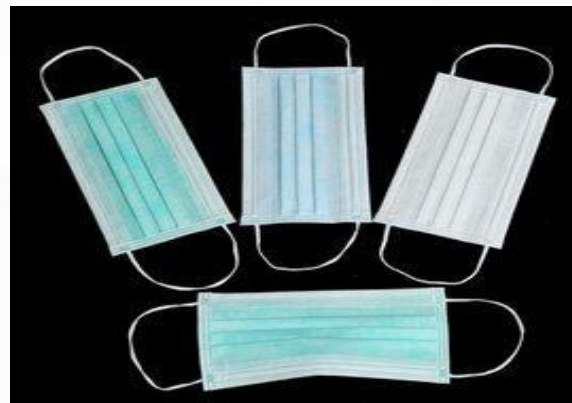
N95 Mask:

It can filter 95% 0.3um particles and block virus.Used for airborne diseases.



Disposable surgical mask:

There are three layers: the outer layer is waterproof to prevent the droplets from entering the mask;The middle layer is provided with a filtration layer, which can block 90% of particles of $5 \times \mu\text{m}$.The inner layer of the near muzzle is used for moisture absorption.



cotton mask:

The anti-virus efficiency of the mask is low, and thick, stuffy, and the face of the poor closeness.



90. In daily life, how to deal with the medical mask after use?

If the mask is wet or dirty with secretions, it must be replaced immediately. Discard the mask after use. Discard the material used to cover the mouth or nose. Wash properly (for example, with plain soap or detergent and water) and perform hand hygiene after removing the mask.



91. Under what circumstances should medical personnel wash their hands and/or use hand sanitizer for hand sanitization :

- Before contact with patient ;
- Before cleaning and aseptic operations, including before performing invasive operations ;
- After exposure to the patient's humoral risk, including contact with the patient's mucous membranes, damaged skin or wounds, blood, body fluids, secretions, feces, wound dressings, etc ;
- After contact with the patient ;
- After contact with the patient's surrounding environment, including contact with the patient's surrounding medical-related devices, appliances and other objects.



92. What personal protective equipment should be provided to relevant departments (departments) of medical institutions according to the regulations?

Relevant departments (departments) of medical institutions should be equipped with: disposable work cap, disposable surgical mask, protective glasses (anti-fog type), work clothes (white gown), protective clothing, disposable latex gloves, disposable shoe covers and comprehensive respiratory protection device or positive pressure headgear, etc.



93. What is "super spreader"?

The virus in an infected person mutates or ADAPTS to the human body, resulting in a strong transmitter of the virus, which allows the patient to infect many close contacts. Such patients are called "super spenders". In terms of the number of infected people, if the number of infected people exceeds three, it can be considered within the scope of the super spreader. If the number of infections is more than ten, it should be a more accurate super spreader.

Gao fu, an academician at the Chinese academy of sciences and director of the Chinese center for disease control and prevention, said at a press conference held by the state administration of science and technology on January 22 that there was no evidence of new coronavirus superspitters. Gao fu said that the new coronavirus is in the process of continuous cognition, the prevention and control measures adopted are the prevention and control measures under the guidance of theory, and special attention will be paid to the possible super spreaders.



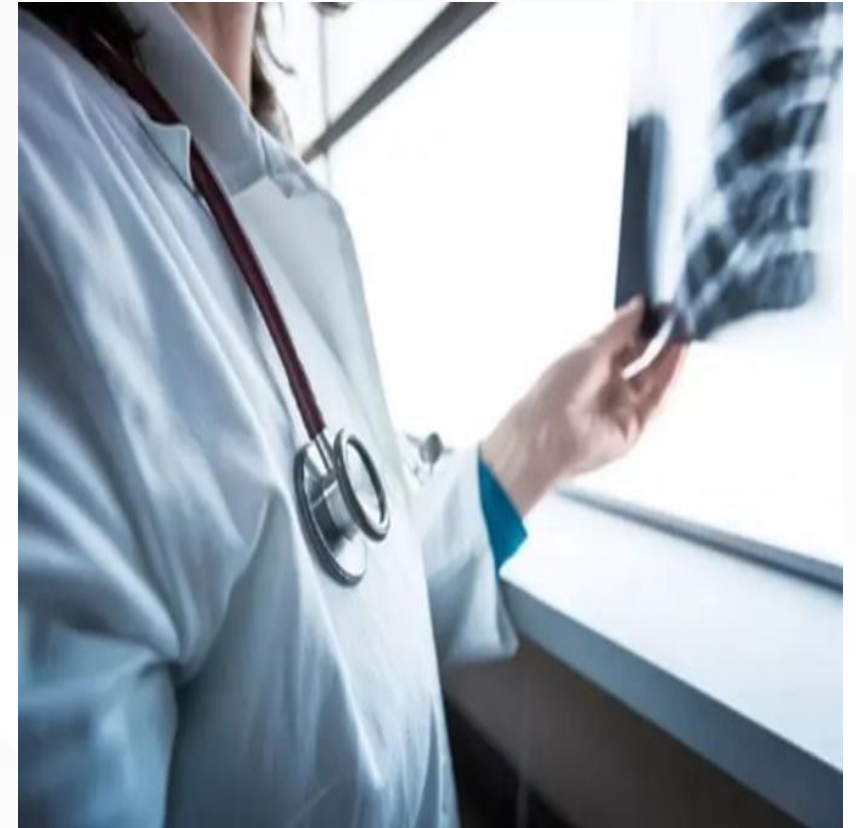
94. What are the characteristics of super spreaders ?

