

COVID-19 in China

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March 25, 2020

To talk about

- Current situation in China
- What China has done in the past 3 months
- The key points
- Questions

Current situation in China – By March 24, 2020

全国疫情

查看输入疫情

进入广东疫情

Patient from outside China

昨日 -318

5219

现存确诊

Current diagnosed

昨日 -176

1573

现存重症

Current severe patient

昨日 +74

427

境外输入

昨日 +147

81803

累计确诊

Total diagnosed

昨日 +458

73301

累计治愈

Total discharged

昨日 +7

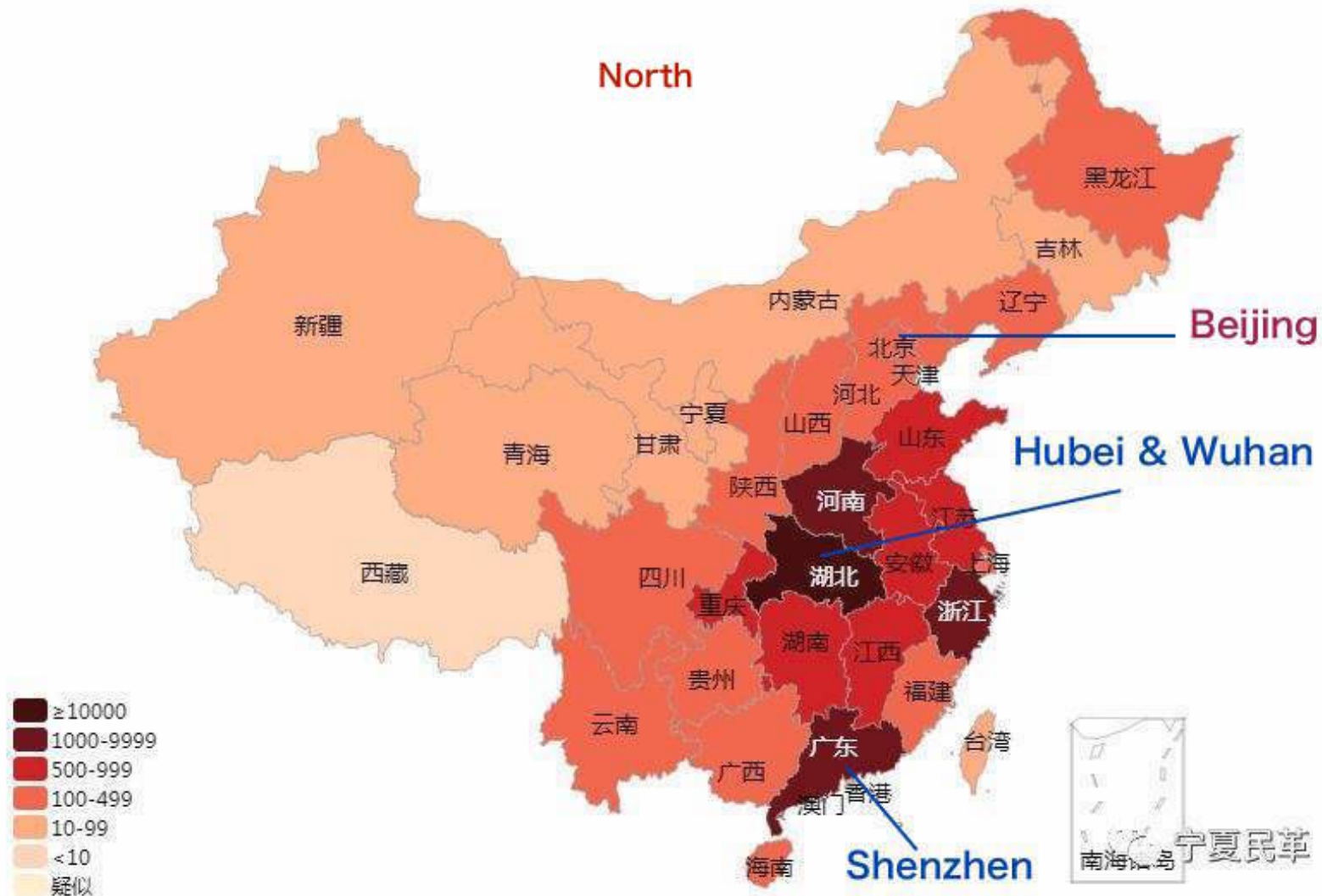
3283

累计死亡

Total death

截止 2020.3.24 20:12 | 数据说明 ?

