



EUSEM

EUROPEAN SOCIETY FOR EMERGENCY MEDICINE

Third WEBINAR COVID-19 Sharing experiences

Name: Luis Castrillo

Position: EUSEM President

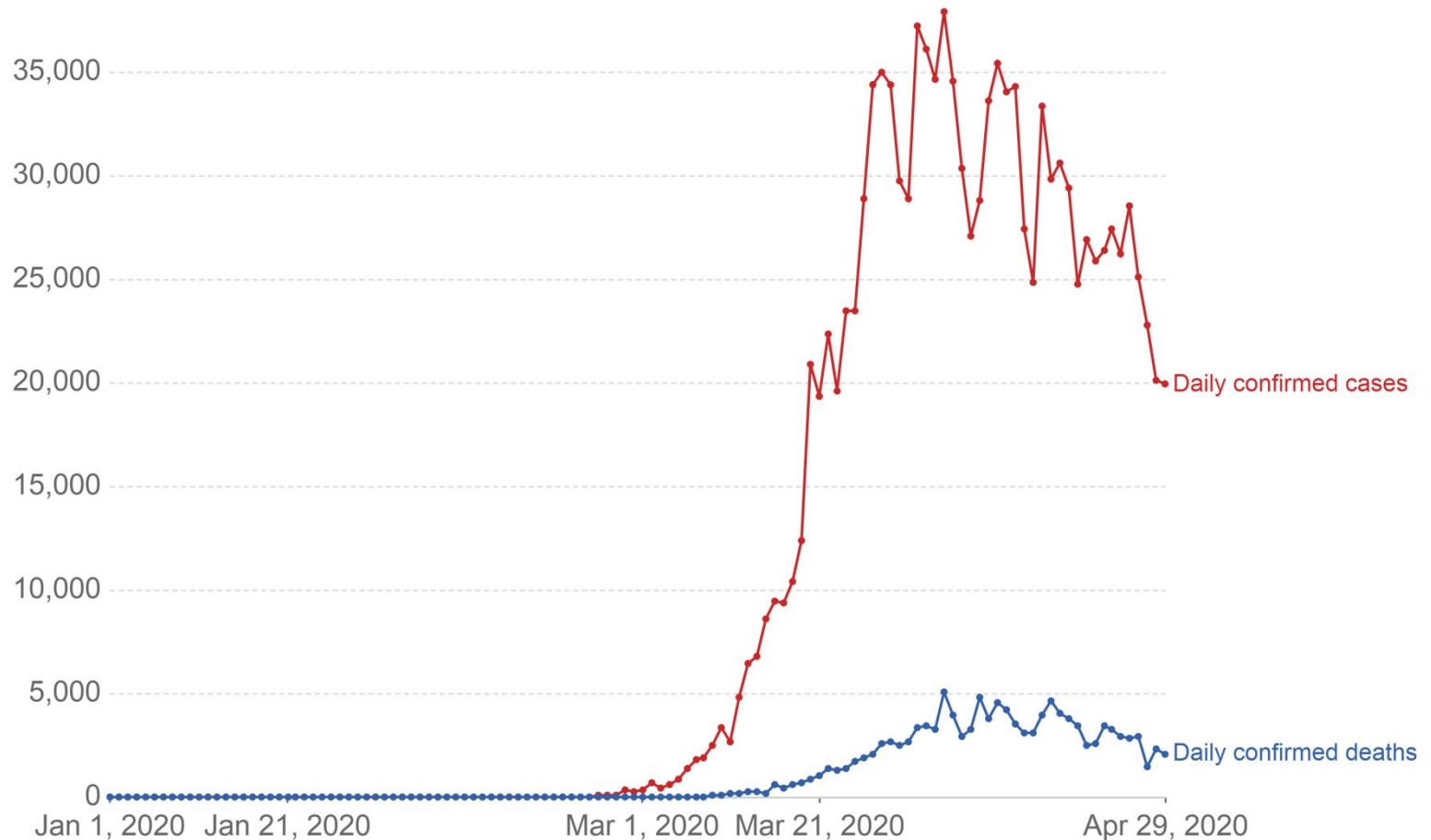
Country: Spain

Declining figures

Daily confirmed COVID-19 cases and deaths, Europe

The confirmed counts shown here are lower than the total counts. The main reason for this is limited testing and challenges in the attribution of the cause of death.

Our World
in Data



Source: European CDC – Situation Update Worldwide – Last updated 29th April, 11:30 (London time)

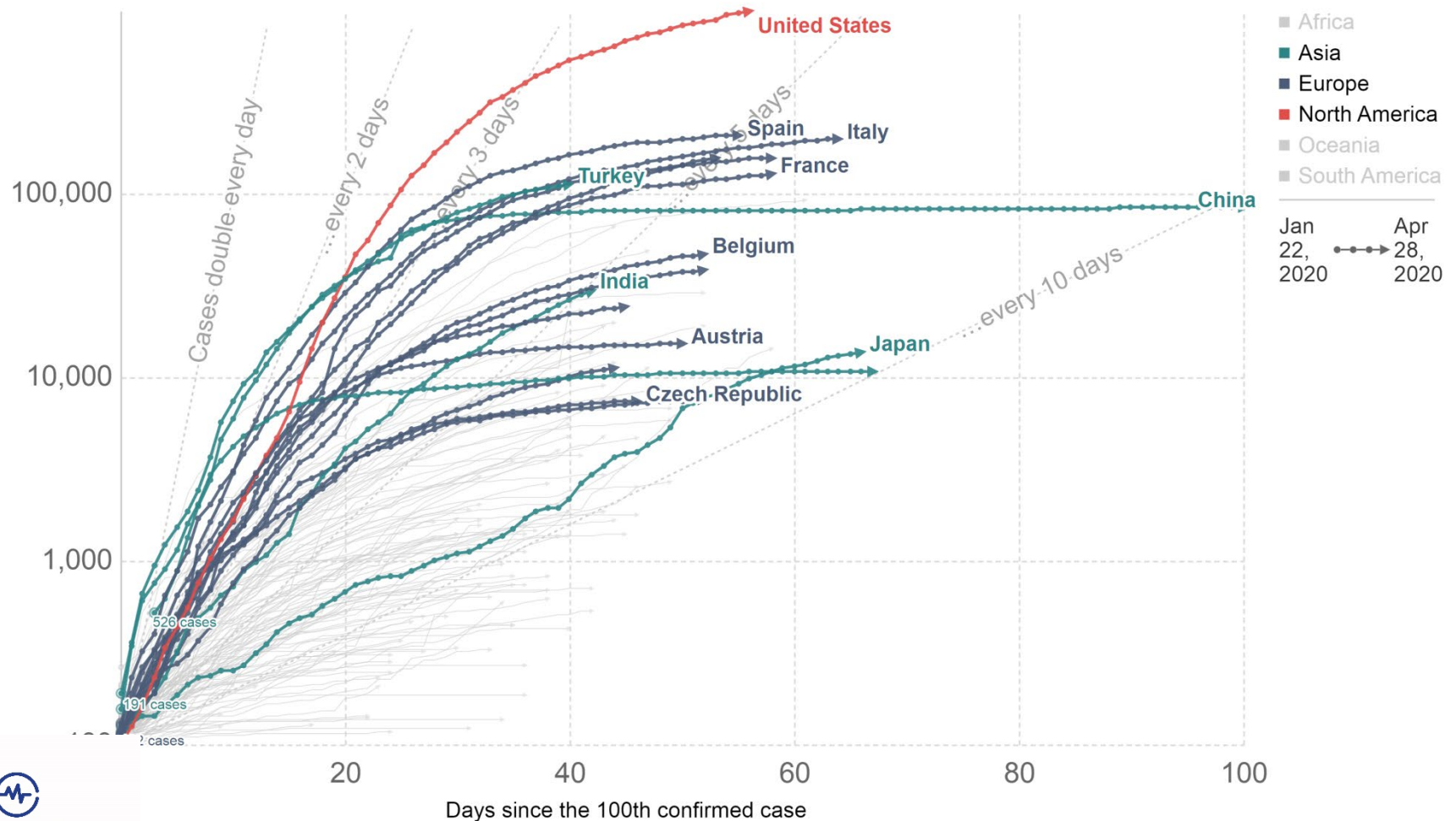
OurWorldInData.org/coronavirus • CC BY

Are curves declining

Total confirmed COVID-19 cases: how rapidly are they increasing?

The number of confirmed COVID-19 cases is lower than the number of total cases. The main reason for this is limited testing.

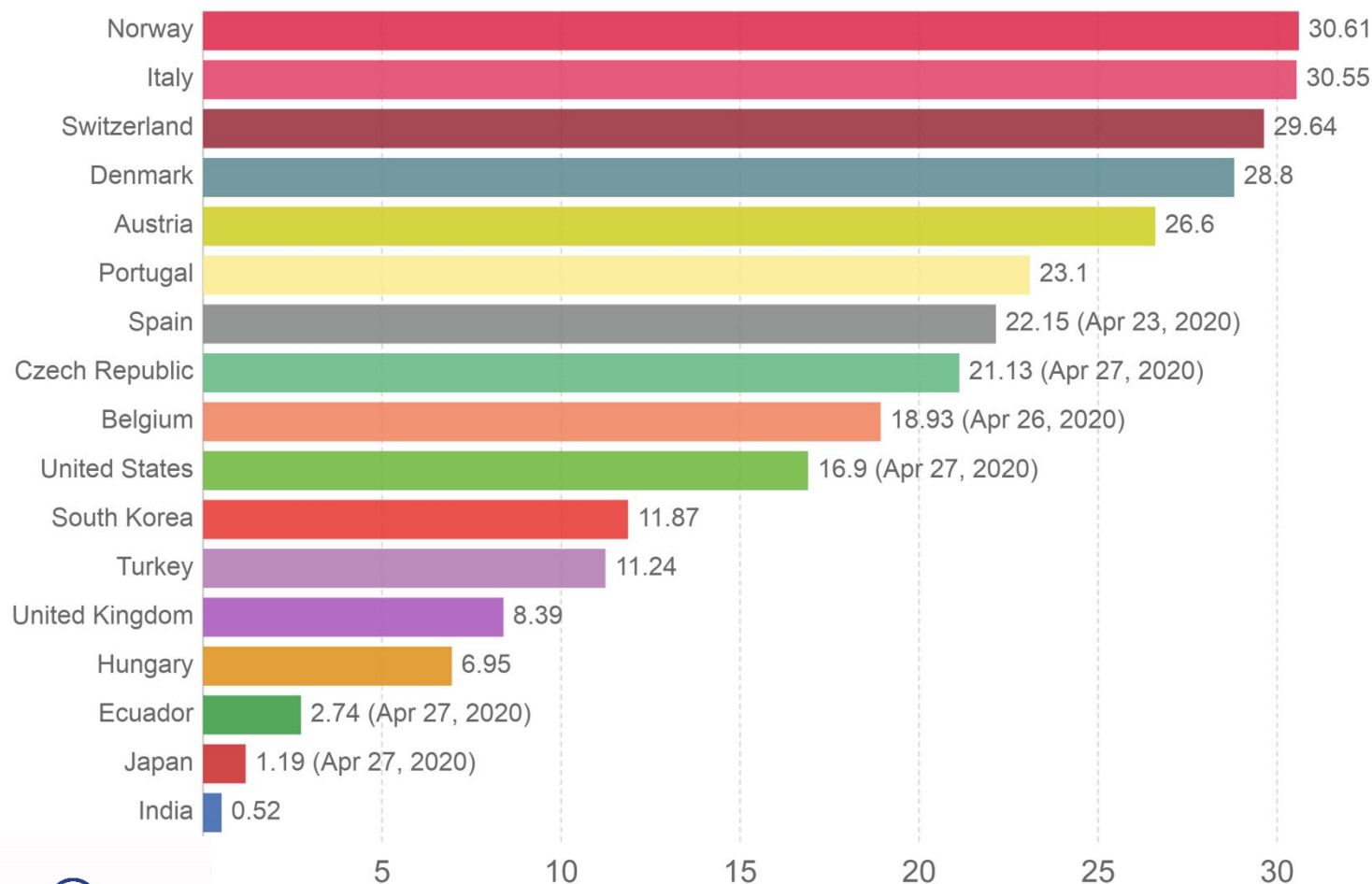
Our World
in Data



Differences in management

Total COVID-19 tests per 1,000 people, Apr 28, 2020

Our World
in Data



Data sources collated by Our World in Data

OurWorldInData.org/coronavirus • CC BY

However, there are substantial differences across countries in terms of the units, whether or not all labs are included, the extent of pending tests are included and other aspects. Details for each country can be found at the linked page.



WEBINAR COVID-19:
Sharing experiences of high COVID-19 impact countries.

Name: Said LARIBI, MD, PhD

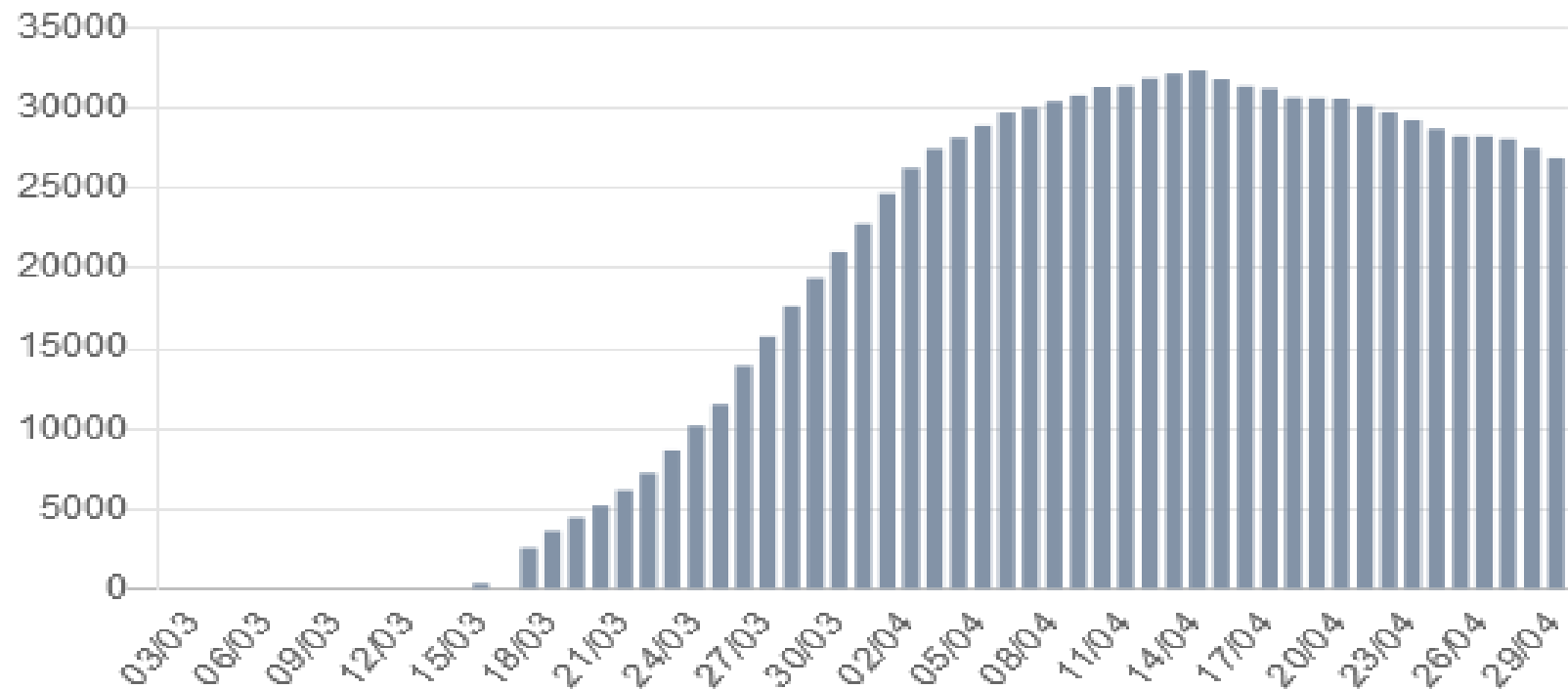
Position: Chair EUSEM Research network
and Head of the Emergency Department

Country: Tours, France

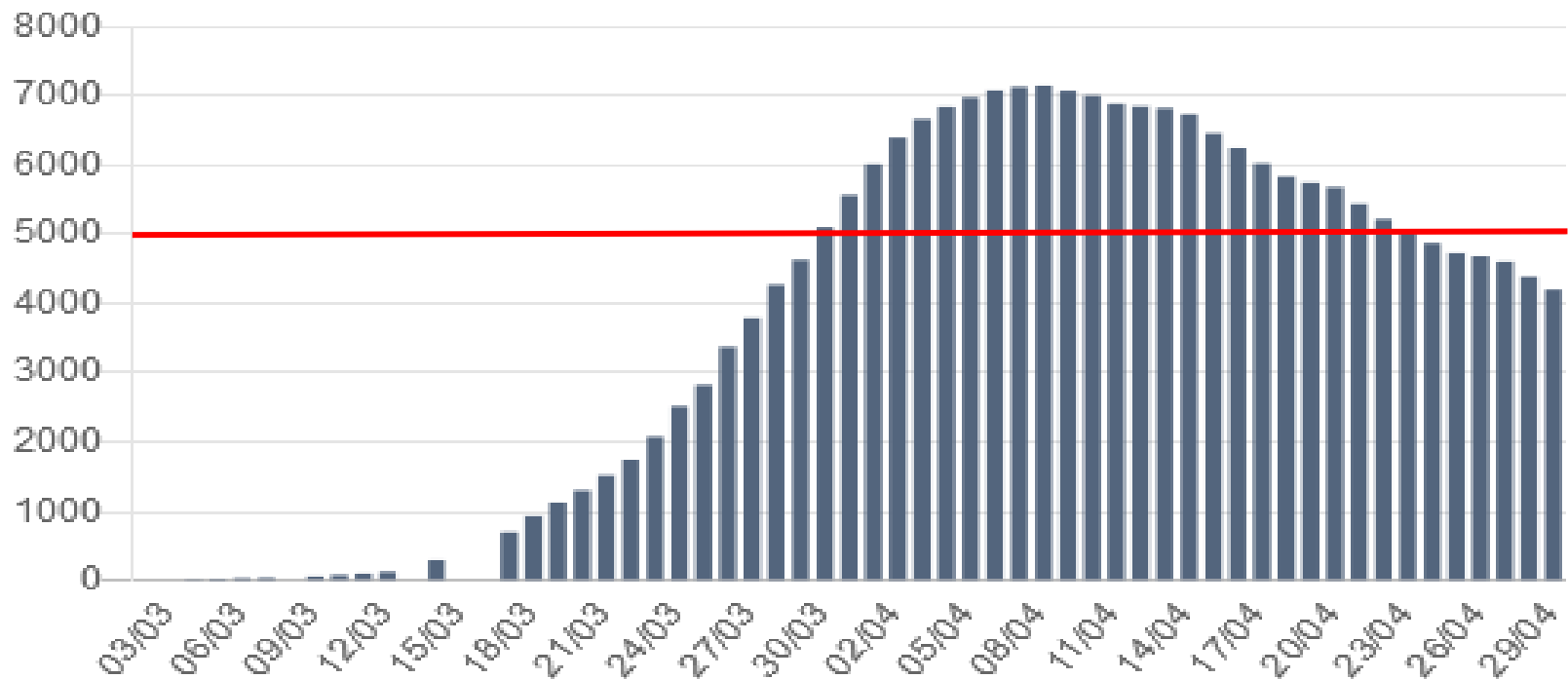
France: Situation on April 29, 2020

- Total confirmed cases: **128 442**
- Hospitalizations for Covid: **26 834**
- ICU patients: **4 207**
- Case Fatality Rate (CFR): **24 087** (9 034 in nursing home)

France: Hospitalisation trend



France: ICU patients trend

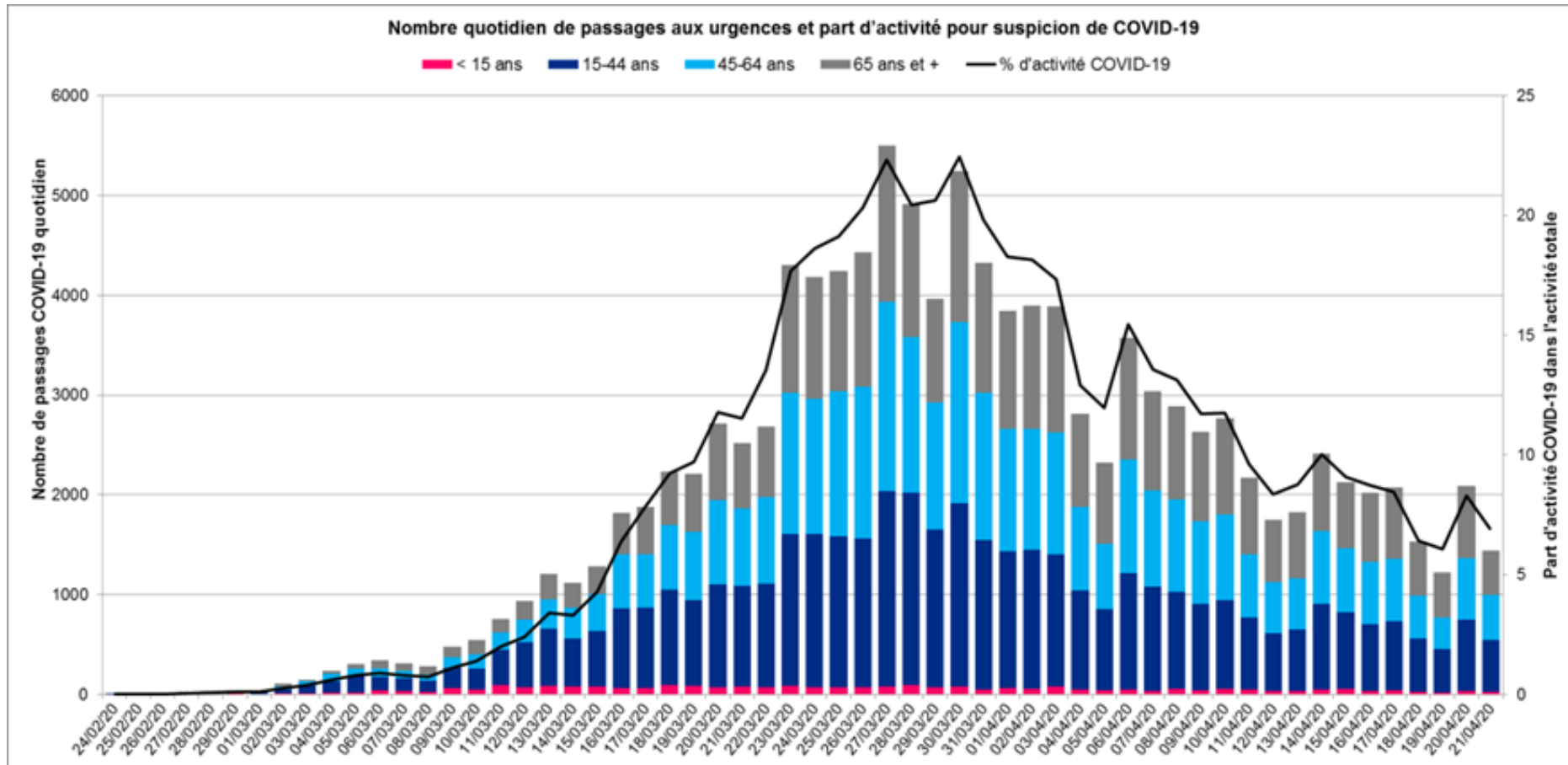


France: Indicators for deescalating

Deescalating is being different among regions and hospitals and depends mainly on the following indicators:

- Number of Covid patients in ICU
 - Number of hospitalized Covid patients outside ICU
 - Number of patients tested positive to Covid
-
- Number of beds in ward and ICU are regularly adapted to the number of patients in each region and hospital

France: ED visits



France: Plans for cancelation of the ED Covid track

- There is no plan for cancelation of the ED Covid tracks at the moment.
- Authorities did ask to all hospitals to keep separate tracks for Covid and non Covid patients at least until the summer
- In my region (2.5 millions habitants) each hospital will keep a Covid track in the ED as well as dedicated beds in ward to Covid patients
- If the number of patients admitted to ICU continue to decrease, ICU beds may be centralized in the largest hospitals

France: Next steps for EDs

- Continue to manage patients attending the ED with suspected Covid-19
- We expect suspected Covid patients to increase with the end of the national lockdown
- Another difficulty: Non Covid patients in the ED will increase over the next weeks
- Finally we may face a bed shortage due to increased activity in the hospital.