Super spreaders have the following characteristics:

1. Infirm with advanced age and constitution

2. There are other underlying diseases

They are few in number, but they are highly infectious and are the main spreaders of the epidemic.



95. What is "poison king"?

Super spenders can also be called "poison king". The second meaning of "poison king" is that the cases infected by the spitters usually appear severe and even die. "poison king" is the result of the increased infectivity and pathogenicity after the virus mutates .



96. Why is the new coronavirus pneumonia included in the statutory b infectious disease class a management?



1The virus, for the time being, does not appear to be as severe as a class a infectious disease (plague and cholera), but the public health risk is high and everyone needs to be alert and protected.

2Upgrade to class a management, reporting and publishing speed will be faster. It is convenient for medical personnel to prevent and control diseases, and also for the public to know the latest situation, timely response to.

97. How do special people wear masks?

1Pregnant women wear protective masks, should pay attention to the combination of their own conditions, choose comfort better products.Before wearing, you should consult a professional physician to confirm that your physical condition is suitable.

2The elderly and patients with chronic diseases have different physical conditions. For example, patients with cardiopulmonary diseases may feel uncomfortable after wearing, or even worsen their existing conditions. These patients should seek professional guidance from doctors.

3The child is in growth development stage, its face shape is small, the child protective mask that suggests to choose regular manufacturer production



98. Can drinking banlangen and fumigated vinegar prevent the new coronavirus?

No, radix isatidis is suitable for the treatment of wind heat, cold and other thermal diseases, is ineffective for coronavirus; The concentration of acetic acid contained in fumigated vinegar itself is very low and cannot reach the disinfection effect.



99. What protective measures should be taken during home medical observation?

1The family should be equipped with necessary disinfectants and personal protective equipment, family members and personnel carrying out medical observation should do a good job of personal hygiene protection, to minimize exposure.

2Medical observation objects as far as possible single room living;Reduce exposure to co-habitants;Ventilation is maintained in the home.The toilet after its use does necessary cleaning and disinfection work.

3Medical observation objects to minimize unnecessary outings;Wear a mask when you go out and avoid places where people gather.

4.Take your temperature once a day in the morning and once a day in the evening.



100. What is an isolated medical observation?

"Law of the People's Republic of China on the prevention and treatment of infectious diseases" close contacts of "infectious disease patients" and "suspected infectious disease patients" shall be subject to medical observation or other preventive measures at designated places.

- Key management measures for close contacts include: registration and 7 days of medical observation;
- Minimize outdoor activities;
- The CDC is responsible for following up close contacts, taking daily temperature and health inquiries, and registering them.



101. Why is the new coronavirus pneumonia included in the management of quarantinable infectious diseases?

Relevant provisions of the law on the prevention of infectious diseases, based on the new type of coronavirus pneumonia infection disease of the original, the understanding to the characteristics of epidemiology, clinical features, will be a new type of coronavirus infection pneumonia in quarantine infectious disease management, through to the port and each kind of barrier, transport links such as control, to control the disease spread by people, animals and goods, etc.



Postscript

The progress and development of human society is always accompanied by the threat of infectious diseases, review of infectious diseases in recent years, the Chinese and foreign great events and disease around the original biological evolution analysis results, we have reason to believe that the occurrence of infectious diseases, spread and popular to the passive choice, is to balance between nature and human and believes that human can conquer disease, to establish a new equilibrium and harmony soon.

The new coronavirus pneumonia has been included in the national management of statutory infectious diseases. With the deepening of its prevention and control work, technical information is increasingly abundant, relevant knowledge is rapidly updated, and scientific prevention measures will be gradually improved.