Map

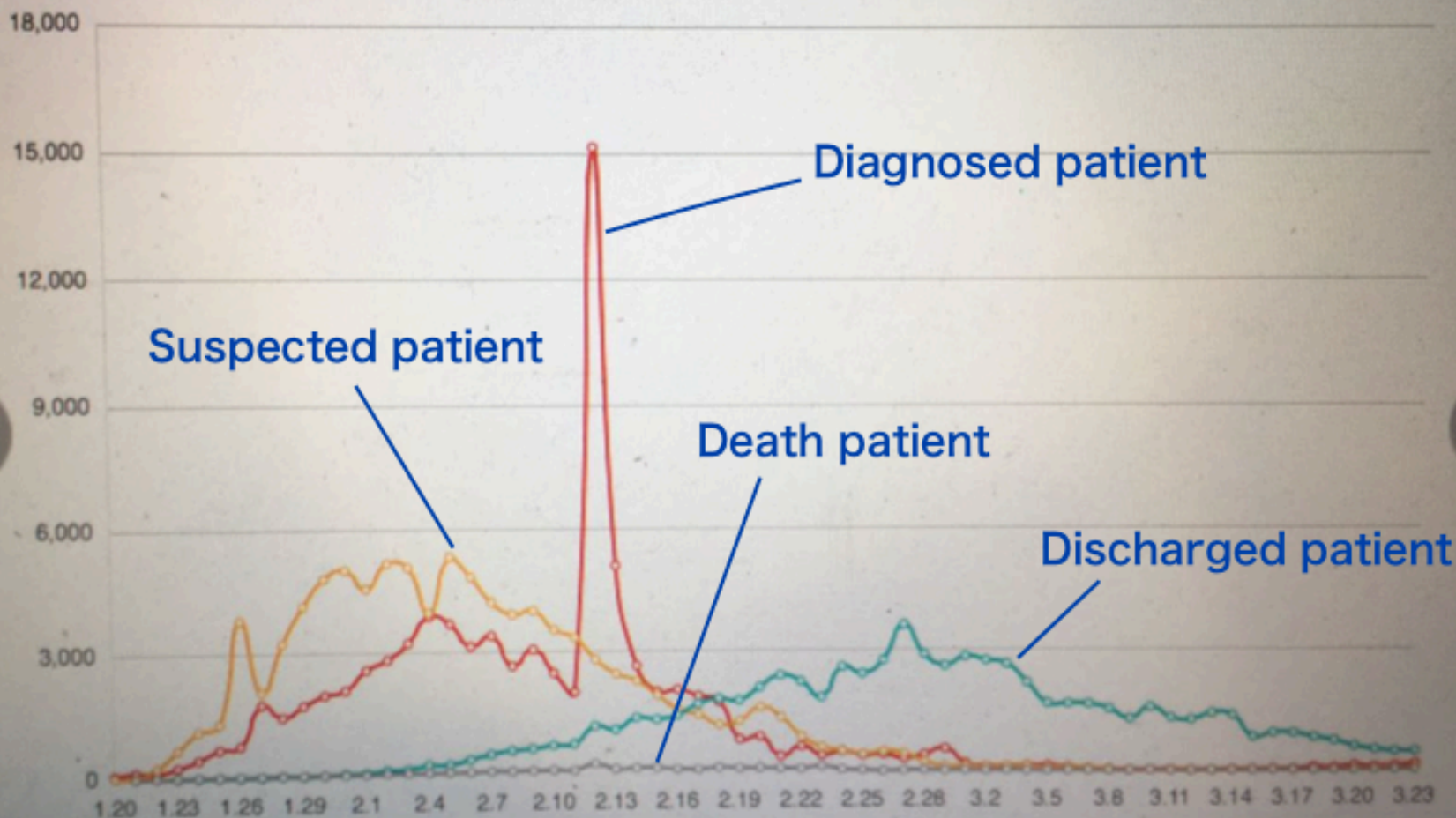


The first three provinces

省市	Diagnosed patients		Death patient		疫情
	昨日新增	累计确诊	治愈	死亡	
湖北 (Hubei)	1	(82.9%) <u>67801</u>	60323	(96.3%) <u>3160</u>	详情
广东 (Guangdong)	15	1428	1333	8	详情
河南 (Henan)	0	1274	1250	22	详情