COVID-19 Webinar – 30 April 2020

Cem OKTAY, MD
Antalya, TURKEY



Countries in deescalate phase (Turkey)

1. Actual figures of the epidemic Turkey – Current Status

Confirmed cases : 117,589

Deaths : 3081

ICU patients : 1,574

Intubated patients: 831

TÜRKİYE GÜNLÜK KORONAVİRÜS TABLOSU

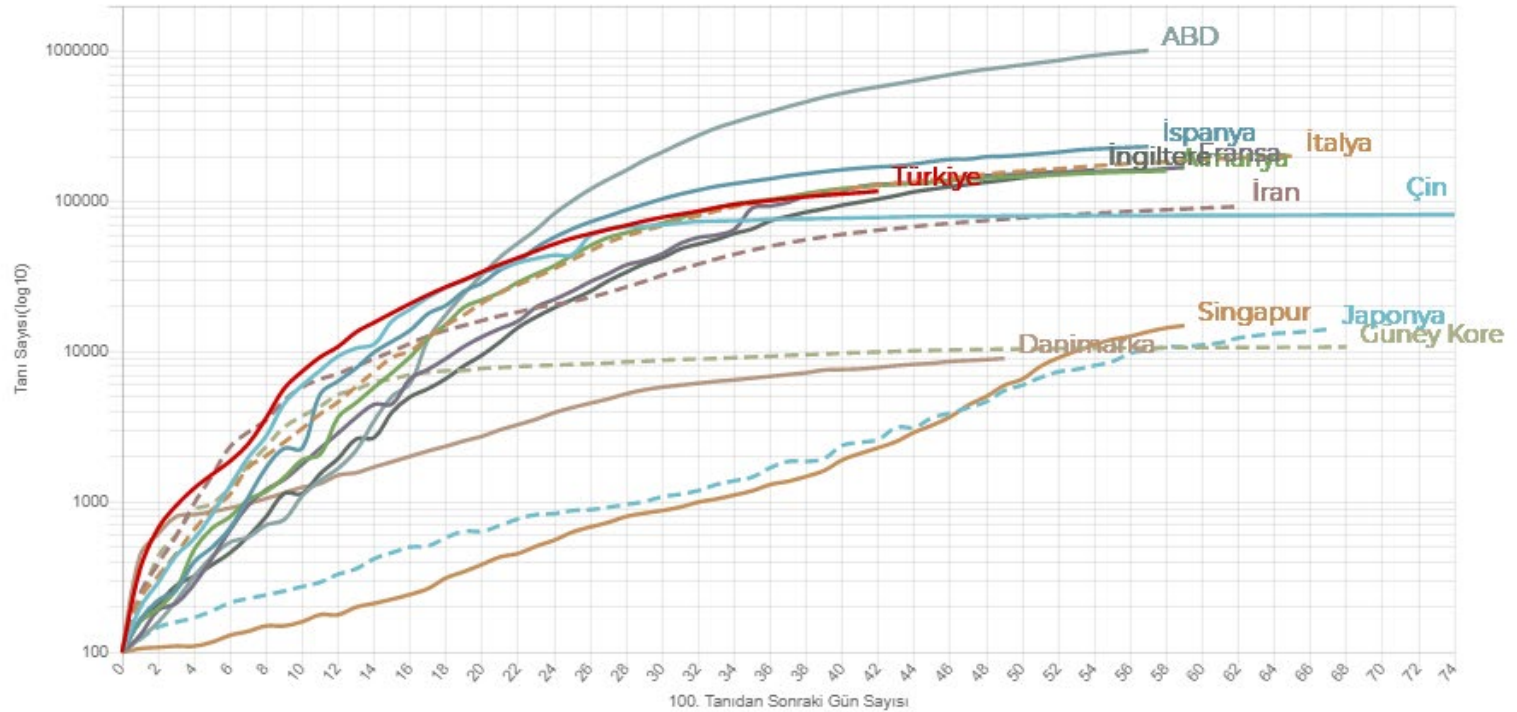
TOPLAM TEST SAYISI	991.613	29 NİSAN 2020	BUGÜNKÜ TEST SAYISI	43.498
TOPLAM VAKA SAYISI	117.589		BUGÜNKÜ VAKA SAYISI	2.936
TOPLAM VEFAT SAYISI	3.081		BUGÜNKÜ VEFAT SAYISI	89
TOPLAM YÜZLÜ BAĞIM HASTA SAYISI	1.574		BUGÜNKÜ İYİLEŞEN SAYISI	5.231
TOPLAM ENTUBE HASTA SAYISI	831			
TOPLAM İYİLEŞEN HASTA SAYISI	44.040			

TÜRKİYE GÜNLÜK KORONAVİRÜS TABLOSU

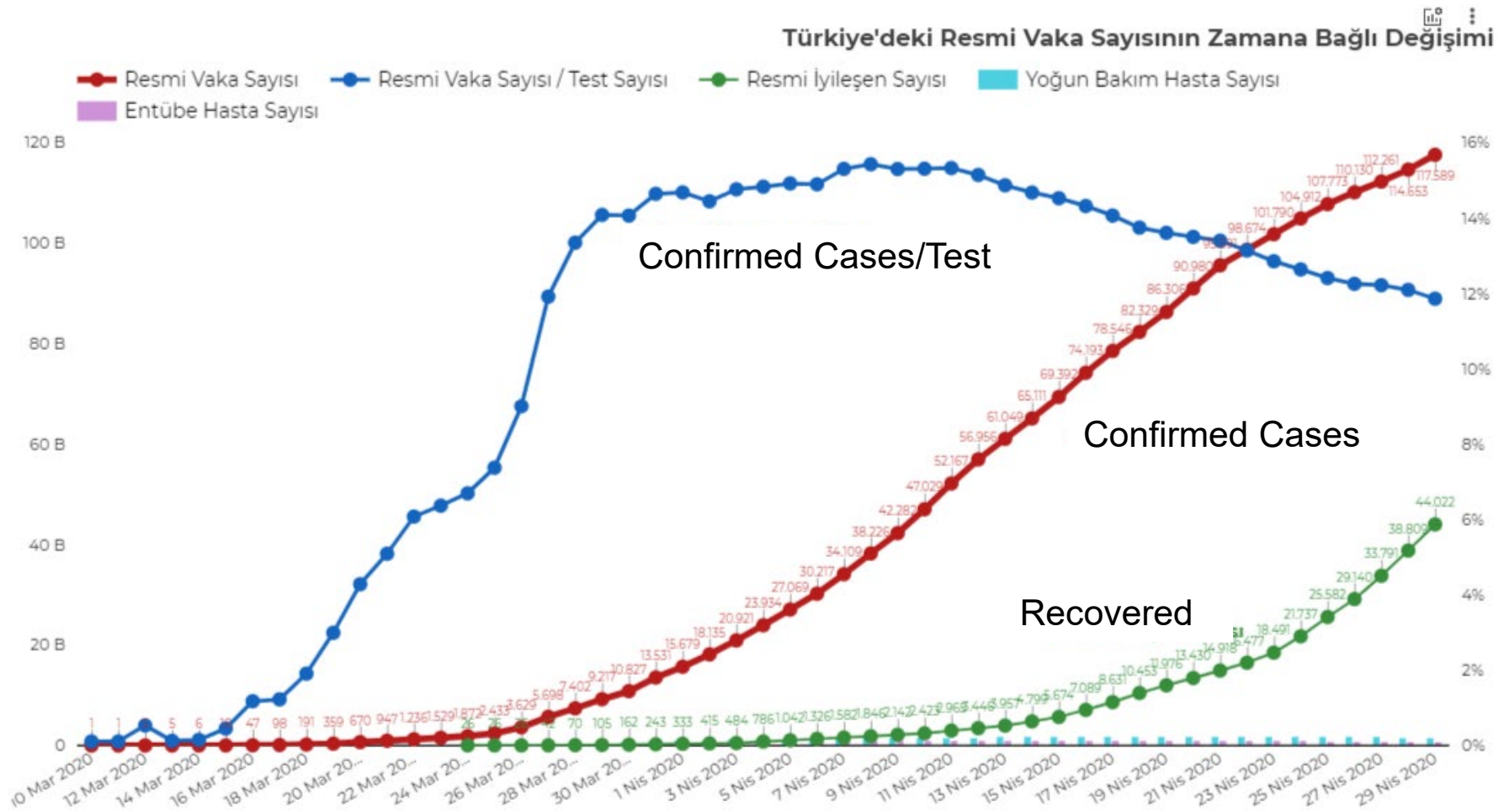


COVID-19 growth after 100 cases

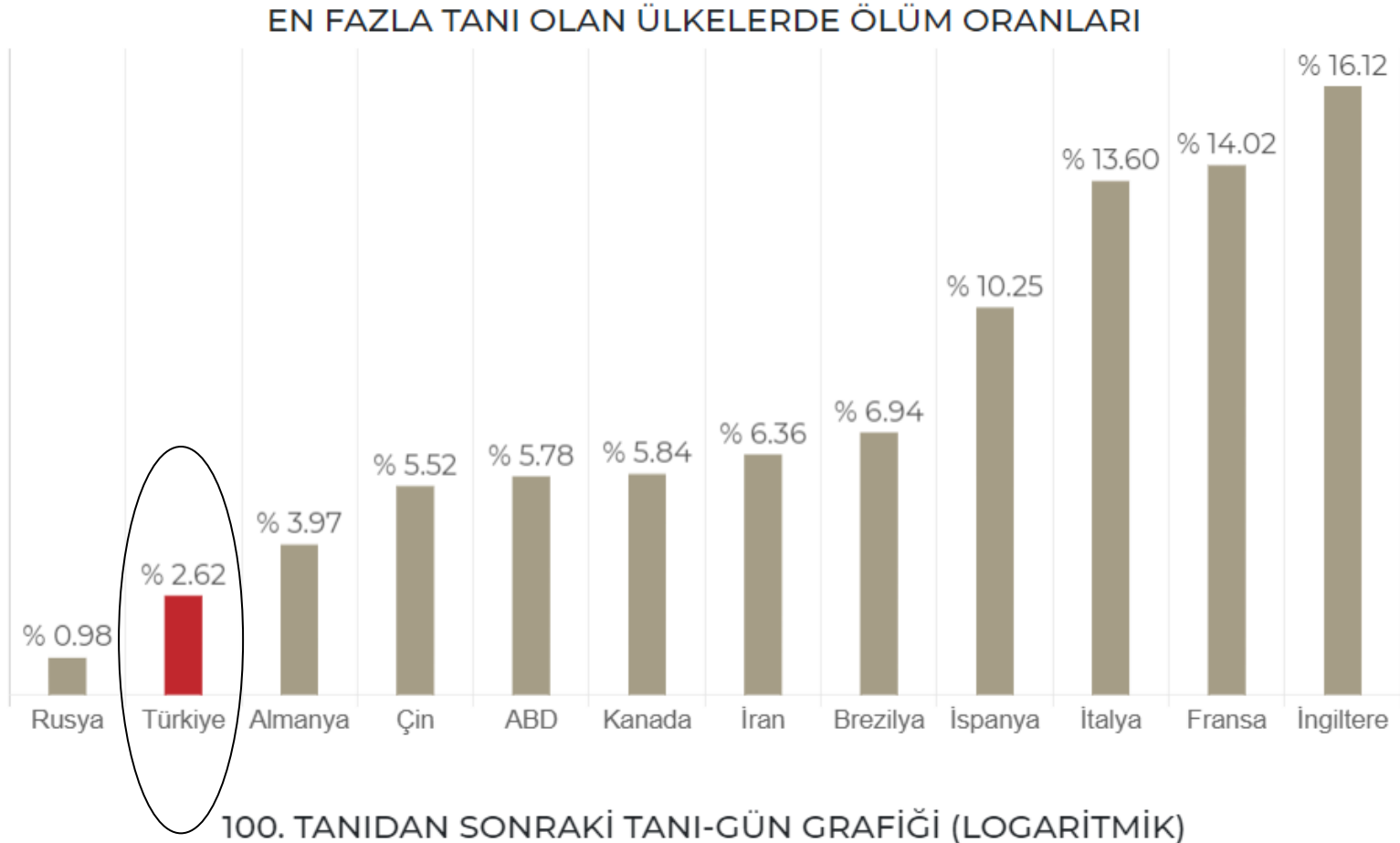
100. TANIDAN SONRAKİ TANI-GÜN GRAFİĞİ (LOGARİTMİK)



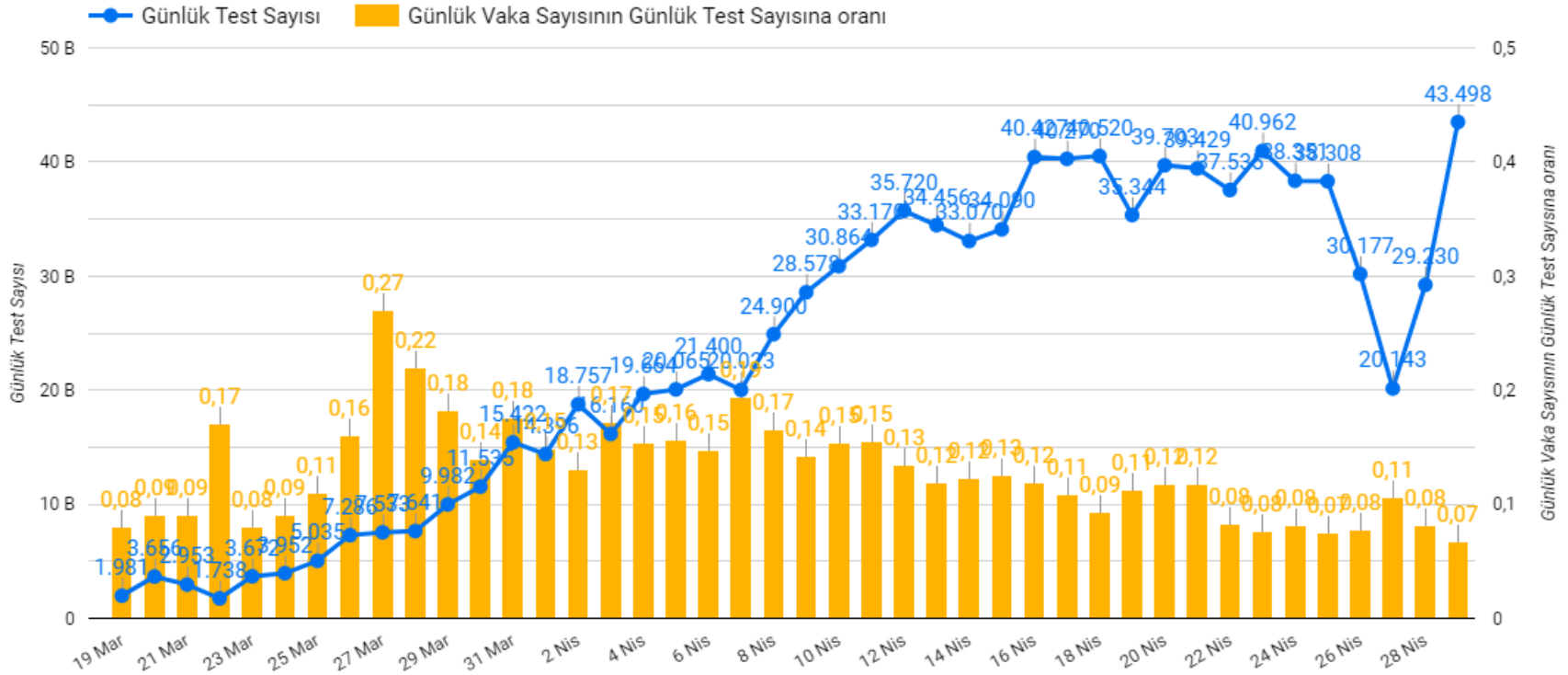
Number of Confirmed Cases and Recovered



Case Fatality Rate



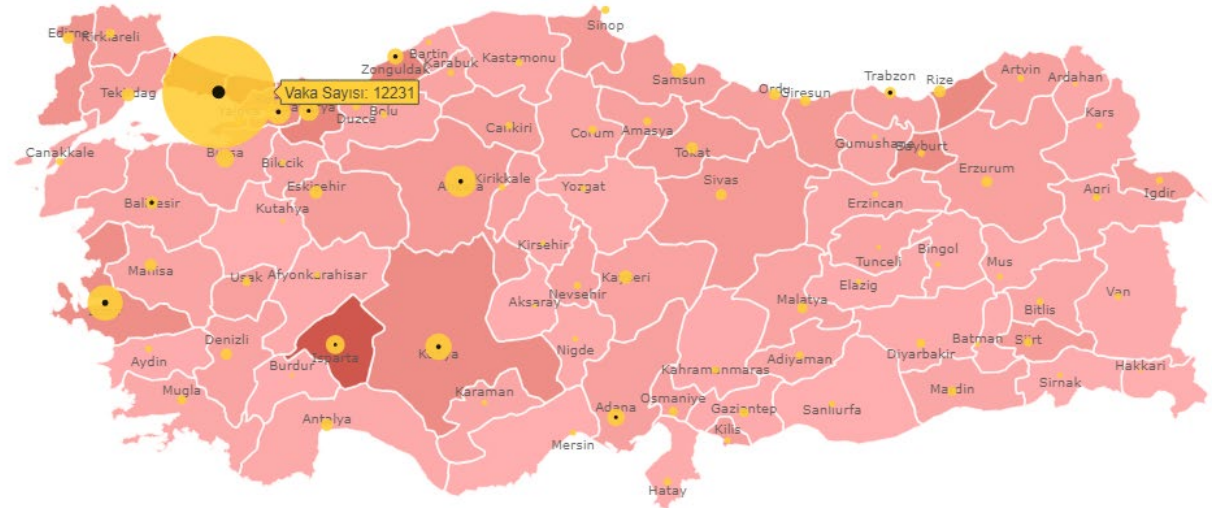
Number of PCR Tests and Rate of Confirmed Cases



7 April 2020

Confirmed Cases for Provinces

Almost 60% of cases is in Istanbul



7248 HCPs are infected (29 April 2020)

~6.2% of all cases

Total number of HCPs: 1.1 million

Konum	Vaka sayısı	Vefat sayısı
İstanbul	12.231	117
İzmir	1.105	18
Ankara	860	7
Konya	601	7
Kocaeli	500	8
Sakarya	337	3
Isparta	289	1
Bursa	259	2
Adana	241	3
Zonguldak	197	5
Samsun	167	1
Kayseri	130	1
Tekirdağ	121	0
Eskişehir	118	1
Balıkesir	106	5
Antalya	102	2
Rize	101	3
Manisa	100	1
Edirne	91	2
Tokat	90	3
Ordu	88	0
Trabzon	87	5
Denizli	86	2

Countries in deescalate phase (Turkey)

2. ICU situation

Total # of ICU beds:

38,000

for adults:

24,071 (~60%)

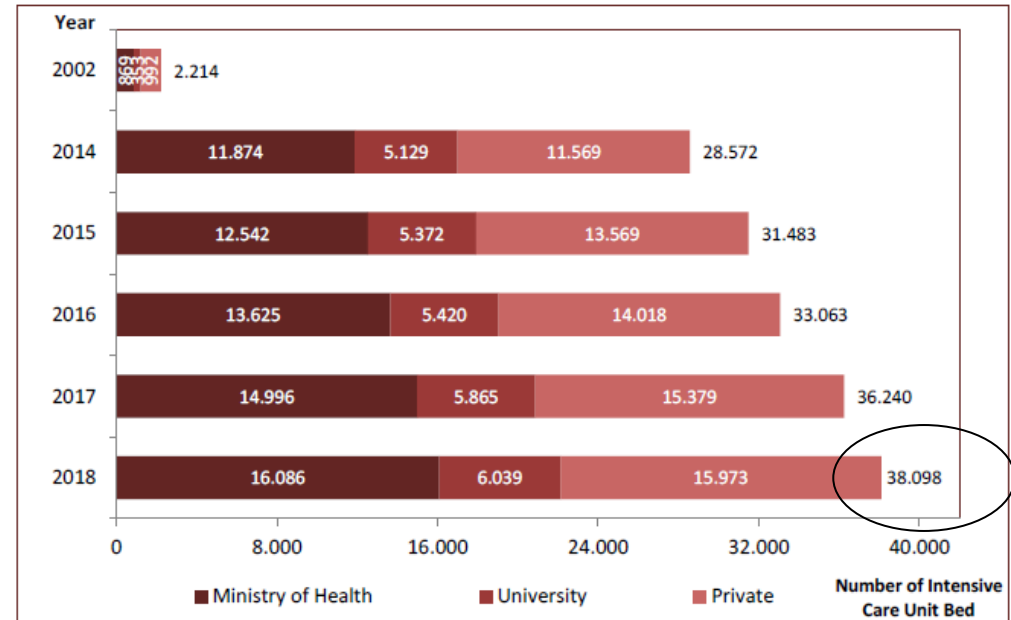
Total # of ventilators:

17,000

ICU bed occupancy:

<60%

Figure 7.9. Total Number of Intensive Care Unit Beds by Years and Sectors



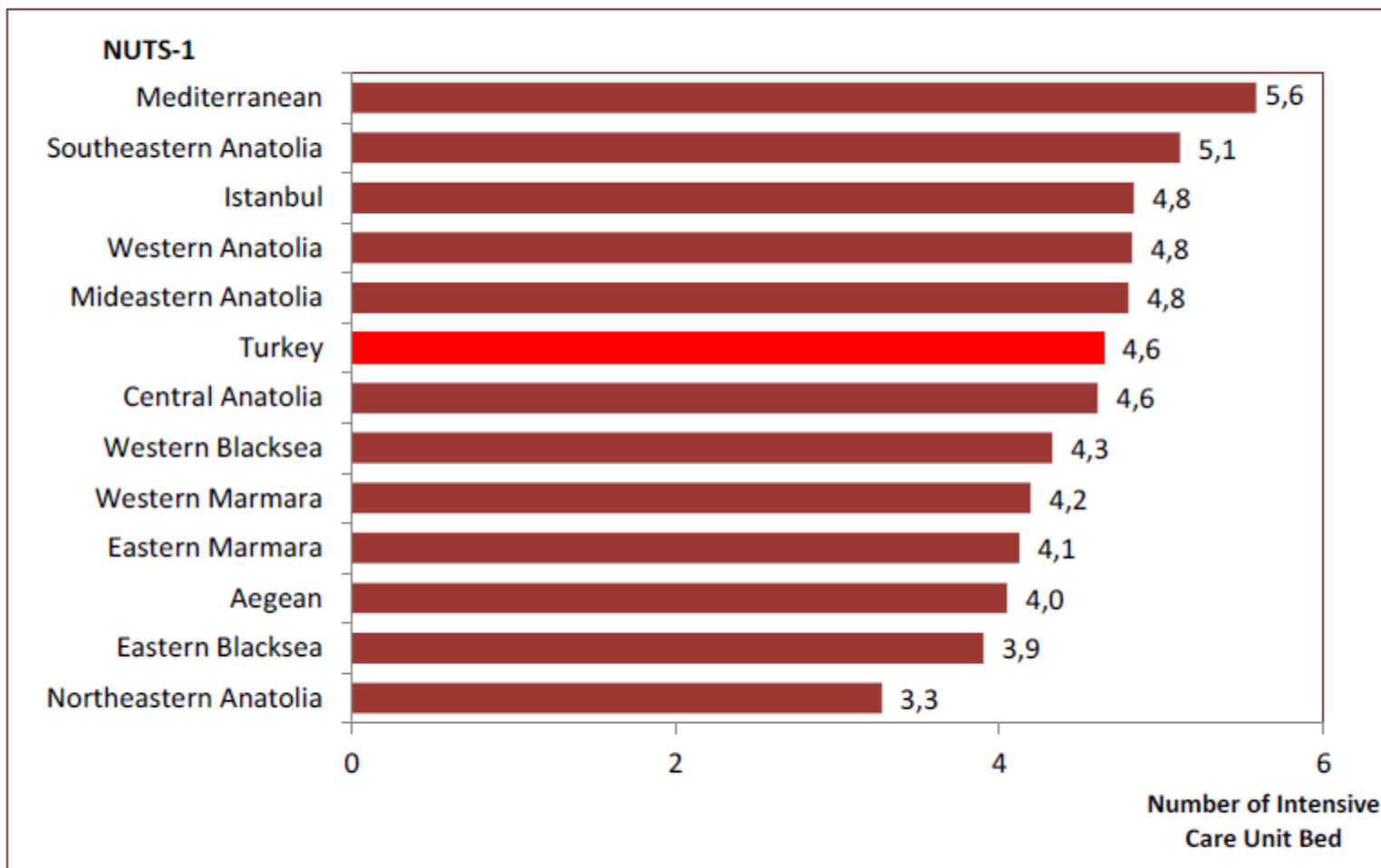
Source: General Directorate of Health Services

Table 7.3. Number and Distribution (%) of Intensive Care Unit Beds by Types and Sectors, 2018

	Ministry of Health		University		Private		Total	
	Number	%	Number	%	Number	%	Number	%
Adult	11,171	69,4	4,049	67,0	8,851	55,4	24,071	63,2
Child	941	5,8	542	9,0	142	0,9	1,625	4,3
Neonatal	3,974	24,7	1,448	24,0	6,980	43,7	12,402	32,6
Total	16,086	100	6,039	100	15,973	100	38,098	100

Source: General Directorate of Health Services

Figure 7.11. Number of Intensive Care Unit Beds per 10.000 Population by NUTS-1, All Sectors, 2018



Source: General Directorate of Health Services

Countries in deescalate phase (Turkey)

3. Indicators consider for deescalating

- The ratio of the number of daily tests to the number of positive patients decreases
- The number of patients in intensive care unit and the number of intubated ones are decreasing
- The number of recovered/discharged patients is increasing

Daily number of confirmed cases and deaths



Search by Country, Territory, or Area



Overview

Explorer

Global >  Turkey

Last updated: 2020/4/29, 2:00pm CEST

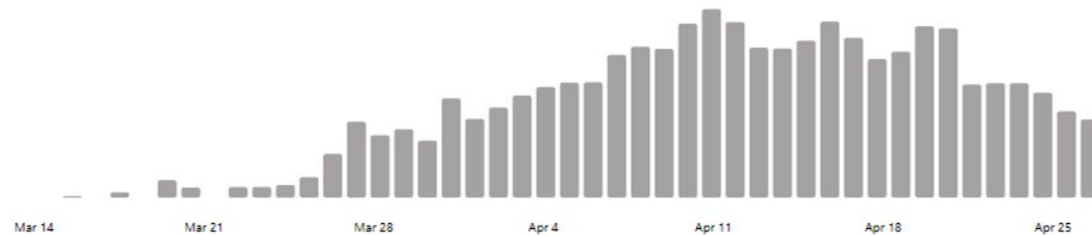
Confirmed Cases Over Time

Daily

112,261

confirmed cases

Source: World Health Organization



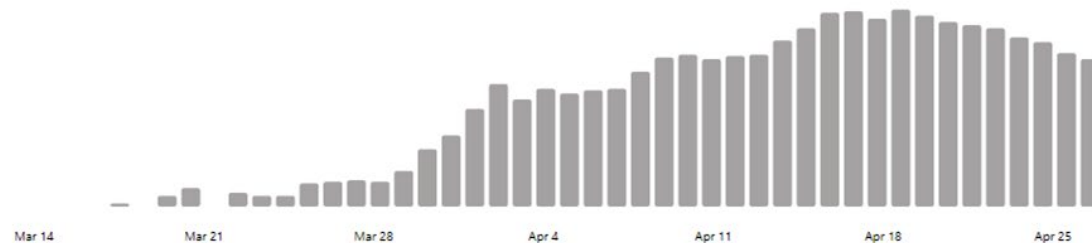
Deaths Over Time

Daily

2,900

deaths

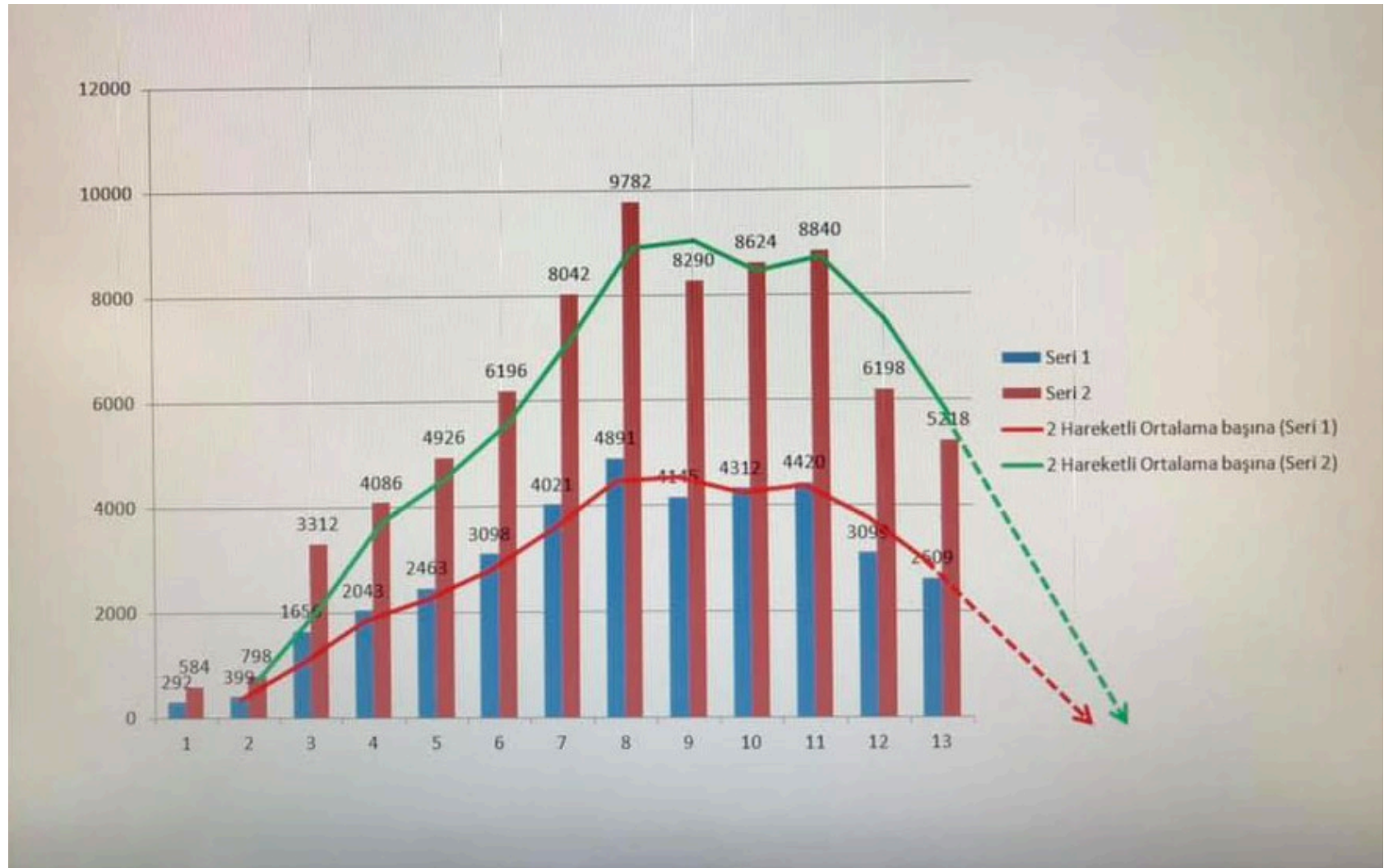
Source: World Health Organization



Reasons for success in intensive care units

- Late intubation
- High flow oxygen
- Prone position and
- Early start of favipravir

Estimated decrease in the number of cases



Countries in deescalate phase (Turkey)

4. Plans for Cancellation of the ED Tracks or Triage of Covid patients.
 - Almost all hospital EDs have a COVID-19 suspected case area and regular ED area
 - A triage is done just in the entrance of EDs
 - All EPs are using PPEs
 - It seems triage of COVID-19 patients will continue for several more months

Countries in deescalate phase (Turkey)

5. Regular ED visits

5. Estimated Prevalence of the covid in the ED patients

– Changes among providences

- More in Istanbul, Ankara, Izmir

– Unexpected cases:

- Falls + COVID-19
- ACS + COVID-19
- Cholecystitis + COVID-19, etc

6. New protocols based on tests results.

5. Regular ED Visits

- With general precautions, the number of patients has decreased
- In hospitals, both in-patient services and ICUs are ready and accepting patients
- EDs have not been in a difficult situation
- Emergency departments never stopped taking care of at non-covid patients and they still continue
- From now on, the number of regular patients will increase a little more

New Protocols

- The WHO confirmed that a novel coronavirus was the cause of a respiratory illness in a cluster of people in Wuhan City on 12 January 2020
- The Ministry of Health set up the Coronavirus Scientific Advisory Board 2 days earlier (on 10 January 2020)
 - An EP is included in the Board, Prof. Ahmet DEMIRCAN, Gazi University, Ankara
- The first case was officially confirmed on 11 March 2020
- Advisory Board realised COVID-19 Guide
 - Last update on April 14, 2020 (98 pages)

Definition

- Confirmed case (PCR test +)
- and
- Suspected case (in 4 categories)

3. VAKA TANIMI VE VAKA YÖNETİMİ

3.1. Olası Vaka

A:

- » Ateş veya akut solunum yolu hastalığı belirti ve bulgularından en az biri (öksürük ve solunum sıkıntısı), VE
- » Klinik tablonun başka bir neden/hastalık ile açıklanamaması VE
- » Semptomların başlamasından önceki 14 gün içerisinde kendisi veya yakınının yurt dışında bulunma öyküsü

VEYA

B:

- » Ateş veya akut solunum yolu hastalığı belirti ve bulgularından en az biri (öksürük ve solunum sıkıntısı), VE
- » Semptomların başlamasından önceki 14 gün içerisinde doğrulanmış COVID-19 vakası ile yakın temas eden

VEYA

C:

- » Ateş ve ağır akut solunum yolu enfeksiyonu belirti ve bulgularından en az biri (öksürük ve solunum sıkıntısı), VE
- » Hastanede yatış gerekliliği varlığı (SARI)* VE
- » Klinik tablonun başka bir neden/hastalık ile açıklanamaması

**SARI (Severe Acute Respiratory Infections-Ağır Akut Solunum Yolu Enfeksiyonları) son 14 gün içinde gelişen akut solunum yolu enfeksiyonu olan bir hastada, ateş, öksürük ve dispne, takipne, hipoksemi, hipotansiyon, akciğer görüntülemesinde yaygın radyolojik bulgu ve bilinç değişikliği nedeniyle hastaneye yatış gerekliliği*

VEYA

D:

- » Ani başlangıçlı ateş ile birlikte öksürük veya nefes darlığı olması ve burun akıntısı olmaması

3.2. Kesin Vaka

- » Olası vaka tanımına uyan olgulardan moleküler yöntemlerle SARS-CoV-2 saptanan olgular.

Case Management Algorithm

Olası/Kesin COVID-19 vakalarının yönetimi Vaka Takip Algoritması'na göre yapılır.

COVID-19 VAKA TAKİP ALGORİTMASI

OLASI VAKA

Tanımlandığı anda İl Sağlık Müdürlüğü Bulaşıcı Hastalıklar Birimi bilgilendirilir. Vakanın yönetimi İl Sağlık Müdürlüğü koordinasyonunda yürütülür.

SAĞLIK KURUMU

- Her yataklı tedavi kurumunda, HSYs sistemine vaka kaydını yapmak ve kayıtlı vakaların günlük izlemelerini yapacak personeller belirlenir.
- COVID-19 olası vaka tanımına uyan tüm vakalar Hastane Bilgi Yönetim Sistemi (HBYS) üzerinden U073 ICD 10 tanı kodu ile Bulaşıcı Hastalıklar Bildirim Sistemi kapsamında E-Nabız'a bildirilir.
- Olası vakadan itibaren tüm vakalar Halk Sağlığı Yönetim Sistemine (HSYS) kayıt edilir.
- Vakalardan uygun numune alınarak* HSYs üzerinden COVID-19 tetkik istemi yapılır.
- HSYS üzerinden istemi yapılan numune İl Sağlık Müdürlüğü aracılığı ile veya Sağlık Müdürlüğü tarafından belirlenen prosedüre göre uygun şartlarda ve ivedilikle ilgili laboratuvara ulaştırılır.
- Olası/kesin vakalar, Pandemi Hastaneleri (Sağlık Bakanlığı hastaneleri, Devlet ve Vakıf Üniversitesi hastaneleri ile özel hastaneler)nde izole şekilde kabul ve tedavi edilir.
- Vakaların tedavi ve izlem süreci hekim değerlendirilmesisonrasında Pandemi Hastanelerinde veya evde yapılır.
- İl ve hastaneler bazında yapılmış olan Pandemi Planına uygun olarak kesin ve olası vakaların öncelikle bu hastalar için ayrılmış olan hastane, servis ve yoğun bakımlarda takip edilmesi esastır. Hastaların bu birimlerde mümkünse izole olarak, değil ise en az 1- 1,5 metre mesafe ile ayrılmış alanlarda izlenmesi sağlanmalıdır.
- Pandemi hastanelerinin bulunmadığı yerlerde 2. basamak erişkin yoğun bakım ünitesi bulunan hastaneler de pandemi hastanesi olarak hizmet verir.

İL SAĞLIK MÜDÜRLÜĞÜ

- Yataklı tedavi kurumlarından alınan numunelerin ilgili laboratuvarlara ivedilikle ve uygun şartlarda gönderilmesini sağlar.
- Vaka kümelenmesi şüphesinde vakalar arasında epidemiyolojik bağlantı araştırılır.
- HSYS'ye girilen tüm vakaların temaslı sorgulamalarının yapılması, temaslı listelerinin oluşturulması ve HSYs sistemine girişlerinin yapılması sağlanır.
- HSYS'ye kayıt edilen ve hastanede yatmakta olan vakaların günlük izlem durum bilgilerini takip edilir.
- Yurt dışından gelen kişiler, kesin vaka teması nedeni ile olası vaka olarak kayıt edilen ve evde izlemine karar verilen kişilerin Aile Hekimliği tarafından yapılan izlem durumları takip edilir.
- Saha ekipleri tarafından yapılacak temaslı takipleri ve pozitif vaka takiplerinin izlenmesi koordine edilir ve günlük izlemler takip edilir.
- Yurt dışından gelen ve belirli bölgelerde toplu olarak izlemine karar verilen kişilerin izlemlerini izlemleri koordine edilir ve günlük izlemler takip edilir.

LABORATUVARLAR

İSM tarafından iletilen numunelerin analizlerini yapılır ve sonuçları LBYS'ye girilir. (LBYS'deki sonuçlar onayladığı anda HSYs'ye otomatik olarak aktarılır. Tetkik sonuçları, istemin yapıldığı kurum ve HSYs'deki kullanıcılara yetki alanları ile sınırlı olmak üzere vaka bazlı olarak gösterilir.)

*Numune solunum yolu sürüntüsü olarak Viral Transport Besiyeri (VTM) ile alınır. Trakeal aspirat, bronkoskopik örnek, balgam alınacak ise steril, vida kapaklı ve sızdırmaz kaplara 2-3 ml alınmalıdır. Tüm örnekler alındıktan hemen sonra buzdolabında (2-8°C arası) muhafaza edilmeli ve ivedilikle laboratuvara ulaştırılmalıdır.

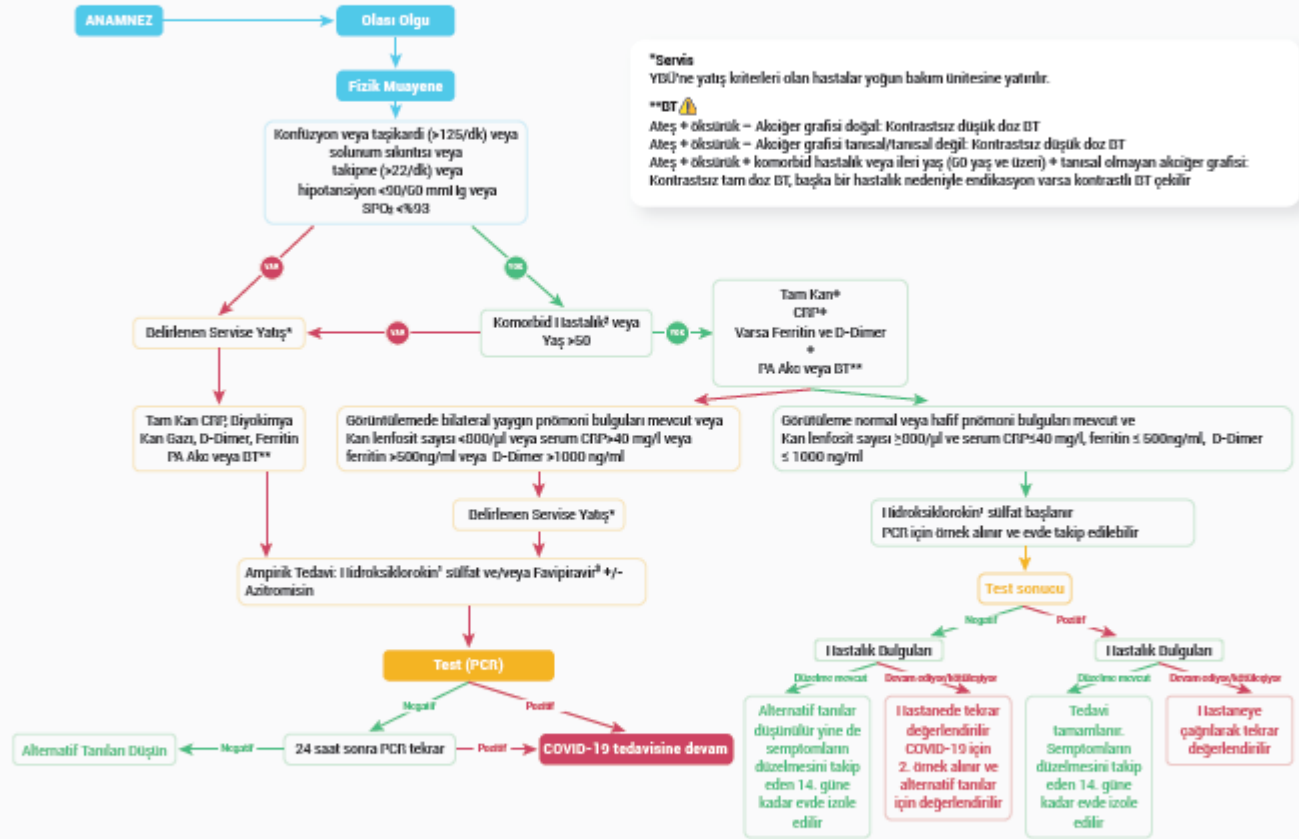
Adult Treatment Algorithm



TÜRKİYE CUMHURİYETİ
SAĞLIK BAKANLIĞI

Güncelleme Tarihi
12.04.2020

COVID-19 ERİŞKİN TEDAVİ ALGORİTMASI



⚠ 20 yaş altındaki genç kadınlarda DT gelişmesinden kaçınılmalıdır

⚠ Çapraz bulağı önlemek için her hastadan sonra BT cihazı uygun şekilde temizlenmelidir

NOT: Oseltamivir, influenza ile uyumlu klinik bulguları olan, mevsime ve diğer faktörlere göre influenza ile değişim gösteren COVID-19 tedavisi için önerilmez. Favipiravir başlanan veya eklenen olgulara oseltamivir verilmesi veya kesilmesi

Oseltamivir COVID-19 tedavisi için önerilmez. Favipiravir başlanan veya eklenen olgulara oseltamivir verilmesi veya kesilmesi

*Kardiyak aritmi öyküsü olan veya QT mesafesini uzatan ilaç kullanan kişilerde hidroksiklorokin sülfat tek veya azitromisin ile birlikte kullanıma başlanmadan önce EKG çekilmesi gerekir

† Hem hidroksiklorokin hem de azitromisin QT aralığını uzatıp, ventriküler taşikardiye eğilim yaratabilir

*Kardiyovasküler hastalıklar, DM, HT, kanser, kronik akciğer hastalıkları başta olmak üzere diğer immunosüpresif durumlar

* Favipiravir ağır pnömöni veya hidroksiklorokine rağmen kliniği kötüleşen hastalara başlanır

Therapeutic Options for COVID-19

- Hydroxychloroquine
+/-
- Azithromycin
and/or
- Favipiravir – for severe pneumonia
- Lopinavir/ritonavir – for pregnant patients
- Supportive
 - Methylprednisolone – ARDS + mech. vent.
 - Immune plasma

For the near future

- As prevalence of COVID-19 is decreasing, covid patients are also decreasing in EDs
- PCR test will be done primarily for filiation
- On the other hand, it is more likely to be done in collective workplaces to identify asymptomatic patients
- Antibody tests are planned
 - Especially for health care providers (to plan the workforce)
 - For certain number of antibody tests are planned to measure HERD IMMUNITY across the country

Overall, Why Turkey is Successful?