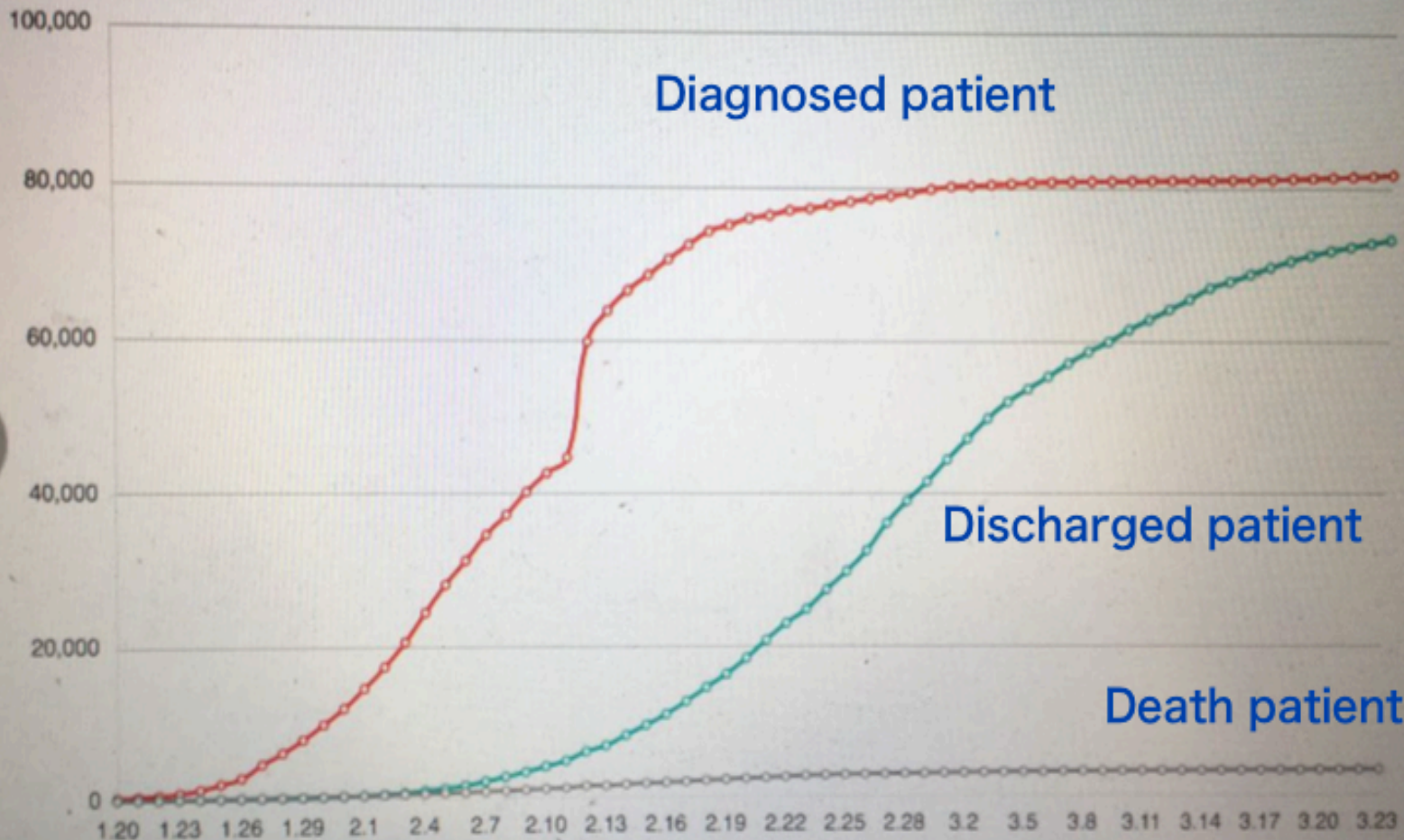
全国疫情新增趋势图

■ 确诊 ■ 疑似 ■ 治愈 ■ 死亡



全国疫情累计趋势图

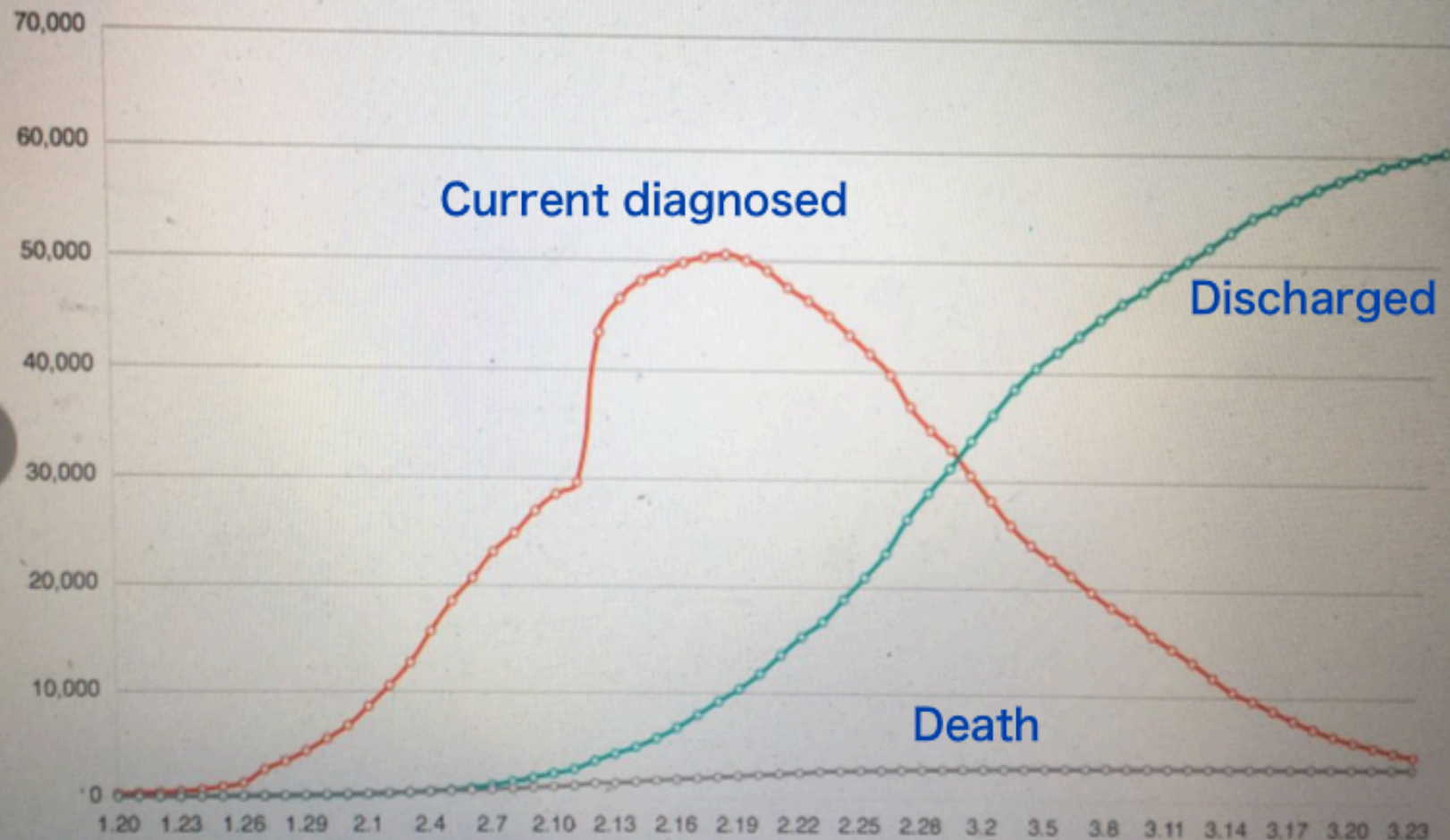
■ 确诊 ■ 治愈 ■ 死亡



湖北疫情趋势图

Hubei Province

■ 现存确诊 ■ 累计治愈 ■ 累计死亡



Shenzhen

- 20 million population
- South China
- Next to Hong Kong

深圳“新冠肺炎”确诊病例每日新增变化

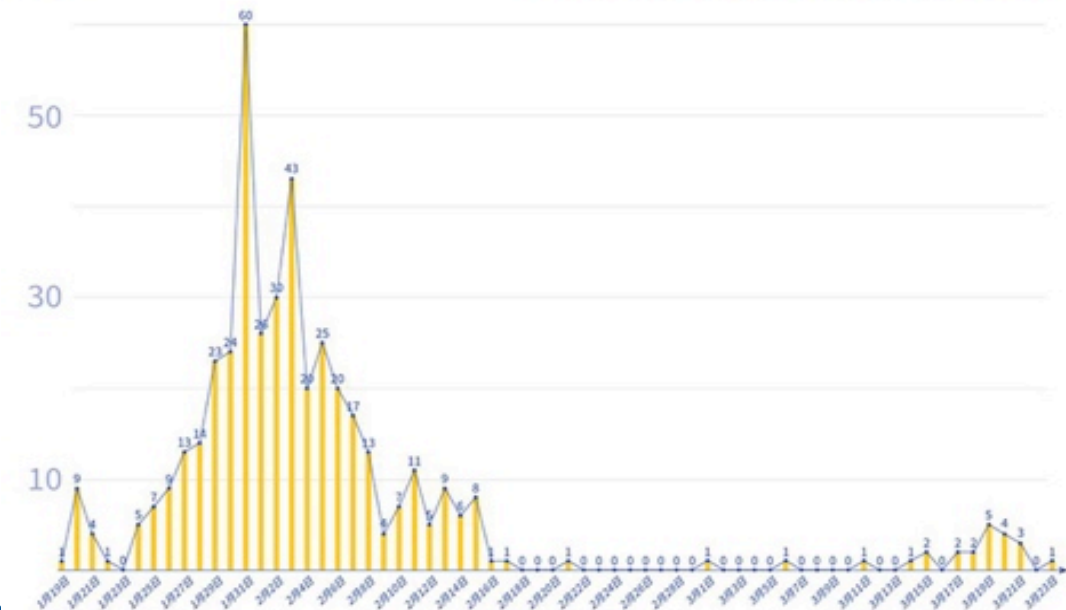
(截至3月23日)