1. Scientific Advisory Board was established and Government acted according to their recommendations
2. Early precautions were taken, some flights were canceled to some countries
3. Those who came from abroad were first released but then quarantined for 14 days in dormitories
4. Test-filiation was done well (starting from the first case)
5. Curfew was imposed under 20 and over 65 years old people
6. Early treatment and early isolation
7. EDs, inpatient services and ICUs are prepared very well

Overall, Why Turkey is Successful?

8. No problem with PPEs (with some exceptions)
9. Hydroxychloroquine appears to alleviate symptoms
10. We use CT scan very quickly
11. Measures were taken for social distance (cafes, restaurants were closed early, bus, public transport etc. measures)
12. A curfew was declared on the weekends, albeit for a short time
13. Mobility of all people was tried to be reduced
14. Positive / suspected cases were followed up with telephone applications
15. Favipravir administered very early to patients with pneumonia, “a drug who is believed to save Turkey”,
 - patients have recovered quickly, did not need ICU, and prevent death

Overall, Why Turkey is Successful?

16. No problem with providing all drugs
17. Immune plasma, stem cell, IL6 inhibitors were used
18. Turkey has been always taking care of seriously ill patients
 - We have experienced physicians and other HCPs
 - We adapted very quickly
19. Guides that were constantly updated throughout the country were engraved, and standard treatments and approaches were made
20. We followed the events happening both in China and in Europe fast and early. We took early precautions. We are lucky that the virus entered our country late.

CZECH REPUBLIC - situation on 28th April 2020

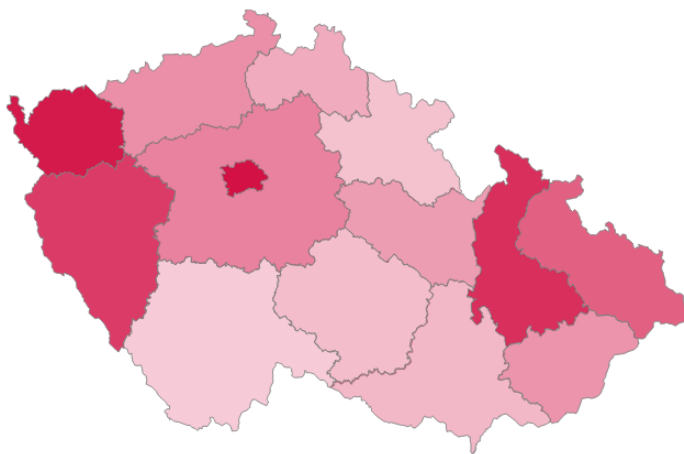
Jana Šeblová, Roman Gřegoř



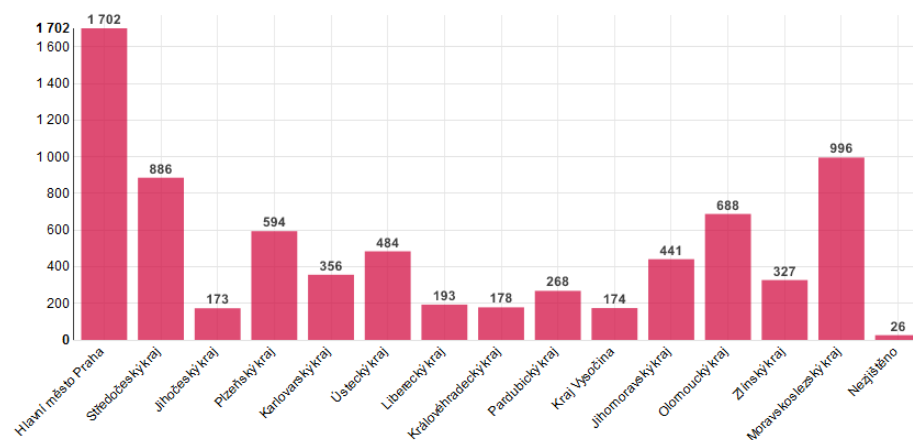
COVID-19 positive patients/100 000 inhabitants by regions

Přehled výskytu laboratorně prokázaného onemocnění COVID-19 podle regionu

Počet osob s COVID-19 přepočtený na 100 000 obyvatel



Celkový počet osob s COVID-19 dle kraje ČR (dělení dle trvalého bydliště pacienta)



Počet osob s laboratorně prokázaným onemocněním COVID-19 v jednotlivých krajích: Cizinci, osoby bez uvedeného trvalého bydliště, nevyplněné záznamy.

Z důvodu změny metodiky pro zpracování hlášení KHS a pozitivních nálezů laboratoří došlo ke drobným korekcím v přehledech podle regionu. Poslední aktualizace pozitivních nálezů byla provedena ke dni: 28. 4. 2020 v 17.30 h

GENERAL DATA



MINISTERSTVO ZDRAVOTNICTVÍ
ČESKÉ REPUBLIKY

COVID-19: Přehled aktuální situace v ČR

Onemocnění COVID-19 je způsobeno novým typem koronaviru s odborným označením SARS-CoV-2. Jedná se o vysoce infekční onemocnění, které se projevuje zejména horečkami, respiračními potížemi (kašel, dušnost), bolestí svalů a únavou. U starších a chronicky nemocných osob může nemoc mít vážnější průběh a může vést i k úmrtí. Počátek epidemie COVID-19 je datován k 31. prosinci 2019, kdy byly první případy hlášeny v čínském městě Wu-Chan v provincii Chu-Pej. V České republice byly první tři případy nákazy novým koronavirem prokázány 1. března 2020.

[Kumulativní přehledy dle KHS a laboratoří](#) [Denní přehledy dle KHS a laboratoří](#) [Přehledy dle KHS](#) [Přehled hospitalizací pacientů](#) [Distribuce ochranného materiálu](#)

≡ Menu

Celkový počet provedených laboratorních testů

234 985

k 29. 4. 2020 v 8.30 h

Celkový počet osob s dosud prokázaným
onemocněním COVID-19 (kumulativně za celé
období)

7 563

k 29. 4. 2020 v 17.25 h

Aktuální počet hospitalizovaných s onemocněním
COVID-19

361

k 29. 4. 2020 v 8.30 h

Aktuální počet osob s prokázaným onemocněním
COVID-19 (včetně hospitalizovaných, bez vyléčených
a úmrtí)

4 240

k 29. 4. 2020 v 17.25 h

Celkový počet vyléčených po onemocnění COVID-19
dle hlášení KHS

3 096

stav hlášení
k 29. 4. 2020 v 17.25 h

Celkový počet úmrtí v souvislosti s onemocněním
COVID-19

227

stav hlášení
k 29. 4. 2020 v 17.25 h

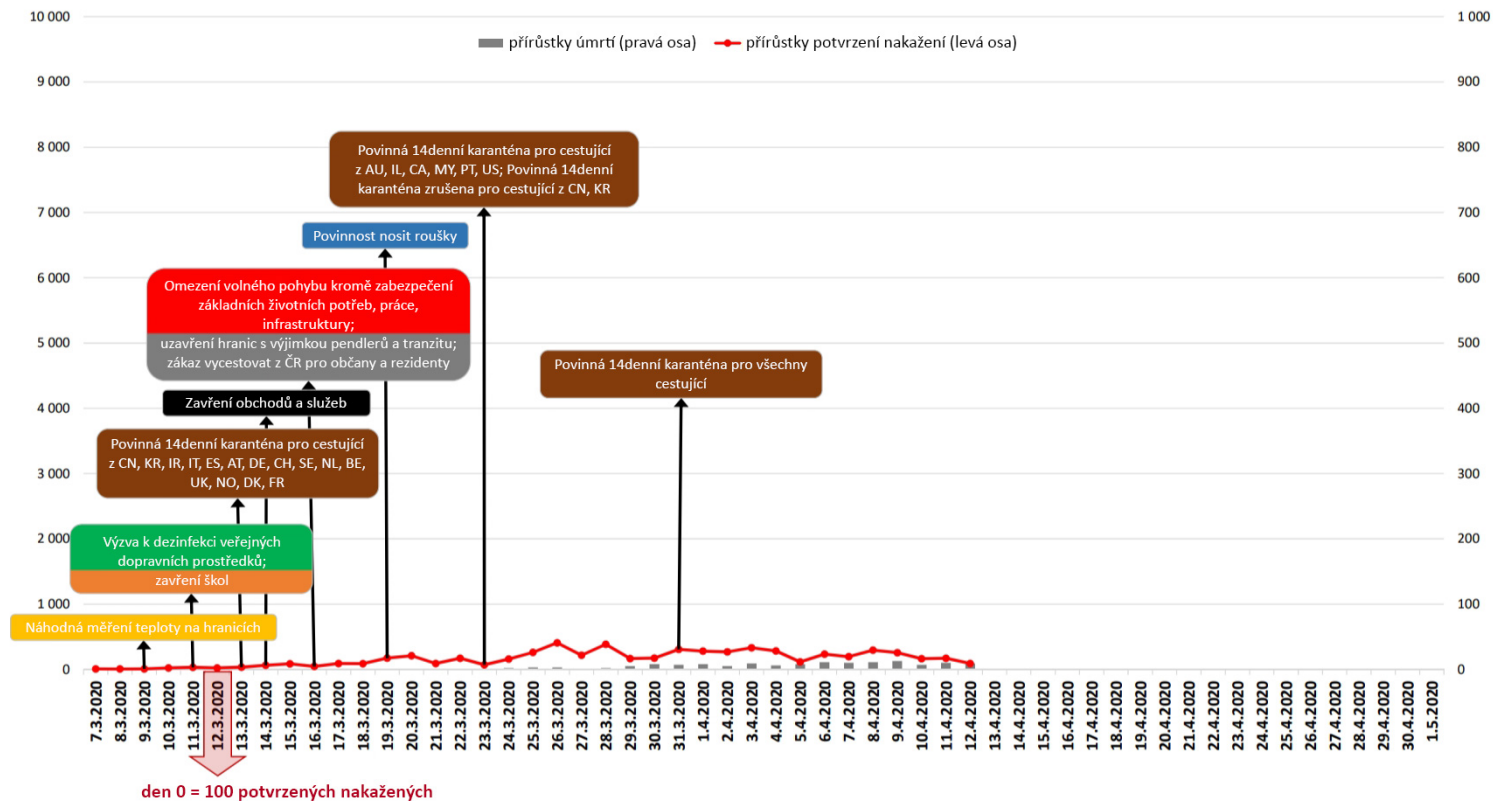
GENERAL DATA

First three confirmed cases – 1st March 2020

100 confirmed cases = the date of general lockdown = 12th March 2020

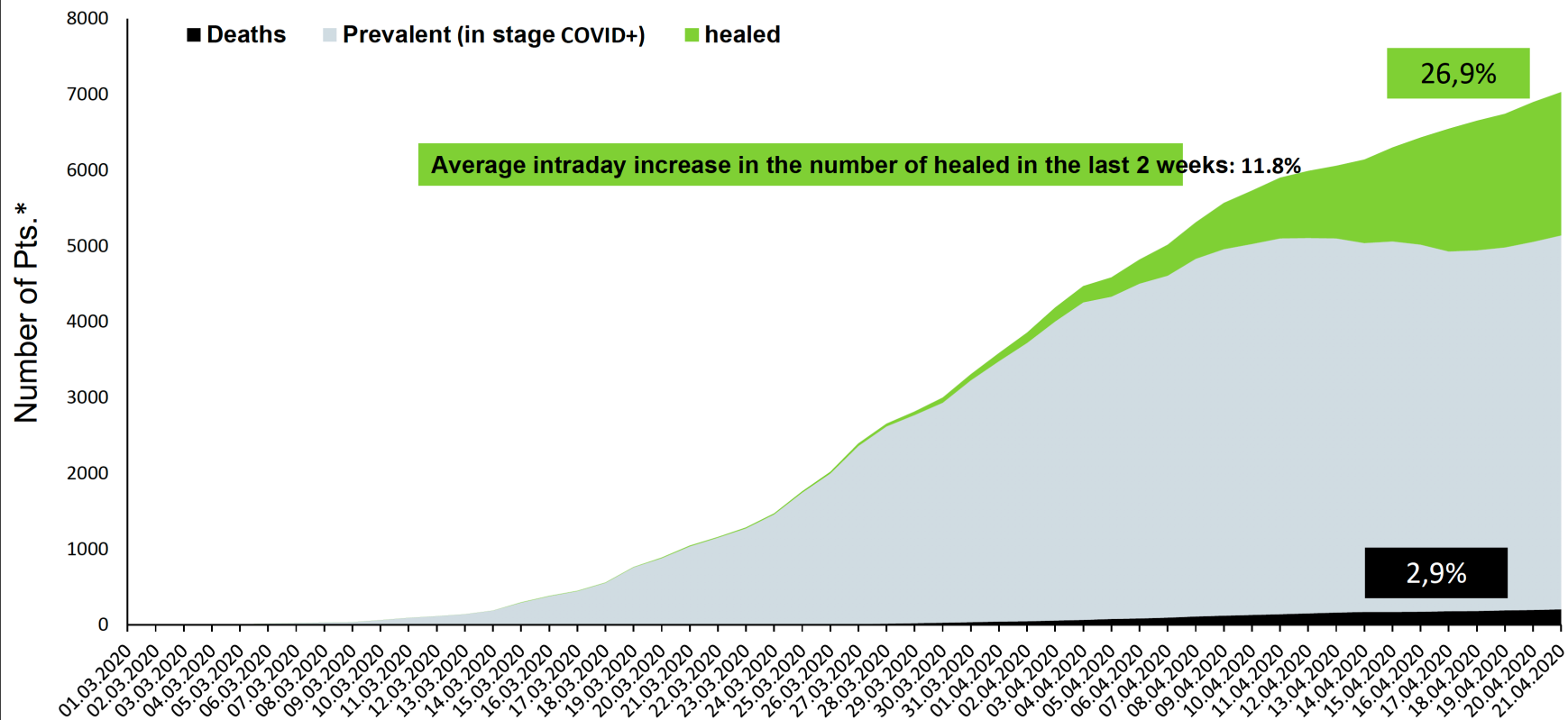
1st victim of COVID-19 – 22nd March 2020

Česko

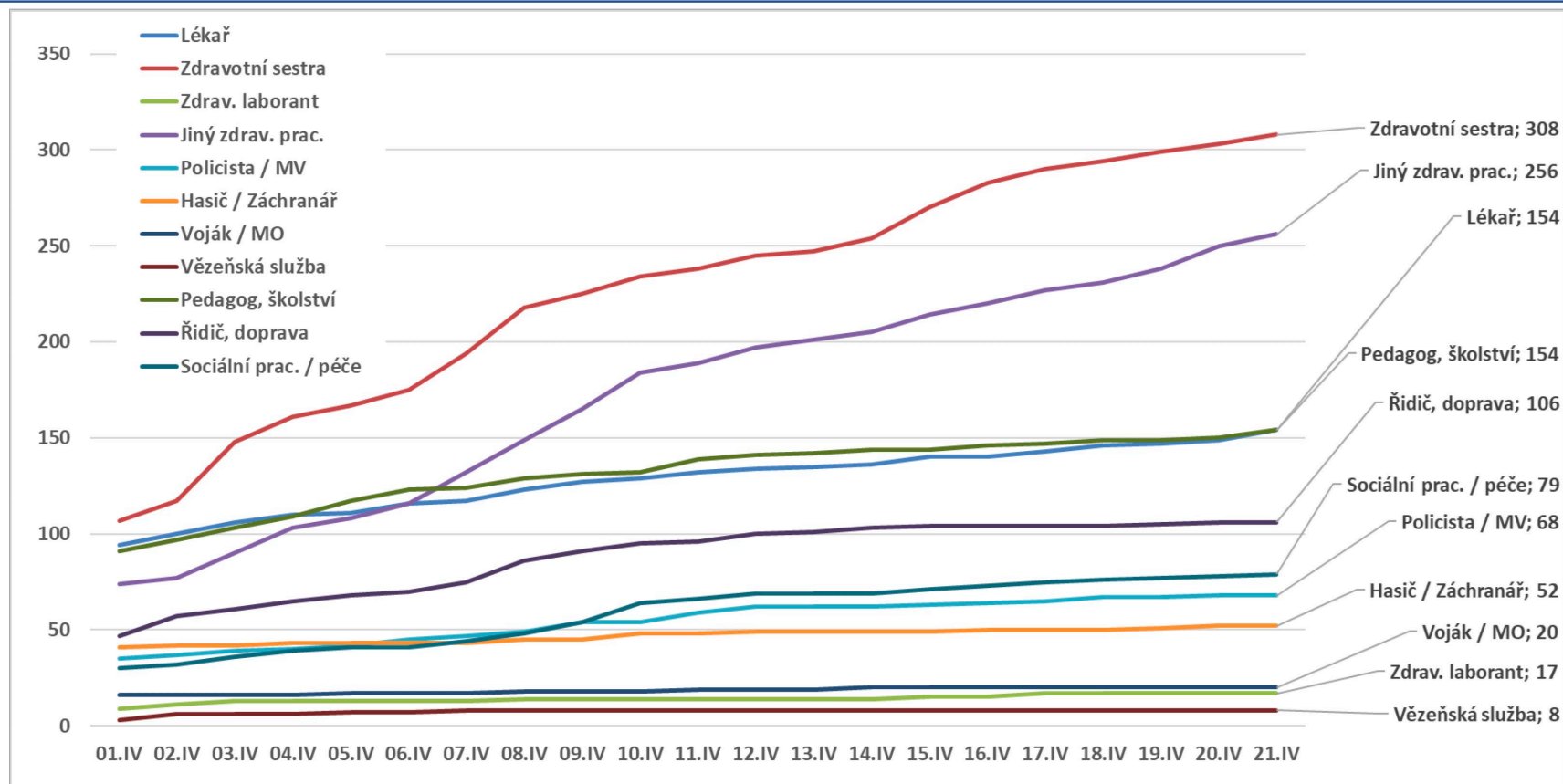




Epidemiologic profile COVID-19 Czech Republic



Numbers of positive tested COVID-19 pts of selected working groups

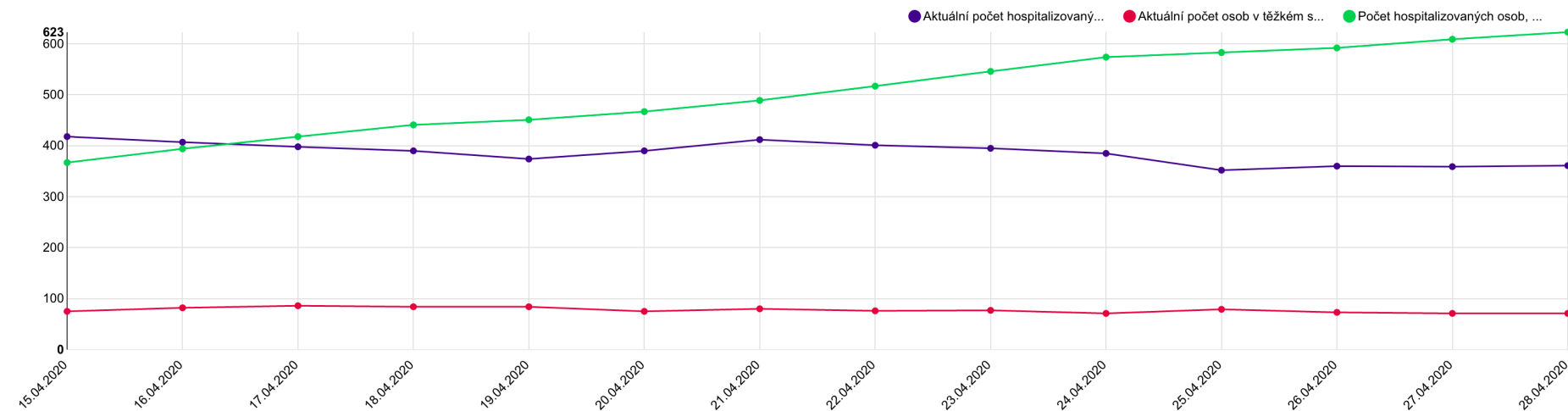


HOSPITALISED PATIENTS

(general, mechanical ventilation and (or) ECMO)

Přehled hospitalizací osob s laboratorně prokázaným onemocněním COVID-19 dle průběžného hlášení nemocnic

[Přehled za posledních 14 dní](#) | [Kompletní přehled za celé období](#) | [Tabulkový přehled](#)



Aktuální počet hospitalizovaných osob (modrá čára), z toho v těžkém stavu nebo s vysoce intenzivní péčí (červená čára) a počet vyléčených nebo propuštěných do domácí izolace (zelená čára).