By March 23

累计确诊 440 例

例数

Number of Diagnosed patient



What China has done in the past 3 months

- Strong leadership from Central Government
- National level medical team set up
- *“Strong confidence...”*
- *“To fight and win the epidemic...”*
- *7 Main guidelines for fighting COVID-19*



Main guideline for fighting COVID-19 (1)

- *Leadership*

- The whole country to work as a whole
- To consider local prevention and control demanding, and to consider how the local situation will affect other places and the whole country
- To criticize those not doing things correctly, and to correct them immediately
- For those doing the wrong thing or misconduct, to punish them according to laws and regulations

Main guideline for fighting COVID-19 (2)

- *To strengthen prevention and control in main regions*

- **Hubei** – Continue to strengthen overall prevention and control, to continue to prevent epidemic spreading to outside
- **Provinces around Hubei** – To press local governments to take the responsibility to set up prevention and control networks at community level
- **Beijing** – To improve prevention and control approaches, to focus on main group of population, to reduce moving sources of infection

Main guideline for fighting COVID-19 (3)

- *To increase admission rate and cure rate*
- *To reduce infection rate and mortality*

- To build dedicated hospitals ASAP
- To dispatch medical staff from all over China to support Wuhan & Hubei
- To work as a whole, to concentrate the best medical staff, to concentrate the severe patients, unified arrangement for medical treatment (Protocol)
- To propagate the effective treatment practice for severe patients

Main guideline for fighting COVID-19 (4)

- *To increase science & research work*

- To demonstrate where the virus coming from scientifically
- To find out source of infection & route of transmission ASAP
- To strengthen research & development of vaccine and medication
- To open & share information and patient data that allowed to be released by law
- To encourage experts & scholars to take the responsibility & professional liability

Main guideline for fighting COVID-19 (5)

- *To maintain society stability*

- To maintain normal economy & society order
- To maintain medical treatment order
- To maintain society safety & stability
- To strengthen road and traffic management and control
- To reduce public transportation pressure and to prevent clustering of cross infection

Main guideline for fighting COVID-19 (6)

- *Publicity and education*

- To strengthen the confidence of to fight and win
- To increase the positive education
- To response to internal and international concern
- To tell the story about fighting COVID-19 in China and to collaborate with international partners

Main guideline for fighting COVID-19 (7)

- *Economic stability*

- With proper prevention and control work, support people return to work and production
- To restart the work of main projects
- To stabilize resident's consumption
- To improve management capacity at national level

Leading organizations



Medical team at national level

Medical team leader –

Prof. ZHONG Nanshan

(钟南山教授)



Wuhan locked down

- 10:00 AM
- Jan 23, 2020
- To localize the infected patients
- Not to infect too many other people and other places



Wuhan locked down

- People saying sadly
- “A brave man to break his own arm...”
- “To sacrifice a city to save a country...”



A new hospital in Wuhan was built & finished within 8 days - 1000 beds (Late Jan.) (For severe patients)



Another new hospital in Wuhan was built & finished within 18 days - 1600 beds (Early Feb.) (For severe patients)



Big containers were used & hospital inside



Hospital inside – Examination machine & CT



Shenzhen

(For severe patients)

Beijing



Mobile cabin hospital (For mild symptoms/suspected patients)



Mobile cabin hospital (For mild symptoms/suspected patients)



Mobile cabin hospital (For mild symptoms/suspected patients)

- Total over 30,000 beds
- Significantly gather the patients together
- In order not to infect other people



Medical support from the whole country going to Wuhan & Hubei



Medical support from the whole country going to Wuhan & Hubei



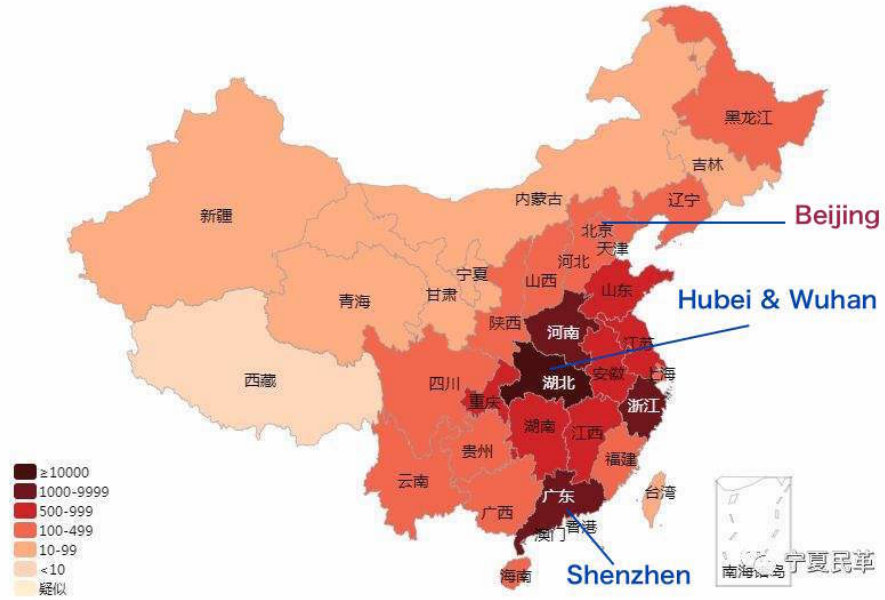
Different support from the nation and overseas going to Wuhan & Hubei



In order to work inside ICU for a long period of time



Medical staff from a province to help one city in Hubei

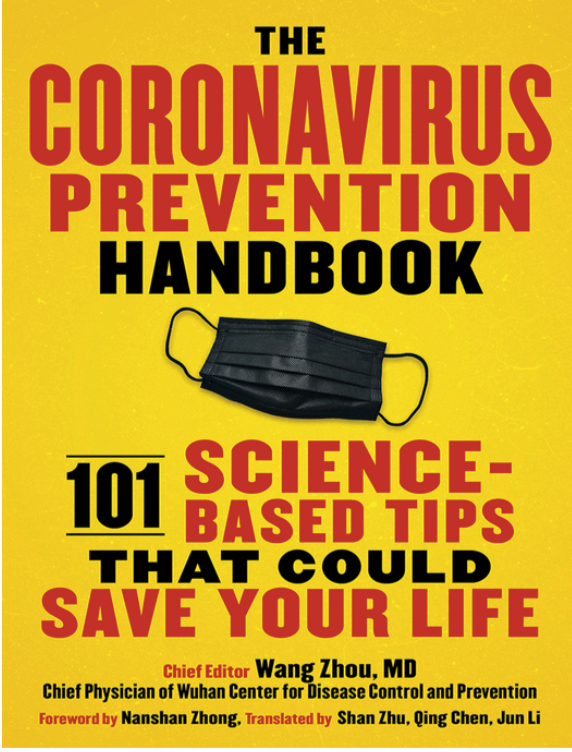
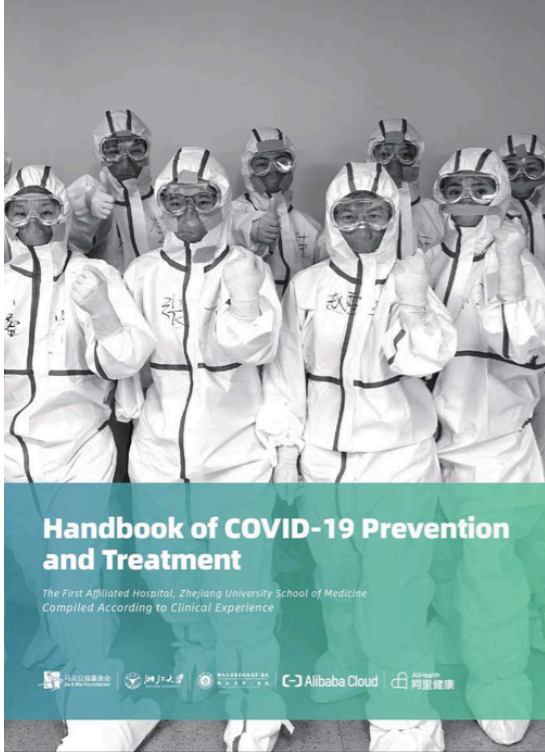