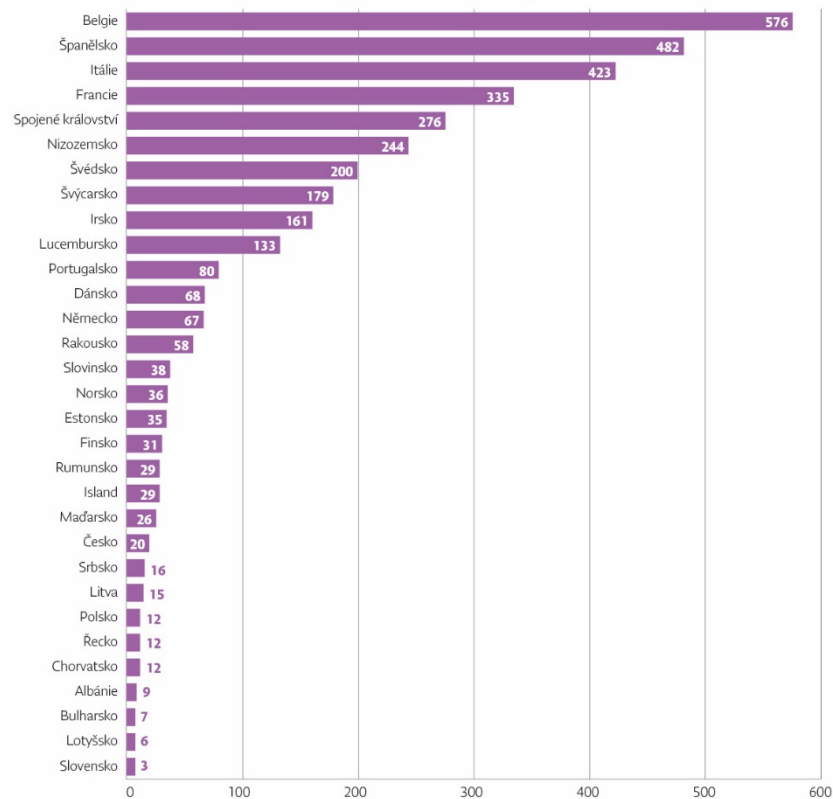
* UPV: Umělá plicní ventilace, ** ECMO: Mimotělní membránová oxygenace (pokročilá metoda podpory životních funkcí)

Aktualizace dat: Přehled je aktualizován jednou za den v dopoledních hodinách podle času ukončení sběru a zpracování dat za předchozí den. Poslední aktualizace byla provedena ke dni: 29. 4. 2020 v 8.30 h

MORTALITY – international comparison infected patients by gender: more women

Mortality per 1 mil inhabitants

Úmrtnost na covid-19 v Evropě (na milion obyvatel)

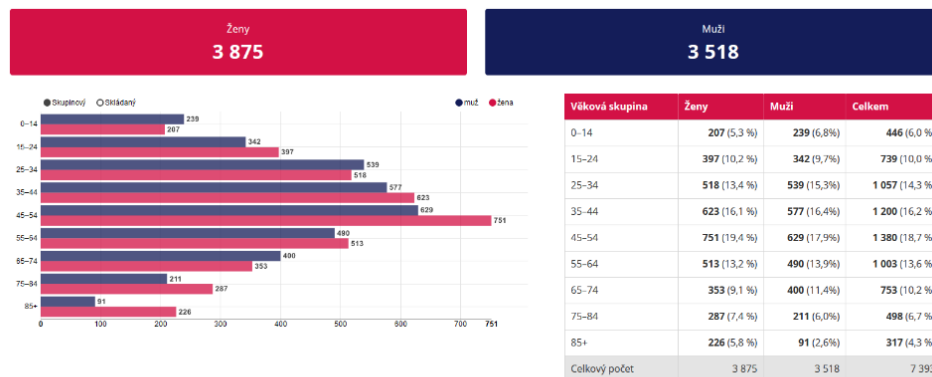


Zdá se, že dnes je bezpečnější žít na Východě než na Západě. A raději na severu než na jihu.

DATA: WORLDOMETER, GRAFIKA: DENÍK N

woman

man



Legenda: Celkové počty osob s laboratorně prokázaným onemocněním COVID-19 podle pohlaví a věkové skupiny dle hlášení KHS.

Poslední aktualizace byla provedena ke dni: 28. 4. 2020 v 17.30 h

DO-IT- YOURSELF

FACE MASKS, SOCIAL DISTANCING, VOLUNTEER'S HELP



PREHOSPITAL CARE

- **Dispatch** - increased workload regarding Covid-19 calls and information (public was adviced from the very beginning to call before coming to health care facilities)
- **Organization of stationary test places and „mobile testing teams“** provided together with public health departments (testing at home), later by help from Army
- **National information line 1212** (H24 since 16th March 2020)
- During first week of pandemic decrease of EMS missions
- Complications with transferring “normal=not COVID+ patients to hospitals – risk of delay (stroke, major trauma, AMI etc.)



EMERGENCY DEPARTMENTS

- Pre-triage according to possible infection outside ED
- Decrease approximately 30 % pts, mostly low priorities (but not only)
- Sometimes complicated admission of patient with other than Covid-19 symptoms
- Management: Guidelines of scientific societies (EM, GP, intensive care, infectious diseases, radiology, palliative care and others)

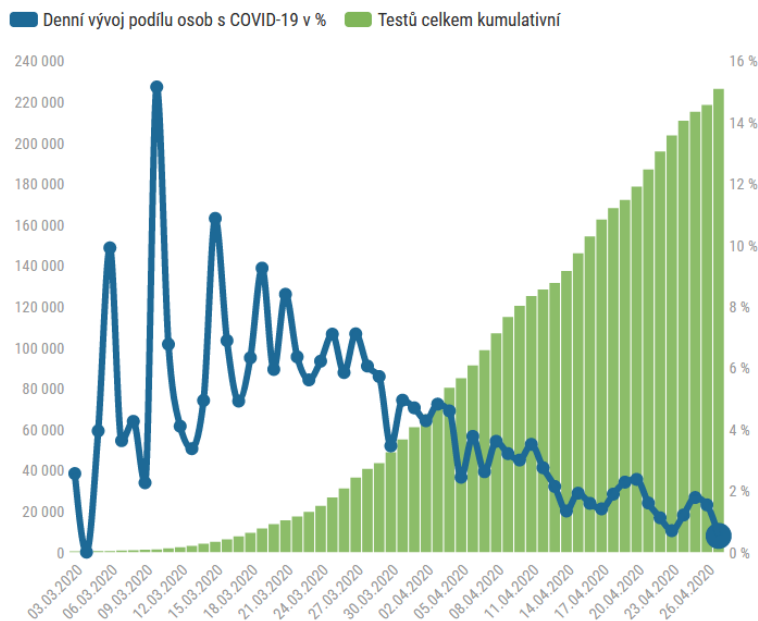


TESTING

226 255 tests/10 mil. population till 28th April 2020

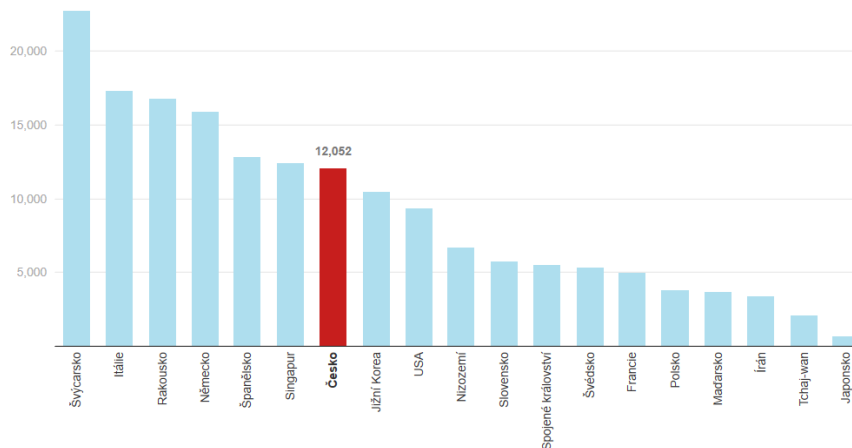
study with planned 27 000 healthy individuals (presence of antibodies) is just taking place

Daily portion of COVID+ (%)



Number of tests per 1 mil. inhabitants

Počet testů na milion obyvatel



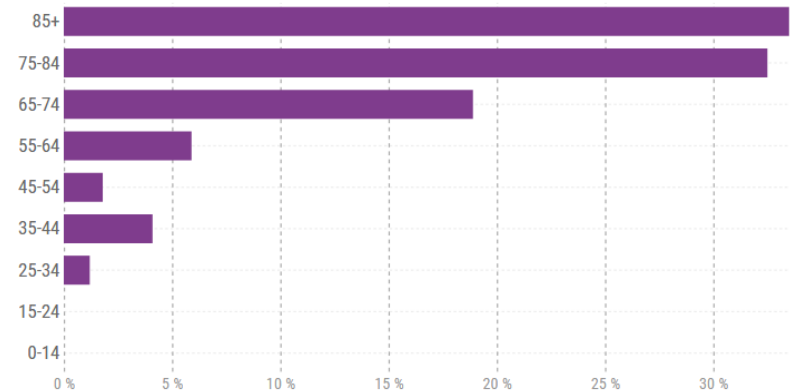
Source: MZV SR • [Get the data](#) • Created with Datawrapper

NURSING HOMES

- **Lack of PPE**
- **some of them affected seriously**
 - help from army
 - long term stay of caring staff

Age structure of COVID-19 deaths

Věková skladba zemřelých v ČR v souvislosti s covid-19



IMPACT ON HEALTH CARE PROFESSIONALS



The most affected professional group:

Data till 20th April:

10 % of all infected patients

693/6800

144 physicians

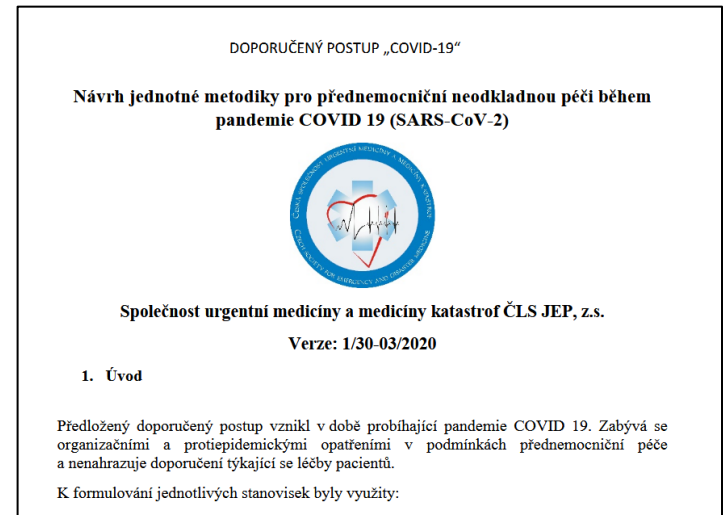
297 nurses, 2 of them died

17 laboratory technicians

235 other health care professionals

INTERNATIONAL COLLABORATION

- Due to delay in outbreak in CR (1-2 weeks) we had time to prepare and learn
- Sharing experience very useful
- CSEDM – GUIDELINES ON COVID-19 PATIENTS:
 - CPR in COVID-19 pts.
 - Use of PPE in COVID-19 pts.
 - Triage in ED in COVID-19 pandemic
 - Criteria for outpatient care in COVID-19 pts.
 - Management of invasive procedures in COVID-19 pts.
 - Prehospital emergency care in COVID-19 pandemic



COVID-19防控体会分享

Sharing Meeting about Prevention and Control of COVID-19

中华医学会急诊医学分会主任委员

Chairman of Chinese Society of Emergency Medicine

急救与创伤研究教育部重点实验室

Key Laboratory of Emergency and Trauma Research of Ministry of Education

中国医学科学院海岛急救创新单元

Research Unit of Island Emergency Medicine, Chinese Academy of Medical Sciences

海南医学院 急诊创伤学院

Emergency and Trauma College, Hainan Medical University

吕传柱

Lyu Chuanzhu

2020年4月30日 30 April, 2020



国内现状
Current Situation in China
初步工作
Preliminary Work
经验分享
Experience Sharing



国内现状
Current Situation in China
初步工作
Preliminary Work
经验分享
Experience Sharing



中国疫情最新数据

Latest data on China's Epidemic Situation

980

现存确诊

Number of existing
confirmed cases

993

无症状感染

Number of asymptomatic
patients

1660

境外输入

Number of import cases

84369

累计确诊

Cumulative confirmed cases

78746

累计治愈

Cumulative cured cases

4643

累计死亡

Cumulative death cases

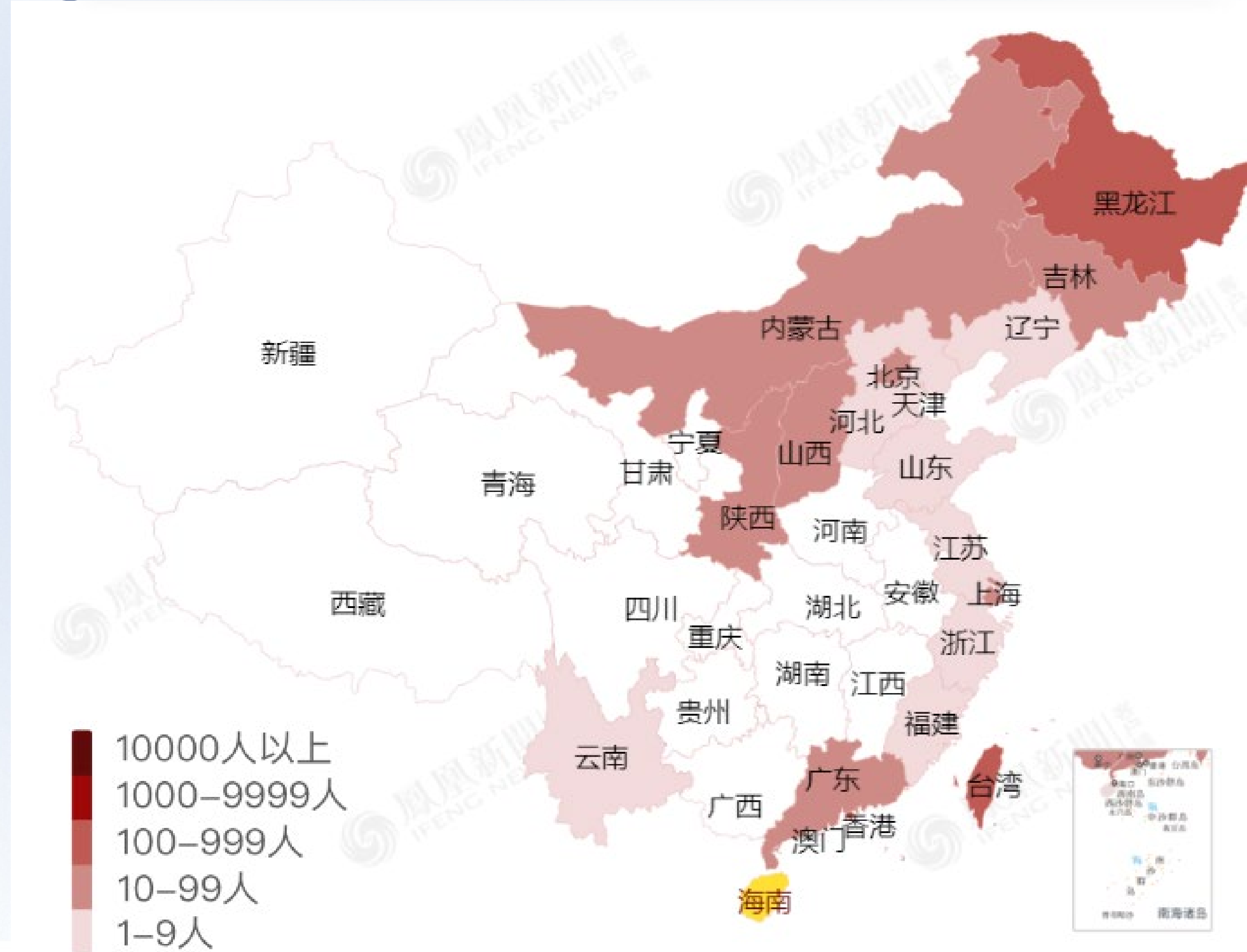


截止日期: 2020-4-29 21:32 来源: 凤凰网

Deadline: 2020-4-29 21:32 Source: Phoenix Network

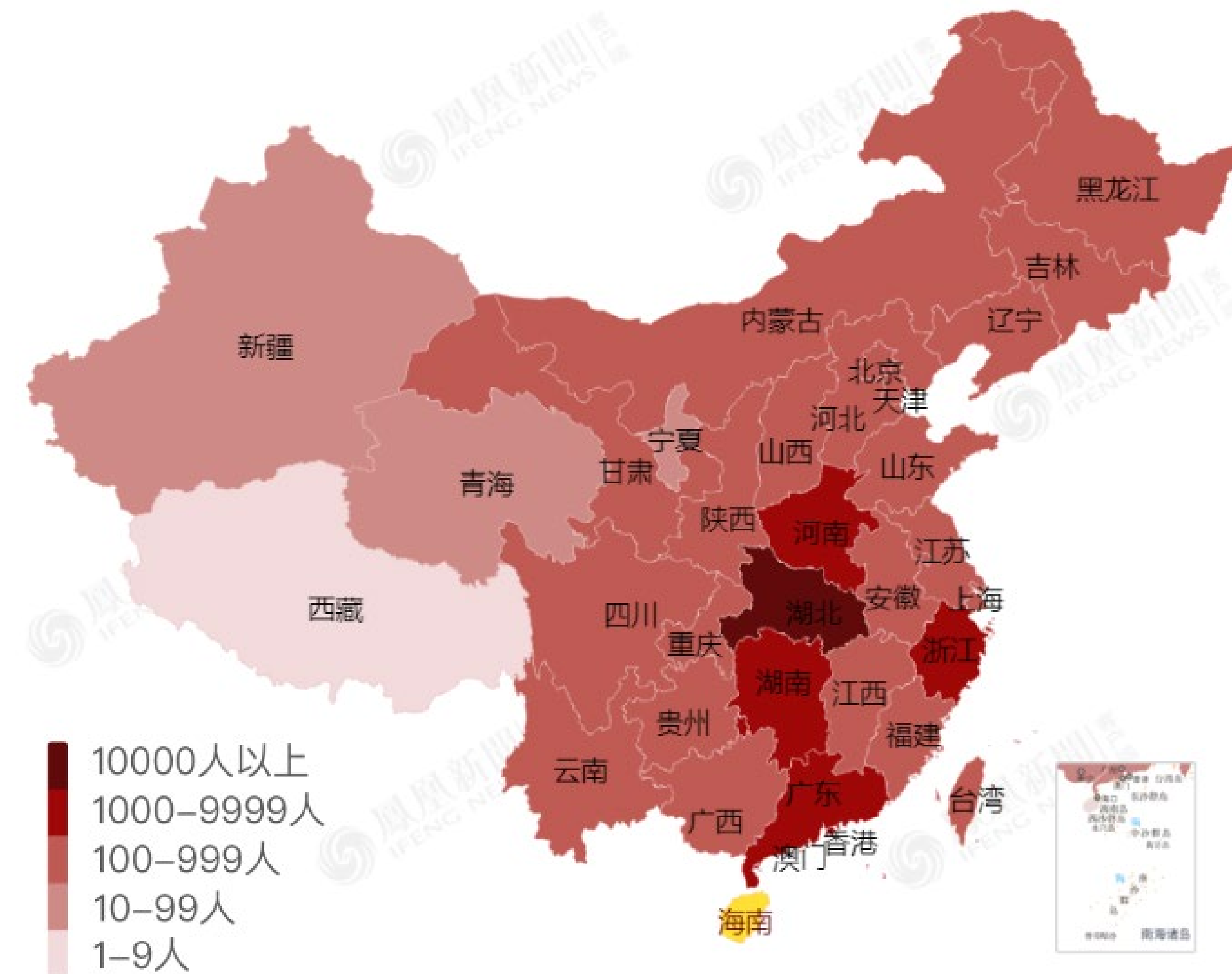
中国现存确诊 (647例)

Existing Confirmed Cases in China (647 cases)



中国累计确诊 (82858例)

Cumulative Confirmed Cases in China (82858 cases)