Medical treatment support inside ICU – Top medical teams from the nation

- Guangzhou
- Hangzhou
- Beijing



Two Handbooks & One Protocol



COVID-19 Diagnose & Treatment Protocol
7th Edition From National Health Commission in China

新型冠状病毒肺炎诊疗方案
(试行第七版)

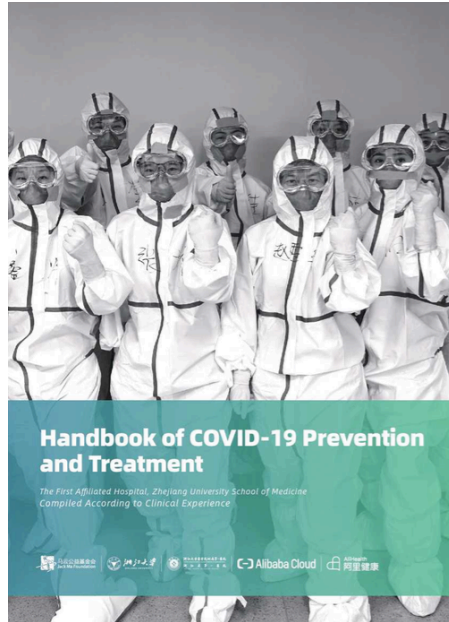
2019年12月以来,湖北省武汉市出现了新型冠状病毒肺炎疫情,随着疫情的蔓延,我国其他地区及境外多个国家也相继发现了此类病例。该病作为急性呼吸道传染病已纳入《中华人民共和国传染病防治法》规定的乙类传染病,按甲类传染病管理。通过采取一系列预防控制和医疗救治措施,我国境内疫情上升的势头得到一定程度的遏制,大多数省份疫情缓解,但境外的发病人数呈上升态势。随着对疾病临床表现、病理认识的深入和诊疗经验的积累,为进一步加强对该病的早诊早治,提高治愈率,降低病亡率,最大可能避免医院感染,同时提醒注意境外输入性病例导致的传播和扩散,我们对《新型冠状病毒肺炎诊疗方案(试行第六版)》进行修订,形成了《新型冠状病毒肺炎诊疗方案(试行第七版)》。

一、病原学特点

新型冠状病毒属于β属的冠状病毒,有包膜,颗粒呈圆形或椭圆形,常为多形性,直径60-140nm。其基因特征与SARS-CoV和MERS-CoV有明显区别。目前研究显示与蝙蝠SARS样冠状病毒(bat-SL-CoVZC45)同源性达85%以上。体外分离培养时,新型冠状病毒96个小时左右即可在人呼吸道上皮细胞内发现,而在Vero E6和Huh-7细胞系中分离培养需约6天。

— 2 —

(Can get from Profs.
Antonio & Michel)



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(Can get from
Profs. Antonio &
Michel)

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1. What are viruses associated with respiratory infections?
2. What are the common viruses associated with respiratory infections?
3. What are coronaviruses?
4. What are the shape and structure of coronaviruses?
5. How are coronaviruses classified?
6. Which wild animals carry coronaviruses?
7. How do coronaviruses transmit from animals to humans?
8. How resilient are coronaviruses in different environments?
9. How virulent is the 2019-nCoV?
10. Can humans develop immunity to 2019-nCoV?
11. What is Severe Acute Respiratory Syndrome (SARS)?
12. What is Middle East Respiratory Syndrome (MERS)?
13. What is novel coronavirus? Why has it become epidemic?

II. Transmission of 2019-nCoV

14. What is community-acquired pneumonia?
15. What are the diagnostic criteria for community-acquired pneumonia?
16. Which pathogens cause community-acquired pneumonia?
17. How is community-acquired pneumonia transmitted?
18. What are the risk factors for transmission of community-acquired pneumonia?
19. How to prevent community-acquired pneumonia?
20. Who are susceptible to 2019-nCoV?
21. What are the epidemiological characteristics of COVID-19?
22. What are the routes of transmission of 2019-nCoV?

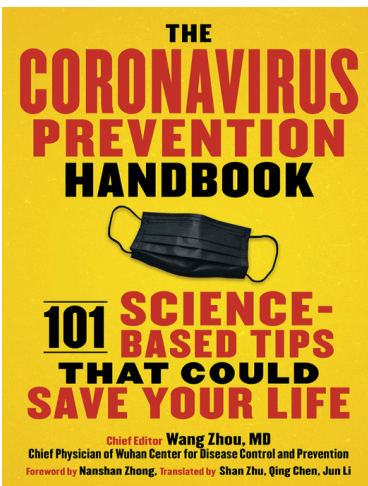
23. What is droplet transmission?
24. What is airborne transmission?
25. What is contact transmission?
26. What is a close contact?
27. Why should close contacts be put under isolated medical observation for 14 days?