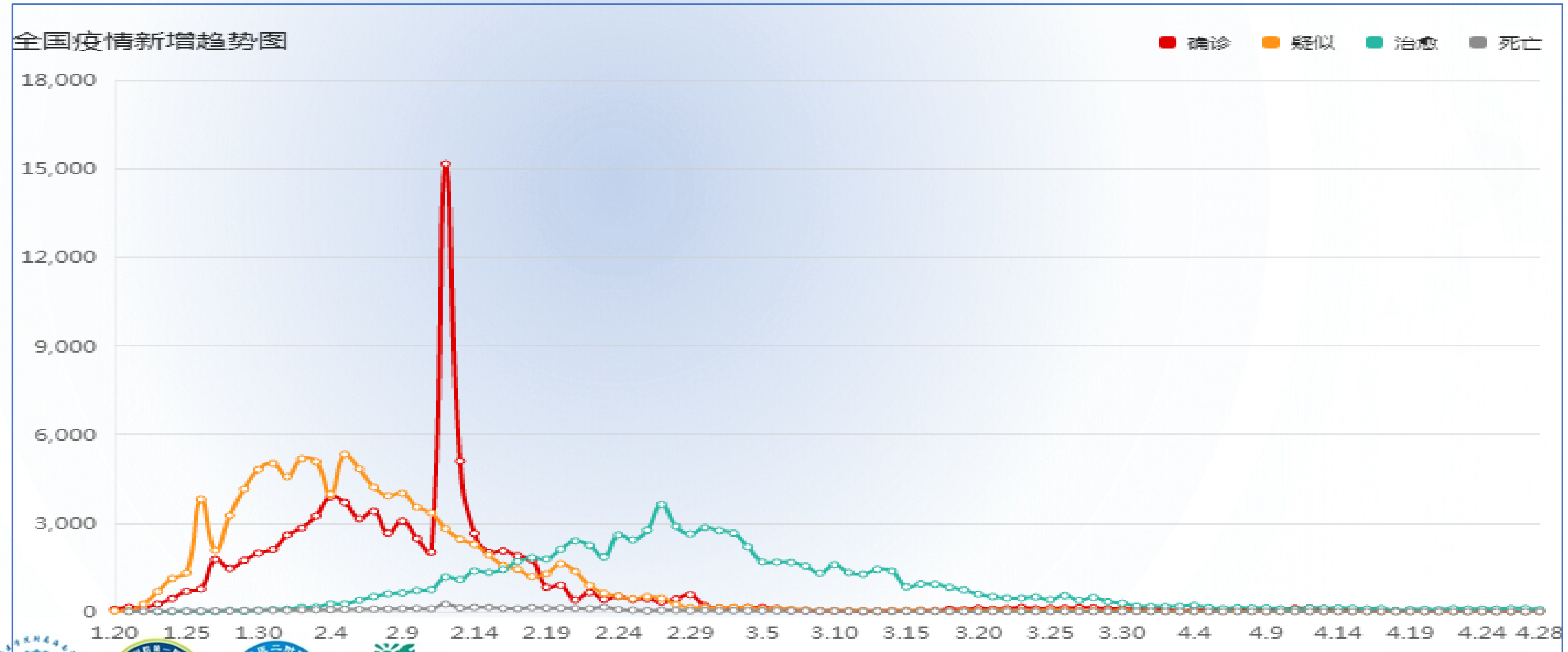


截止日期: 2020-4-29 21:32 来源: 凤凰网

Deadline: 2020-4-29 21:32 Source: Phoenix Network

中国疫情新增趋势图

Trend of Latest Increase of Epidemic in China



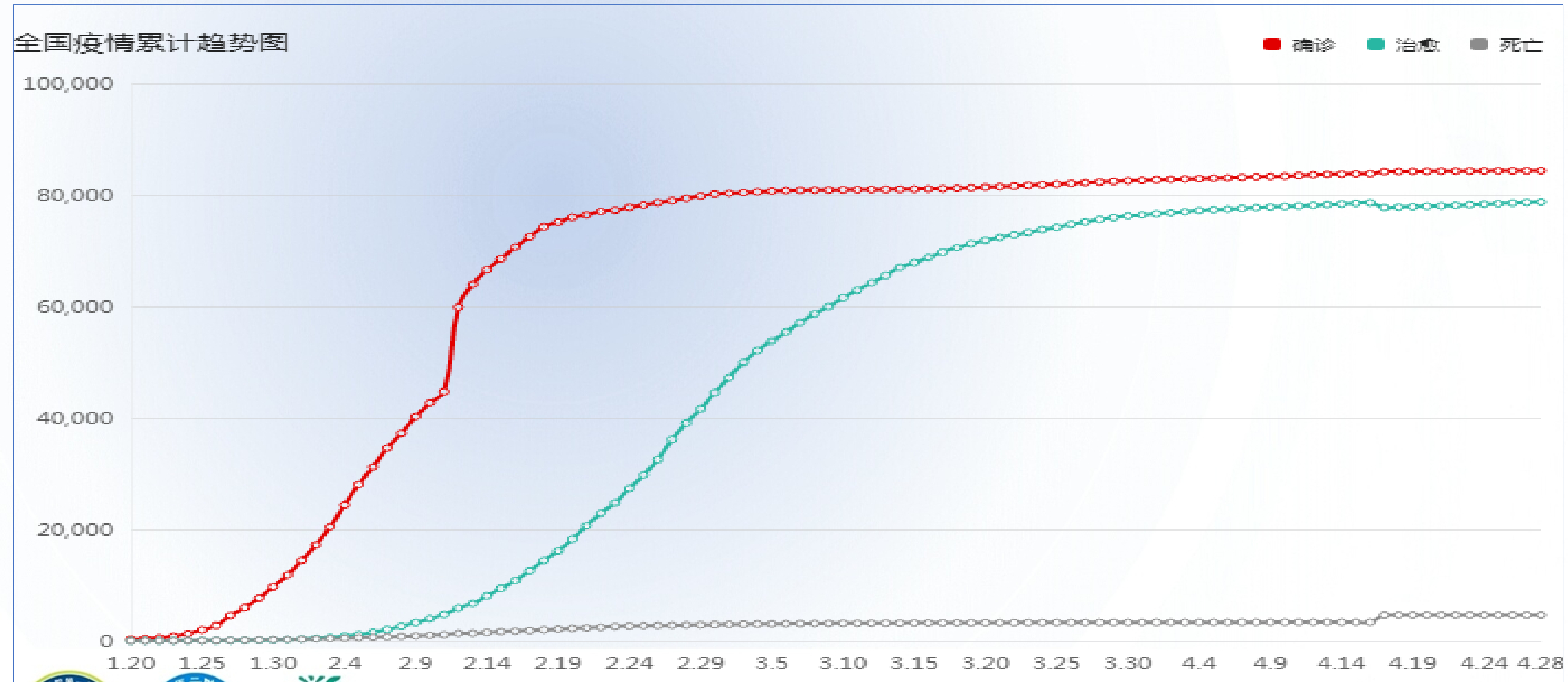
截止日期: 2020-4-29 21:32 来源: 凤凰网

Deadline: 2020-4-29 21:32 Source: Phoenix Network



中国疫情累计趋势图

Trend of Cumulative Cases of Epidemic China



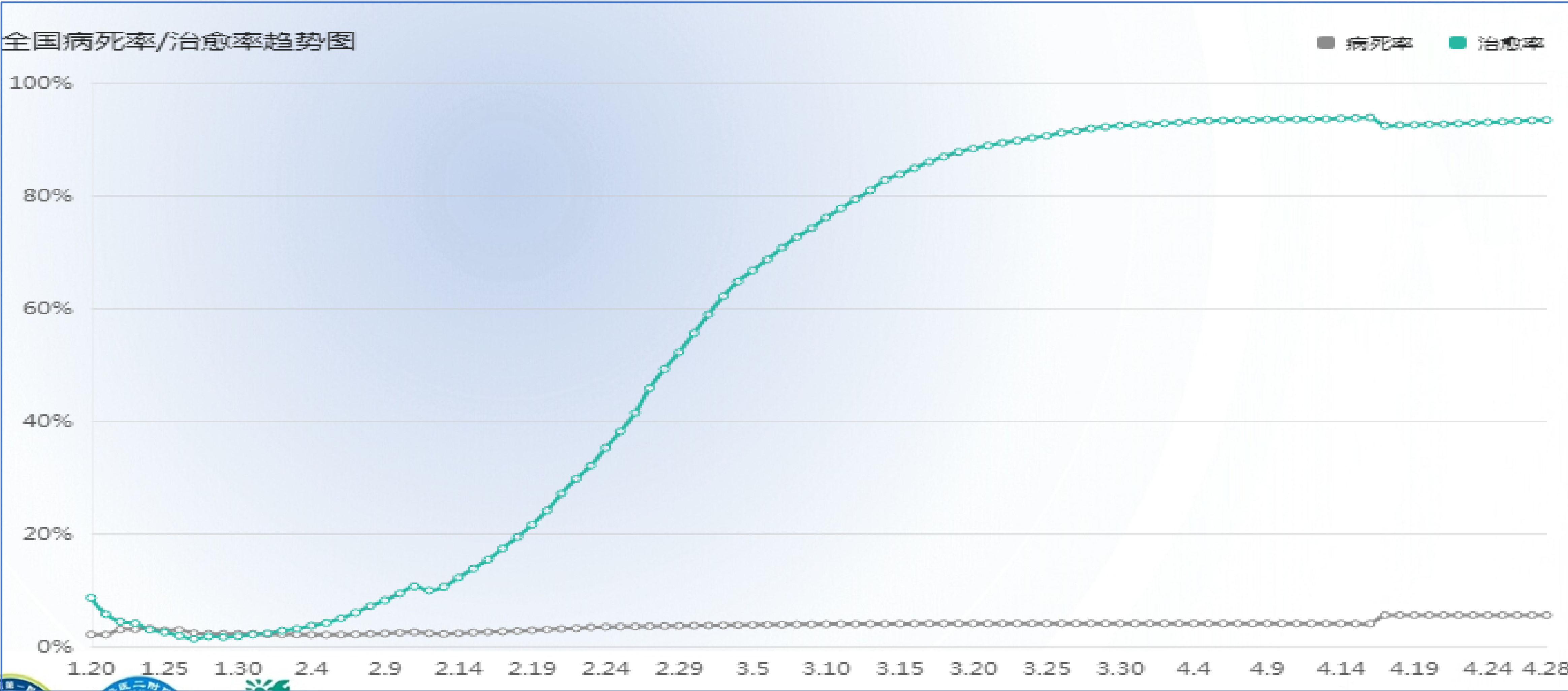
截止日期: 2020-4-29 21:32 来源: 凤凰网

Deadline: 2020-4-29 21:32 Source: Phoenix Network



中国疫情病死率、治愈率趋势图

Trend of Mortality and Cure Rate of Epidemic in China



Cured

Death

截止日期: 2020-4-29 21:32 来源: 凤凰网

Deadline: 2020-4-29 21:32 Source: Phoenix Network

全国援鄂医疗队42600医护人员零感染

42600 medical staff of medical teams in Hubei

海南省医护人员零感染

Zero Infection!

health care workers in Hainan Province

一级防护：适用于发热门诊、门诊与急诊，工作服、隔离衣、外科口罩、工作帽、必要时乳胶手套

Level I protection: suitable for fever clinic, outpatient and emergency, overalls, isolation clothes, surgical masks, work caps, add latex gloves if necessary.

二级防护：疑似和确诊患者的留观病区与隔离病房，防护口罩、工作服、防护服、工作帽、鞋套、手套

Level II protection: suspected and confirmed patients in the ward and isolation ward, protective masks, work clothes, protective clothing, work hats, shoe covers, gloves.

三级防护：适合有引发气溶胶操作的医务人员，二级防护条件下加全面性呼吸面罩

Level III protection: suitable for medical staff with aerosol operation, add comprehensive breathing mask under secondary protection conditions.



Training



培训

Level II



二级防护

Level III



三级防护

中国疫情大事件时间轴

Timeline of Major Epidemic Events in China

中国疫情大事件

病例数

300

250

200

150

100

50

0

现存确诊人数

累计确诊人数

01月20日

数据源：卫健委·本图表由急救与创伤研究教育部重点实验室制作



国内现状
Current Situation in China
初步工作
Preliminary Work
经验分享
Experience Sharing



ECMO的使用

Use of ECMO (Extracorporeal Membrane Oxygenation)



正在进行ECMO（体外膜肺氧合）手术。图片来源：南国都市报



新冠肺炎患者的尸检

Autopsy of Confirmed Patients of COVID-19



Our province completes the first anatomy of dead case of COVID-19 patient

新冠肺炎患者数据库的建立

Establish the Database of COVID-19 Patients

Table 1 Demographic and Clinical Characteristics of Patients Infected with Coronavirus Disease 2019 in Hainan Province

Characteristics	All patients (N=168)	Non-severe (N=132)	Severe (N=36)	<i>P</i>
Age				
Median (IQR)-yrs	51 (36-62)	49 (34-60)	61 (50.3-68)	0.002
Distributions - no. (%)				0.009
0-17 yr	8 (4.8)	8 (6.1)	0 (0)	
18-49 yr	68 (40.5)	60 (45.5)	8 (22.2)	
50-64 yr	59 (35.1)	43 (32.6)	16 (44.4)	
≥65 yr	33 (19.6)	21 (15.9)	12 (33.3)	
Sex - no. (%)				0.17
Male	81 (48.2)	60 (45.5)	21 (58.3)	
Female	87 (51.8)	72 (54.5)	15 (41.7)	
Job - no. (%)				0.01
Retired	56 (33.3)	37 (28)	19 (52.8)	
Medical staff	1 (0.6)	0 (0)	1 (2.8)	
Worker/Farmer	23 (13.7)	21 (15.9)	2 (5.6)	
Service staff	37 (22)	33 (25)	4 (11.1)	
Others	51 (30.4)	41 (31.1)	10 (27.8)	
Sources of cases - no. (%)				0.87
Imported	129 (76.8)	101 (76.5)	28 (77.8)	
Local	39 (23.2)	31 (23.5)	8 (21.9)	

国家紧急医学救援队

National Emergency Medical Rescue Team



国内现状
Current Situation in China
初步工作
Preliminary Work
经验分享
Experience Sharing



经验分享1：点线面救治网络

Form a "point, line and surface" treatment network

点：以确诊为中心的疫点

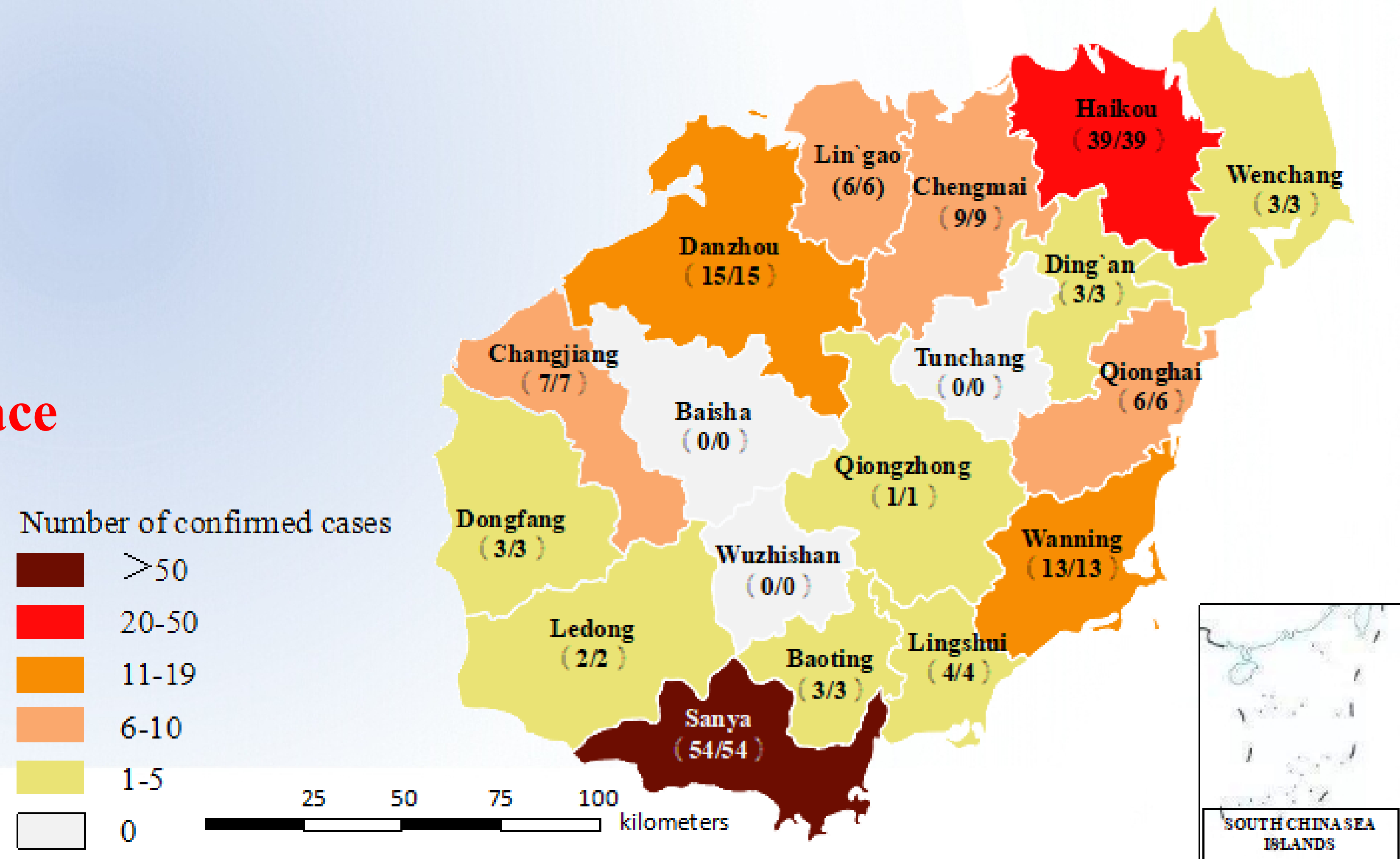
Take the diagnosed patients as the **point**

线：患者的传播链

the route of transmission as the **line**

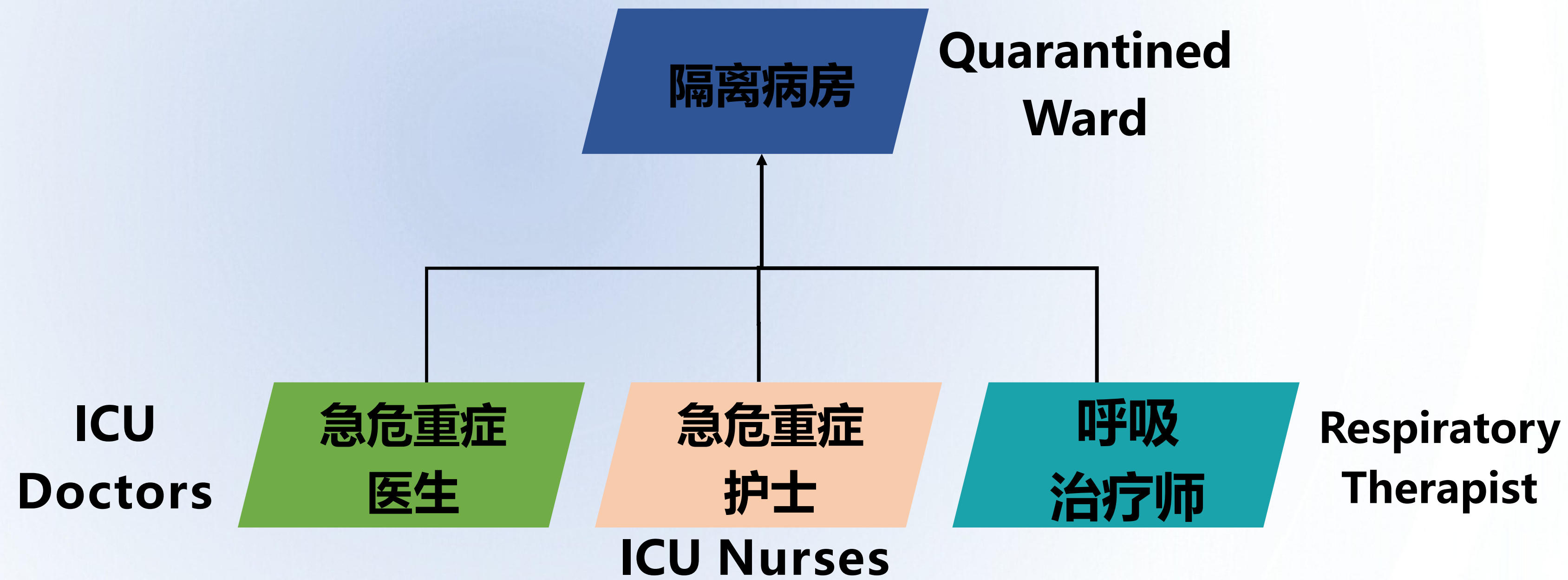
面：社会面

the whole community and society as the **surface**



经验分享2：三个进入

Three In



急危重症医生、急危重症护士、呼吸治疗师进入隔离病房。

ICU doctors, ICU nurses, and respiratory therapists jointly entered the isolation ward.

经验分享3：三个分开

"Three Separation" Protocol



经验分享4：四个集中

Four Centralizations



四个集中：集中患者、集中专家、集中资源和集中救治。

经验分享5：五早

Five Earlier



经验分享6：五类人群管理

做好确诊患者、疑似患者、密切接触者、发热患者和易感人群五类患者管理，进行物理隔离，分级救治。



concerning the management of five types of patients, including confirmed cases, suspected cases, close contacts, fever patients and susceptible people, physical isolation and hierarchical treatment shall be carried out.

Five Gruops of Patients Management

经验分享7：五个结合

"Five Combinations" Protocol



the combination of **traditional Chinese & Western medicine**

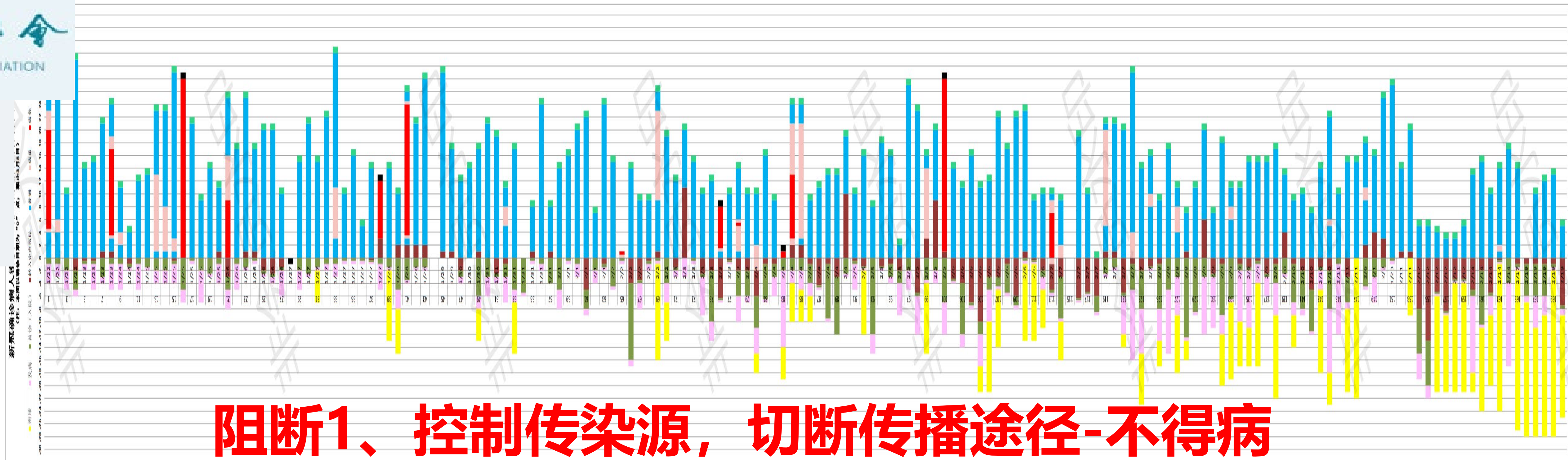
the combination of **basic medicine & clinical practice**

the combination of **front-end treatment & rear multi-disciplinary support**

the combination of **medical treatment & nursing**

the combination of **medical treatment & management**

总结 Summary



阻断1、控制传染源，切断传播途径-不得病

Block 1: Control of infectious diseases, Cut off transmission routes (illness)

阻断2、早期干预、治疗-轻症不转换为重症

Block 2: early intervention, prevent severe from lightness illness

阻断3、集中医疗资源，降低重症患者病死率

Block 3: Concentrate medical resources, reduce mortality in severe cases



感谢您的关注!



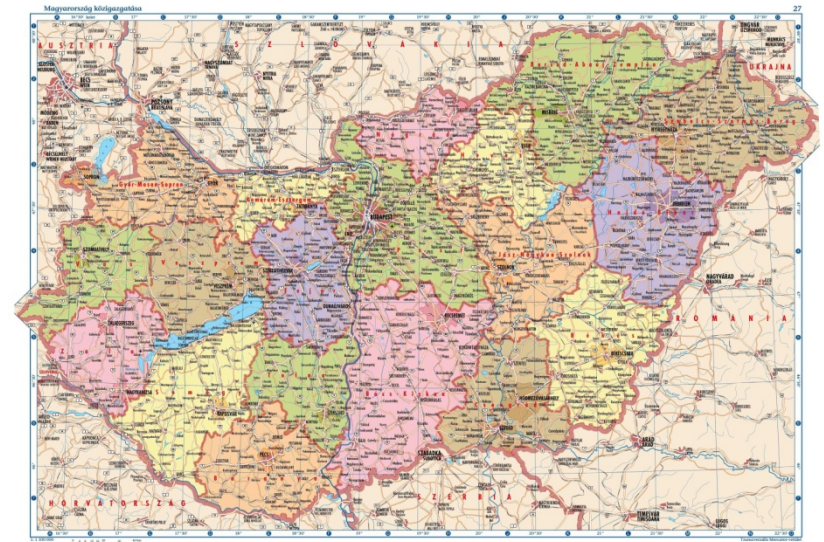
GOOD LUCK

EUSEM COVID-19 Webinar, 3rd Edition

30/04/2020

Countries' first report - Hungary

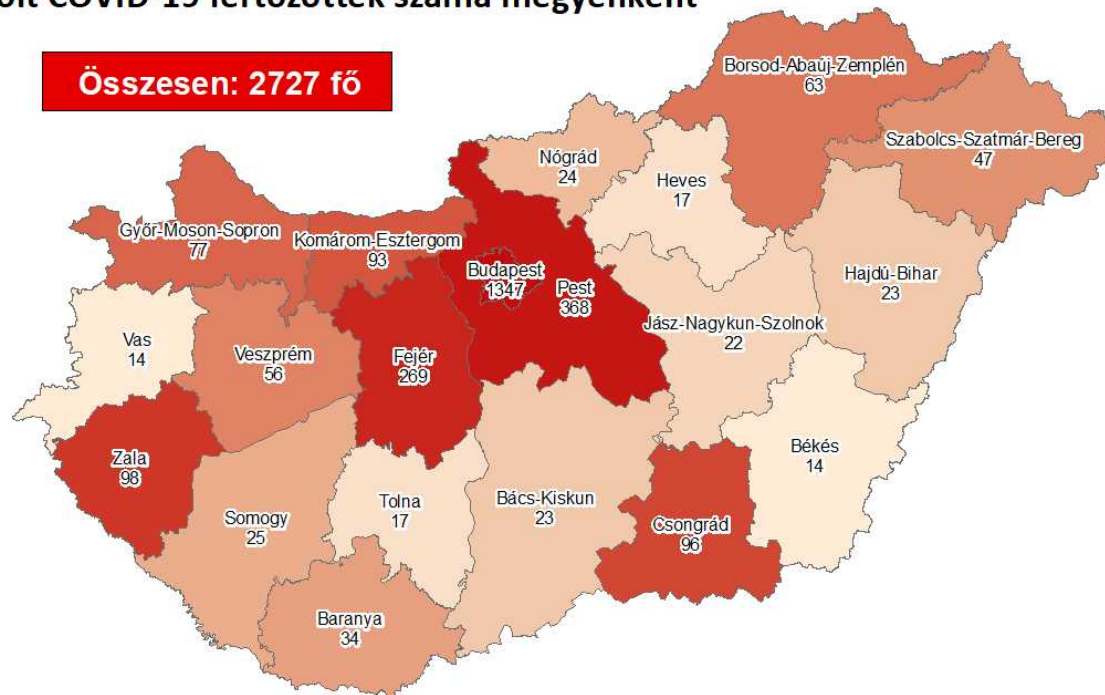
1. Total population: 9 692 675
2. Ca. 2 million in Budapest



Countries' first report - Hungary

1. Total population: 9 692 675
2. Ca. 2 million in Budapest

Igazolt COVID-19 fertőzöttek száma megyénként



Countries' first report - Hungary

1. First verified positive case: 03/02
2. First death: 03/15 (76 ys, female)

Countries' first report - Hungary

1. Pandemic situation declared:

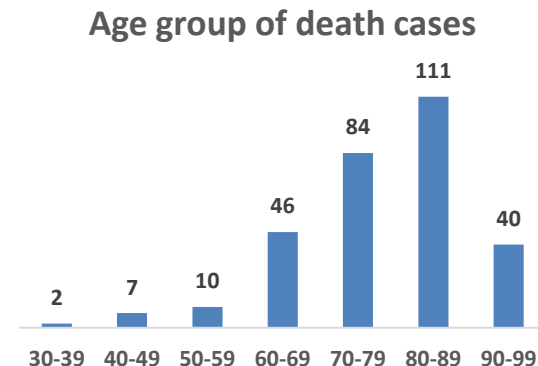
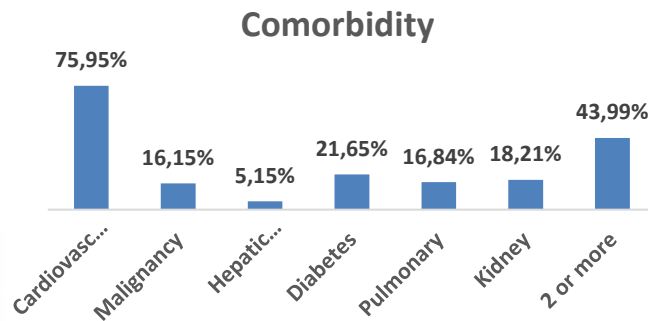
- a) Schools, restaurants, public events – 03/13
- b) ‚Stay at home’ order – 03/28

2. Performed COVID-tests:

- a) 70300 in laboratories accredited by National Public Health Centre
- b) Ca. 30000 in four Hungarian medical schools

Countries' first report - Hungary

1. 2727 verified cases – 30 % health care providers
2. 10071 cases in home quarantine, ordered by the National Public Health Center
3. 536 recovered cases
4. 300 deaths



Countries' first report - Hungary

1. Prehospital care

- a) Dedicated ,green phone number'
 - b) Pre-triage via phone by GPs
 - ii. Sending an EMS unit to take a swab
 - c) Universal emergency number: 112
 - ii. Seven regional dispatch centers
 - iii. 150-200 COVID susp. cases / day
 - iv. 2600-2700 cases / day vs. 3000 cases / day
- (Source: National Ambulance Service)

Countries' first report - Hungary

1. The actual situation in the ED.

- a) Nation-wide unified triage system (based on CTAS)
- b) After the checklist:
- c) ‚Red Zone’ vs ‚Green Zone’



Photo: Andras Jori, Hungarian Red Cross

Countries' first report - Hungary

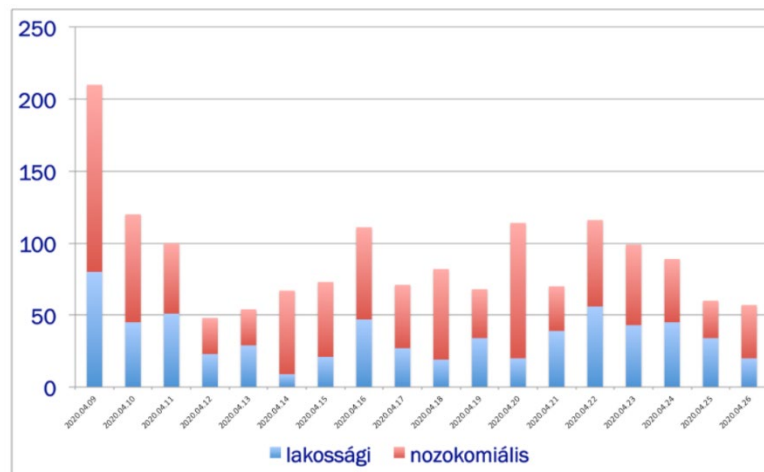
1. Modus operandi (actual):
2. Type of test: PCR
 - a) Acute symptoms of UAI AND abroad in the previous 14 days
 - b) Acute symptoms of UAI AND closely contacted with verified / suspected COVID pos. person
 - c) Severe acute UAI and hospital admission is required.

Countries' first report - Hungary

1. Modus operandi (planned):
2. Type of test: PCR and serological sampling
 - a) H-UNCOVER: HUNgarian COronaVirus disease-19 Epidemiological Research
 - a) 4 Hungarian medical schools, Central Statistical Office, Ministry of Innovation and Technology
 - b) Ca. 18000 people's country-wide representative sampling
 - c) Repeating at least twice during the pandemic period with 1 month apart

Countries' first report - Hungary

1. Majority of cases are nosocomial infections.
2. The most affected places are nursing homes
 - a) At least 50 percent of cases



Source: Semmelweis University

Countries' first report - Hungary

1. Information from other countries:
 - a) Following international literature
 - b) Sharing information and experiences via social media



WEBINAR COVID-19:
Sharing experiences of high COVID-19 impact countries.

Name: José Luis Ruiz
Position: SEMES Council
Country: Spain



Sociedad Española de
Medicina de Urgencias
y Emergencias

Countries in deescalate phase (France, Spain, Italy, Turkey)

1. Actual figures of the epidemic

 GOBIERNO DE ESPAÑA MINISTERIO DE SANIDAD MINISTERIO DE CIENCIA E INNOVACIÓN	
TOTAL CASES (PCR +)	212.917
Last 24h Cases (PCR +)	2.144
Recovery	108.947
Deaths	24.275

Countries in deescalate phase (France, Spain, Italy, Turkey)

1. Actual figures of the epidemic



TOTAL CASES (PCR +)	212.917
Last 24h Cases (PCR +)	2.144
Recovery	108.947
Deaths	24.275

Casos por CCAA (PCR+)

CCAA	Total	Ult.24h	Inc.14d
Andalucía	12004	91	18.75
Aragón	5042	38	53.36
Principado de Asturias	2266	11	25.32
Islas Baleares	1879	9	23.75
Canarias	2202	15	10.54
Cantabria	2146	31	72.97
Castilla y León	16690	101	165.45
Castilla La Mancha	15785	79	154.56
Cataluña	48654	496	158.29
Galicia	9466	138	65.12
C. Valenciana	10236	32	20.88
Extremadura	2764	13	28.28
Comunidad de Madrid	60765	981	168.67
Región de Murcia	1480	5	9.04
Comunidad Foral de Navarra	4794	35	115.41
País Vasco	12619	55	97.07
La Rioja	3910	13	142.99
Ceuta	101	1	12.98
Melilla	114	0	13.87

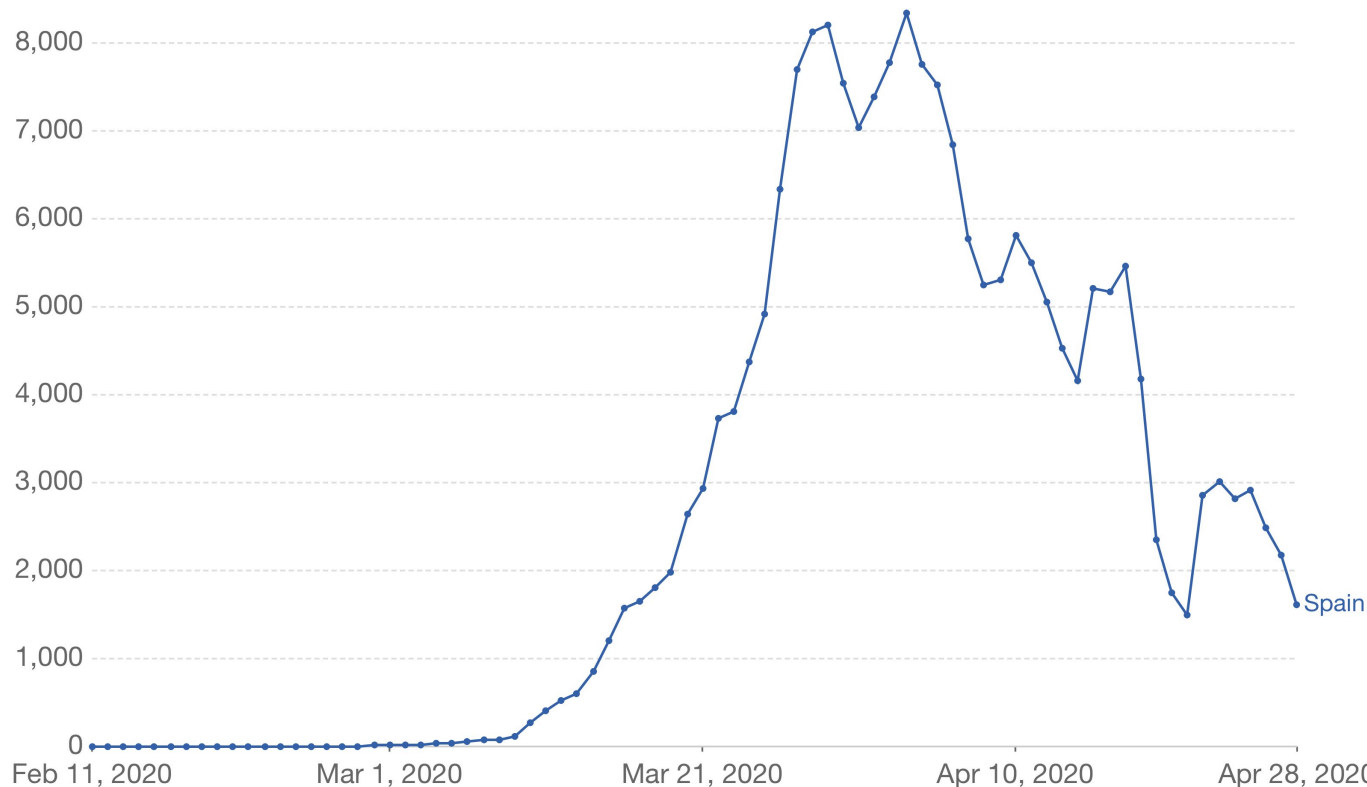
Countries in deescalate phase (France, Spain, Italy, Turkey)

1. Actual figures of the epidemic

Daily confirmed COVID-19 cases, rolling 3-day average

The number of confirmed cases is lower than the number of total cases. The main reason for this is limited testing.

Our World
in Data



Source: European CDC – Situation Update Worldwide – Last updated 29th April, 11:30 (London time) [OurWorldInData.org/coronavirus](https://www.ourworldindata.org/coronavirus) • CC BY

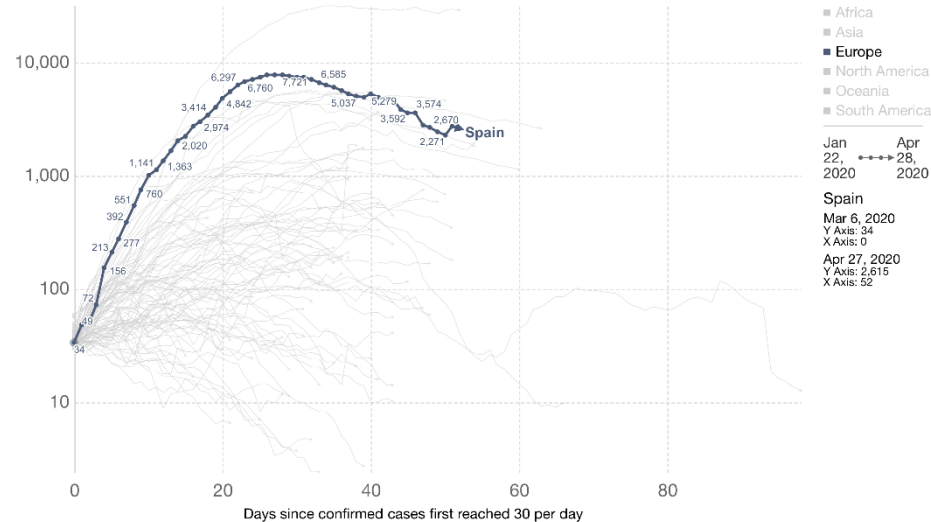
Note: The rolling average is the average across three days – the confirmed cases on the particular date, and the previous two days. For example, the value for 27th March is the average over the 25th, 26th and 27th March.

Countries in deescalate phase (France, Spain, Italy, Turkey)

1. Actual figures of the epidemic

Daily confirmed COVID-19 cases: are we bending the curve?

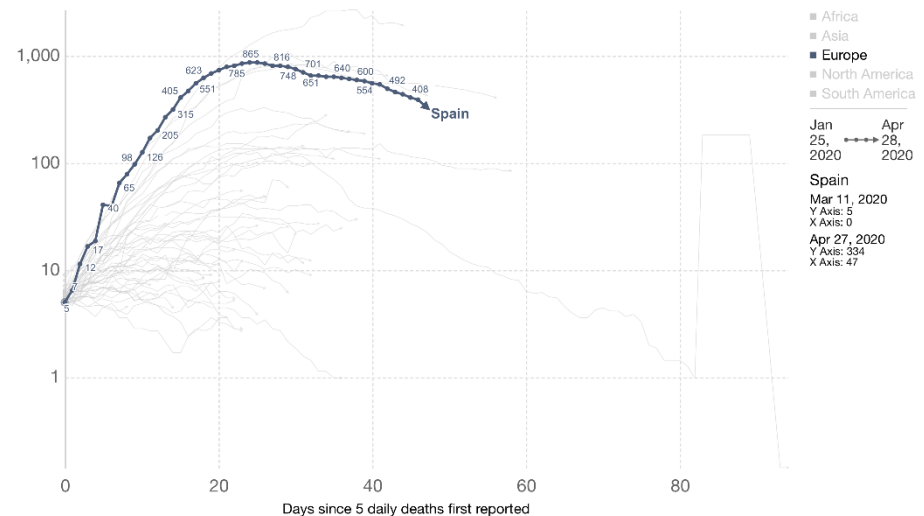
Because not everyone is tested the total number of cases is not known. Shown is the 7-day rolling average of confirmed cases.



Source: European CDC – Situation Update Worldwide – Last updated 28th April, 11:30 (London time) OurWorldInData.org/coronavirus • CC BY

Daily confirmed COVID-19 deaths: are we bending the curve?

Shown is the 7-day rolling average. Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.



Source: European CDC – Situation Update Worldwide – Last updated 28th April, 11:30 (London time) OurWorldInData.org/coronavirus • CC BY

Countries in deescalate phase (France, Spain, Italy, Turkey)

2. ICU situation

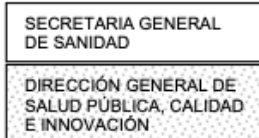
Number of UCI beds in Spain:

Public Hospitals: 4.627

Private Hospital: 1.172

Number of CoVID-19 Patients Admitted to UCI: 10.721

Countries in deescalate phase (France, Spain, Italy, Turkey)



**Centro de Coordinación de
Alertas y Emergencias
Sanitarias**

Tabla 2. Casos de COVID-19 que han precisado hospitalización, ingreso en UCI, fallecidos y curados por Comunidades Autónomas en España, 29.04.2020 (datos consolidados a las 21:00 horas del 28.04.2020).

CCAA	Casos que han precisado hospitalización		Casos que han ingresado en UCI		Fallecidos		Curados	
	Total	Nuevos	Total	Nuevos	Total	Nuevos	Total	Nuevos
Andalucía	5.832	39	722	1	1.188	20	5.272	233
Aragón	2.454	29	258	0	736	1	2.189	108
Asturias	1.886	43	137	0	266	5	809	29
Baleares	1.079	5	166	0	185	4	1.196	30
Canarias	906	6	176	2	134	1	1.107	32
Cantabria	1.006	6	79	1	191	3	1.372	82
Castilla La Mancha	8.523	59	588	4	2.436	40	5.382	76
Castilla y León	7.854	77	524	2	1.736	26	6.448	125
Cataluña	26.546	316	2.768	18	4.905	97	19.060	741
Ceuta	10	0	4	0	4	0	114	4
C. Valenciana	5.072	26	662	3	1.218	18	6.599	176
Extremadura	1.526	21	108	0	440	7	1.797	64
Galicia [†]	2.736		308		547	7	5.393	3.552
Madrid	39.850	216	3.355	17	8.105	57	36.314	473
Melilla	44	0	3	0	2	0	95	3
Murcia	635	6	106	0	130	0	1.153	40
Navarra	1.951	6	130	0	448	16	2.082	104
País Vasco	6.522	40	540	1	1.274	19	10.474	500
La Rioja	1.413	13	87	0	330	4	2.091	27
ESPAÑA	115.845	908	10.721	49	24.275	325	108.947	6.399



Los casos confirmados no provienen de la suma de pacientes hospitalizados, curados y fallecidos, ya que no son excluyentes. Pacientes fallecidos y curados pueden haber precisado hospitalización y por tanto computar en ambos grupos. Los pacientes que han precisado UCI también computan en los pacientes que han requerido hospitalización.

[†] Galicia ha notificado desde hoy los casos acumulados de UCI y ha validado los casos que han requerido hospitalización hasta la fecha (resultando en un valor menor al previamente notificado) por lo que no se han podido calcular los casos nuevos e incrementos correspondientes. Además de los 7 nuevos fallecidos de hoy, ha notificado otras 128 defunciones correspondientes a centros sociosanitarios que no corresponden a defunciones actuales y por tanto no se reflejan en la columna "Nuevos fallecidos" pero se han incluido en el total. También ha consolidado datos de altas domiciliarias lo que explica el gran incremento de los curados.

Countries in deescalate phase (France, Spain, Italy, Turkey)

3. Indicators consider for deescalating:

- Reproductive Number R : has to be under 1
- 50% UCI beds free
- Possibility to practice de PCR test to any symptomatic patient

Countries in deescalate phase (France, Spain, Italy, Turkey)

3. Other Indicators:

- **General indicators (daily)**

- Number of cases with symptoms compatible with covid-19 (information from primary care, attention telephones, Apps, etc.).
- Number of laboratory confirmed cases. –
 - Number of non-hospitalized cases
 - Number of hospitalized cases
 - Number of cases admitted to the ICU
 - Number of deceased cases
 - Number of cases and deaths in nursing homes
 - Number of cases in health and socio-health professionals
- Number of PCRs performed and results.