III. Detection, Diagnosis and Treatment

28. What are the clinical manifestations of COVID-19?
29. Do you know something on laboratory testing for COVID-19?
30. What are the characteristics of COVID-19 chest films?
31. How to identify COVID-19 cases clinically?
32. How to confirm COVID-19 cases?
33. How to diagnose severe COVID-19 cases?
34. What is the difference between COVID-19 and other pneumonia?
35. What should close contacts do with notice from Center of Disease Control?
36. What should I do if I am possibly infected with COVID-19?
37. How to choose a medical institution for treatment?
38. What should be done if a patient requires transportation?
39. Are there any drugs or vaccines against COVID-19?
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42. How to prevent respiratory infections in spring and winter?
43. Why does flu caused by viruses become pandemic?
44. How to keep yourself away from the novel coronavirus?
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46. What are the features of masks for different purposes?
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48. How to choose a mask?
49. How to put on, use and take off a mask?
50. How often should a mask be replaced? Can N95 respirators be extendedly used or reused?
51. How to keep my glasses from fogging up with a mask on?
52. How should special populations choose a mask?
53. Why is handwashing important in preventing respiratory diseases?
54. How to wash hands correctly?
55. What are the key moments for hand hygiene in daily life?
56. How to clean hands if clean water is not available?
57. Does handwashing with soap and clean water work against coronaviruses?
58. Can 75% alcohol reduce risk of 2019-nCoV infection?
59. How to take care of the COVID-19 patient at home?



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- <http://www.nhc.gov.cn/yzygj/s7653p/202003/46c9294a7dfe4cef80dc7f5912eb1989/files/ce3e6945832a438eaae415350a8ce964.pdf>

COVID-19 Diagnose & Treatment Protocol

7th Edition From National Health Commission in China

新型冠状病毒肺炎诊疗方案

(试行第七版)

2019年12月以来,湖北省武汉市出现了新型冠状病毒肺炎疫情,随着疫情的蔓延,我国其他地区及境外多个国家也相继发现了此类病例。该病作为急性呼吸道传染病已纳入《中华人民共和国传染病防治法》规定的乙类传染病,按甲类传染病管理。通过采取一系列预防控制和医疗救治措施,我国境内疫情上升的势头得到一定程度的遏制,大多数省份疫情缓解,但境外的发病人数呈上升态势。随着对疾病临床表现、病理认识的深入和诊疗经验的积累,为进一步加强对该病的早诊早治,提高治愈率,降低病亡率,最大可能避免医院感染,同时提醒注意境外输入性病例导致的传播和扩散,我们对《新型冠状病毒肺炎诊疗方案(试行第六版)》进行修订,形成了《新型冠状病毒肺炎诊疗方案(试行第七版)》。

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Community level: If you don't have your T checked You can NOT go home



The Key Points: 4 Early

- Early detection
 - Early report
 - Early isolation
 - Early treatment
-
- *To move the control point at the front*
-
- To increase the test capacity
 - To stress the importance of community network management
 - To find out every suspected/infected patient
 - To stop or to slow the virus spread

The Key Points: 4 Concentration

- Concentrating patients
- Concentrating experts
- Concentrating resources
- Concentrating treatment
- *Individualized treatment*
- *Trying to help every patient*
- Putting the most severe patients in the best resources hospitals
- Multidisciplinary team approach
- Support from the best medical teams in China
- To reduce mortality

Summary

- Strong Leadership from Central Government
- The whole country to work as a whole
- To fight the virus first
- Trying to provide support for every person and every family
- To protect medical staff
- To control the situation
- And then, to recover the economy

Recommendation – Adopting the principles

- “The experiences from China is not the ONLY way, but the principles are the SAME...” (Prof. Zhong NS)
- *Press conference in Guangzhou*
- *March 18, 2020*

Medical team leader in China



Principles – 4 Early & 4 Concentration

4 Early

- Early detection
- Early report
- Early isolation
- Early treatment

4 Concentration

- Concentrating patients
- Concentrating experts
- Concentrating resources
- Concentrating treatment

Experiences from China

Recommendation – The End

Thank you

- Every country is not the same
- Cannot use the same way
- The most important things are the PRINCIPLES
- Fully understand the principles used in China
- To do it in a way suitable in your own country