Countries in deescalate phase (France, Spain, Italy, Turkey)

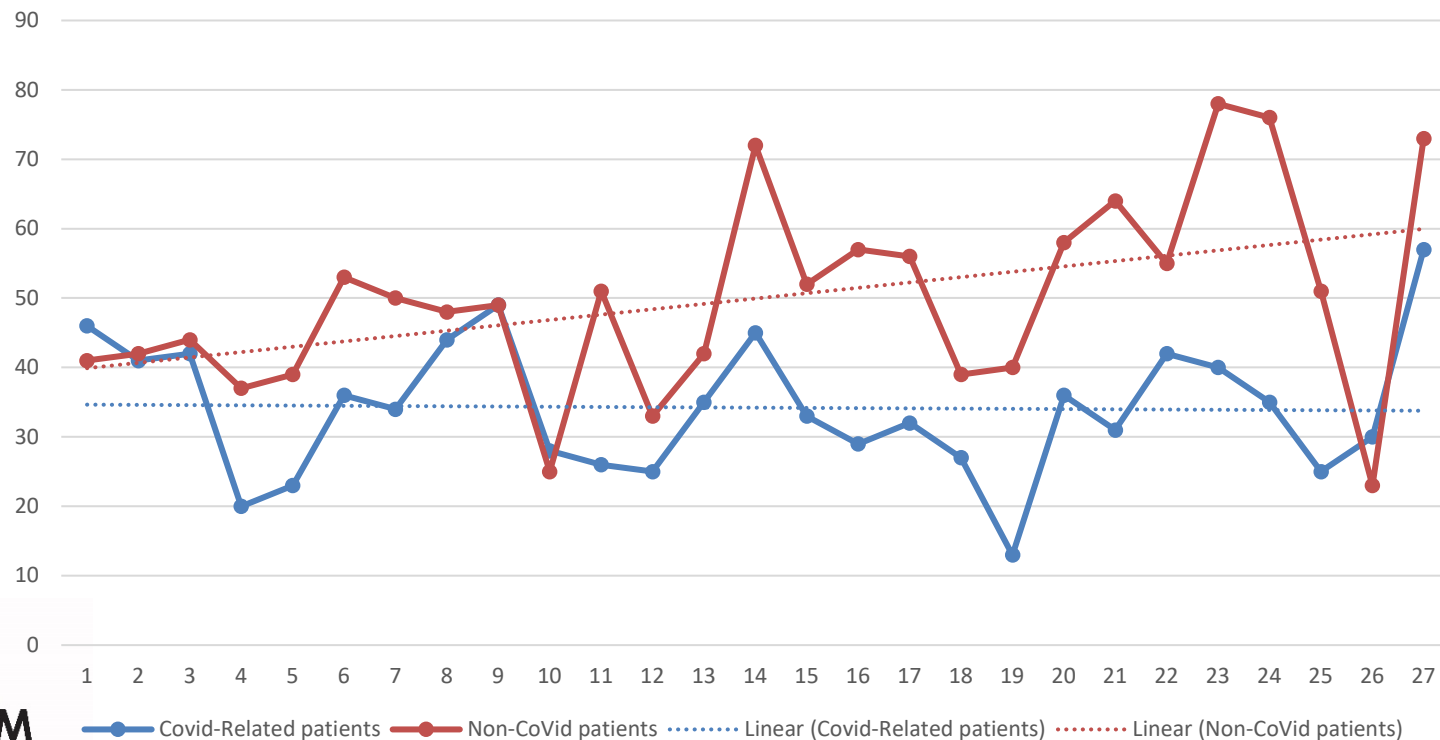
4. Plans for Cancellation of the ED Tracks or Triage of Covid patients.
 - Most Hospital Emergency departments will maintain the double track for several months.
 - Most of the Out of Hospital Emergency Services, maintain PPE, although the COVID-19 pathologies demand is decreasing

Countries in deescalate phase (France, Spain, Italy, Turkey)

5. Regular ED visits

In my Hospital the Covid demand is decreasing and the Non-Covid demand is increasing, as in most Emergency Departments.

Hospital de La Ribera, Alzira, Spain
April 2020.



COVID 19 Portugal report

EUSEM



COVID 19 Portugal report; EUSEM

General Data

- DEMOGRAPHICS

Population: 10,276,617

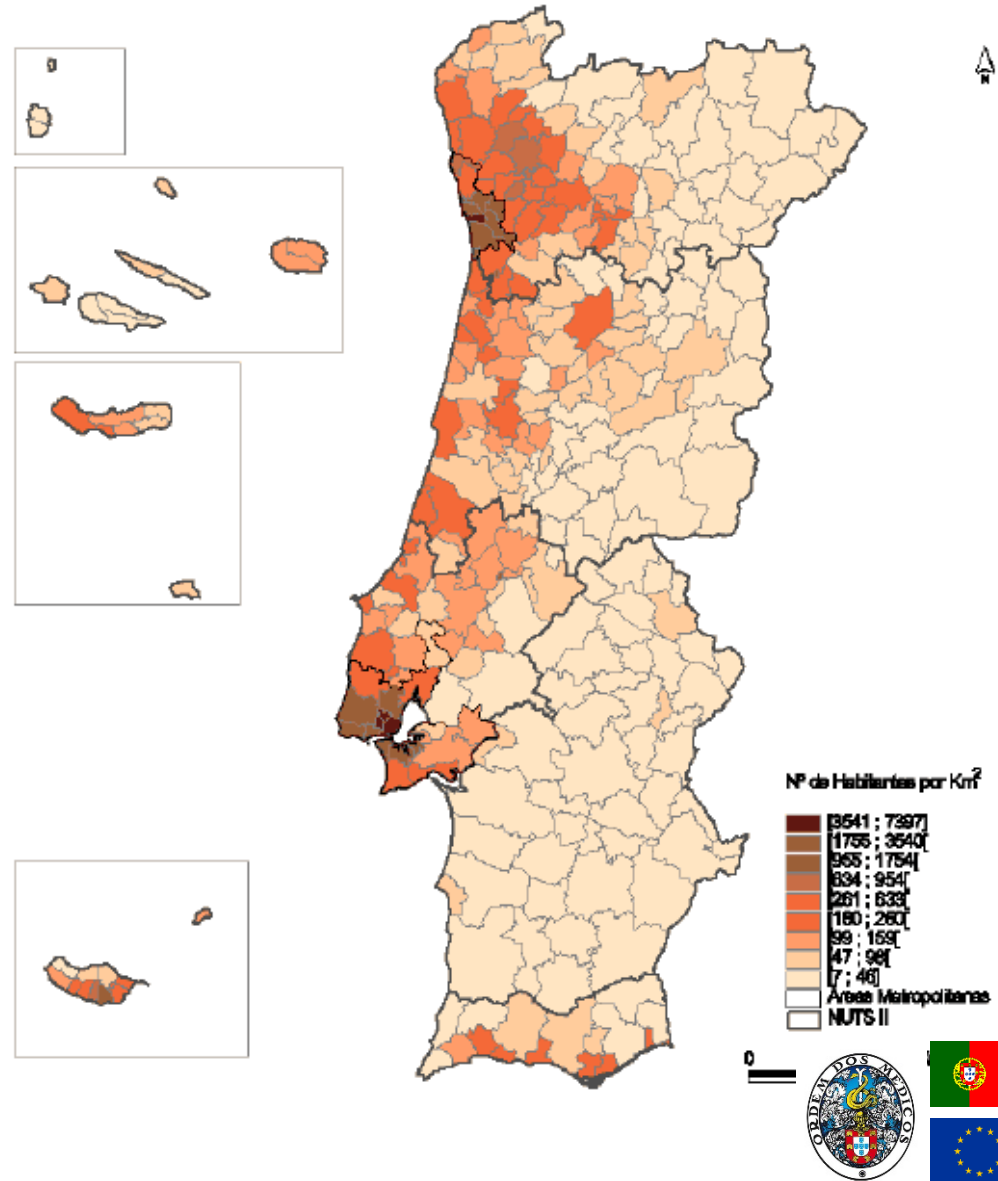
Spain: 46 million

- AREA

92,212 k m²

Spain: 505,990 km²

x 5



COVID 19 Portugal report; EUSEM General Data; Health System; SNS (NHS)

Portugal ranks 12th ahead of other countries like the [United Kingdom](#), [Germany](#) or [Sweden](#). The SNS provides universal coverage. 3 coexisting systems:

- National Health Service (*Serviço Nacional de Saúde, SNS*)
- special social health insurance schemes for certain professions (health subsystems) and
- voluntary private health insurance.

COVID 19 Portugal report; EUSEM General Data; Health System; SNS (NHS)


In addition, about 25% of the population is covered by the health subsystems, 10% by private insurance schemes and another 7% by mutual funds.

- Life expectancy 82 years

COVID 19 Portugal report; EUSEM General Data; Health System; SNS (NHS)

DGS: General Health Directorate

INSA: National Health Institute

COVID-19		 REPÚBLICA PORTUGUESA SAÚDE	 SNS SISTEMA NACIONAL DE SAÚDE	 DGS Direção-Geral da Saúde
		NORMA		
NÚMERO:	010/2020	 Digitally signed by Maria da Graça Gregório de Freitas DN: c=PT, o=Direção-Geral da Saúde, cn=Maria da Graça Gregório de Freitas Date: 2020.04.16 07:58:35 +01'00'		
DATA:	15/04/2020			
ASSUNTO:	COVID-19: FASE DE MITIGAÇÃO Abordagem de Assintomático com Teste Laboratorial Positivo			
PALAVRAS-CHAVE:	COVID-19; Coronavírus; SARS-CoV-2; Caso confirmado assintomático			
PARA:	Profissionais do Sistema de Saúde			
CONTACTOS:	normas@dgs.min-saude.pt			

COVID 19 Portugal report; EUSEM General Data; Health System; SNS (NHS)

DGS: General Health Directorate



Dispositivo de Saúde Pública

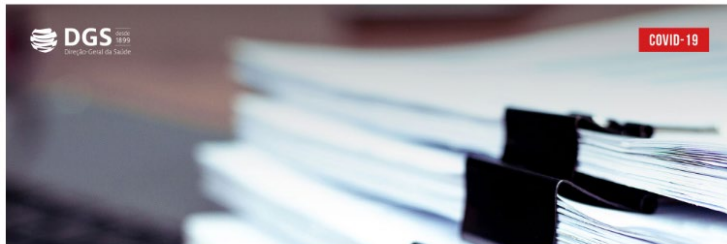
Perguntas Frequentes

Docum

< Voltar

Normas

Consulte as normas publicadas



Norma nº 004/2020 de 23/03/2020 atualizada a 25/04/2020 (NOVO)

COVID-19: FASE DE MITIGAÇÃO – Abordagem do Doente com Suspeita ou Infecção por SARS-CoV-2

Norma nº 011/2020 de 18/04/2020 (NOVO)

COVID-19: FASE DE MITIGAÇÃO – Saúde Mental

INSA: National Health Institute

Laboratórios Referenciados



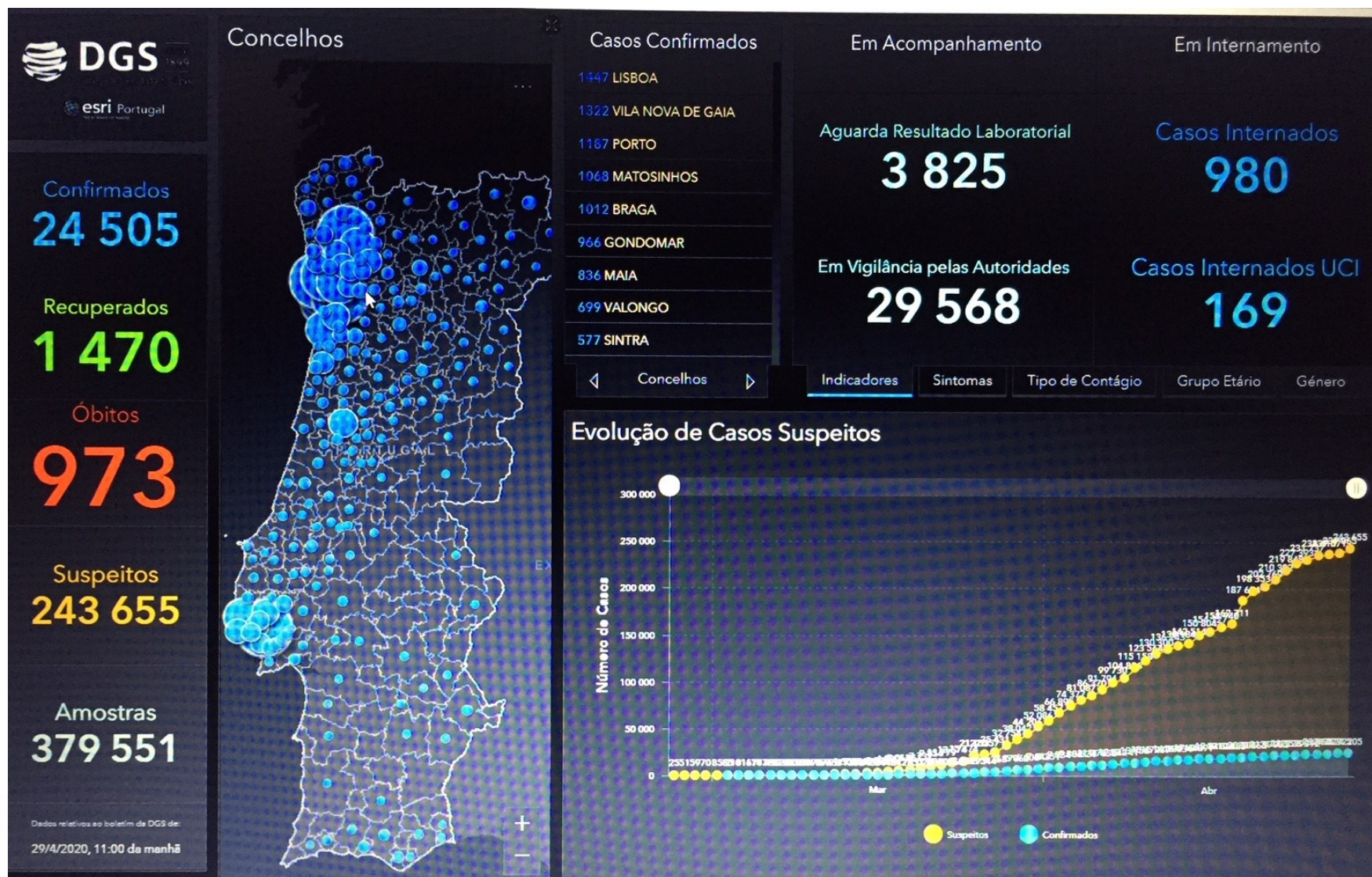
De acordo com a **Norma COVID-19: Fase de Mitigação** os laboratórios, e/ou outros serviços disponíveis para o efeito, garantem:

O doente ou seu representante, após receber a requisição do teste de COVID-19 deve:

- Contactar telefonicamente o laboratório onde pretende realizar o teste de COVID-19
- Agendar a realização do teste de COVID-19

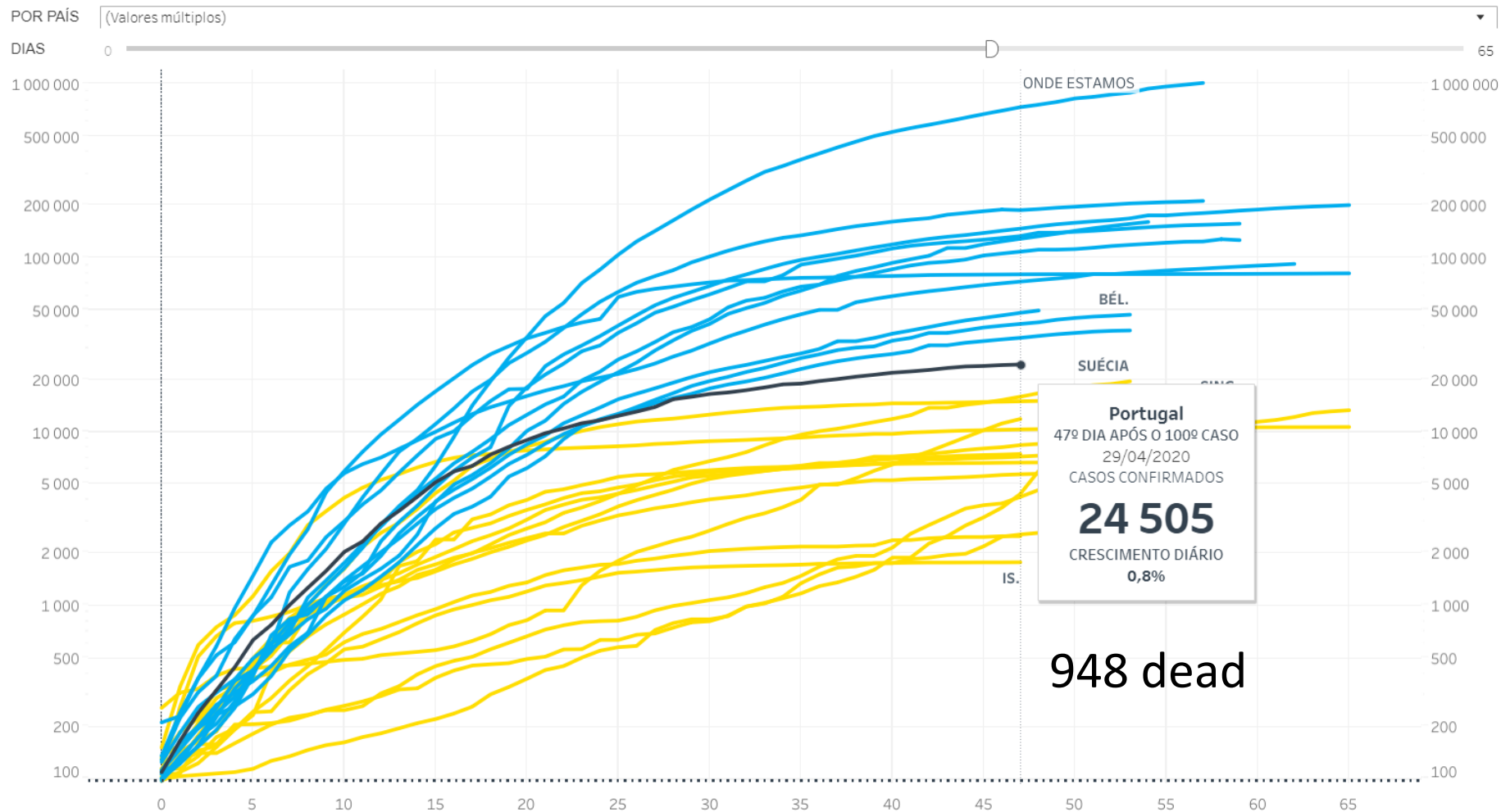
A colheita das amostras deve ser realizada no domicílio ou pontos de colheita destinados ao efeito conforme a **lista de laboratórios**.

COVID 19 Portugal report; EUSEM General Data; Health System; SNS (NHS)



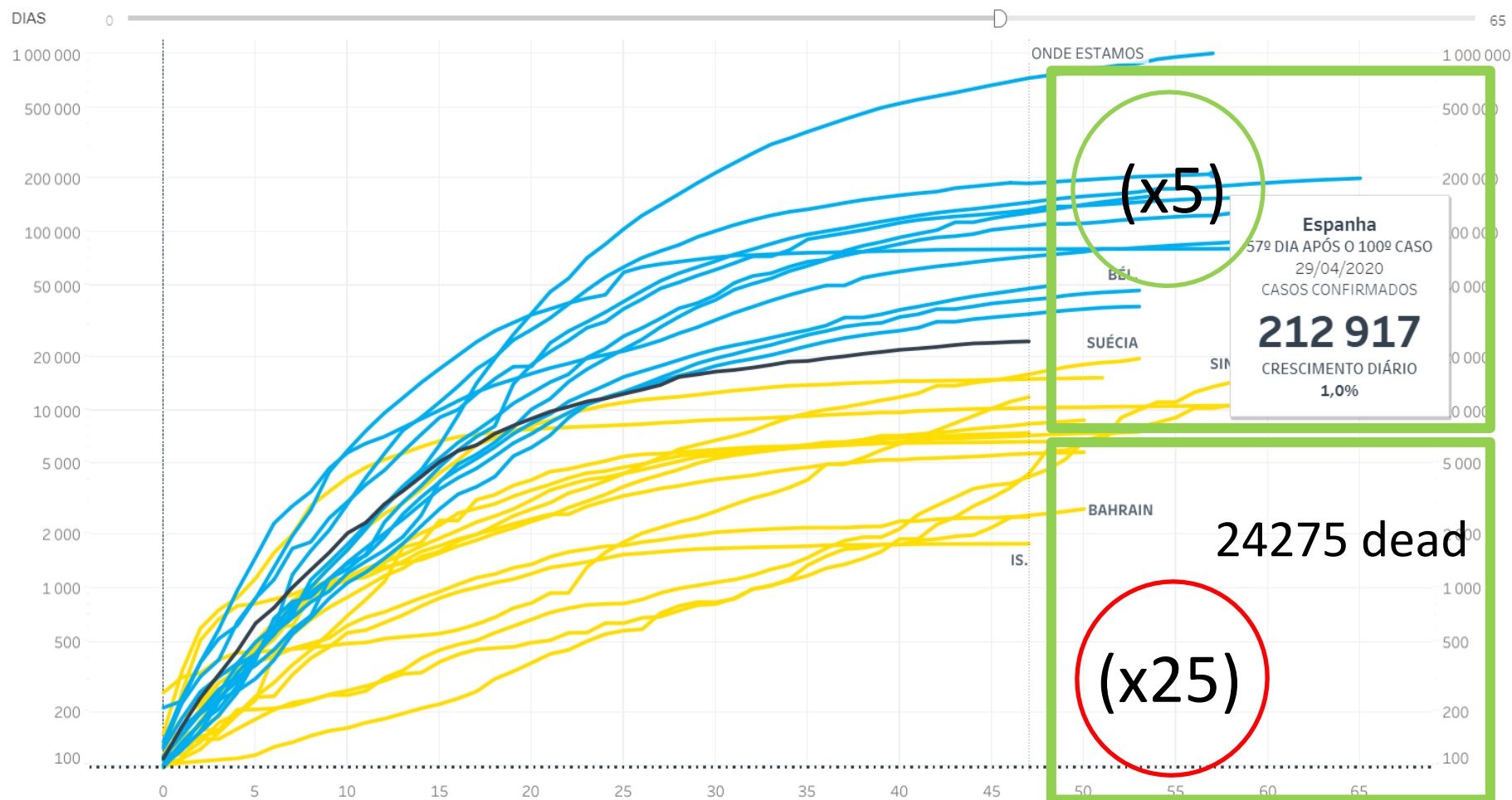
COVID 19 Portugal report; EUSEM

General Data; Health System; SNS (NHS)



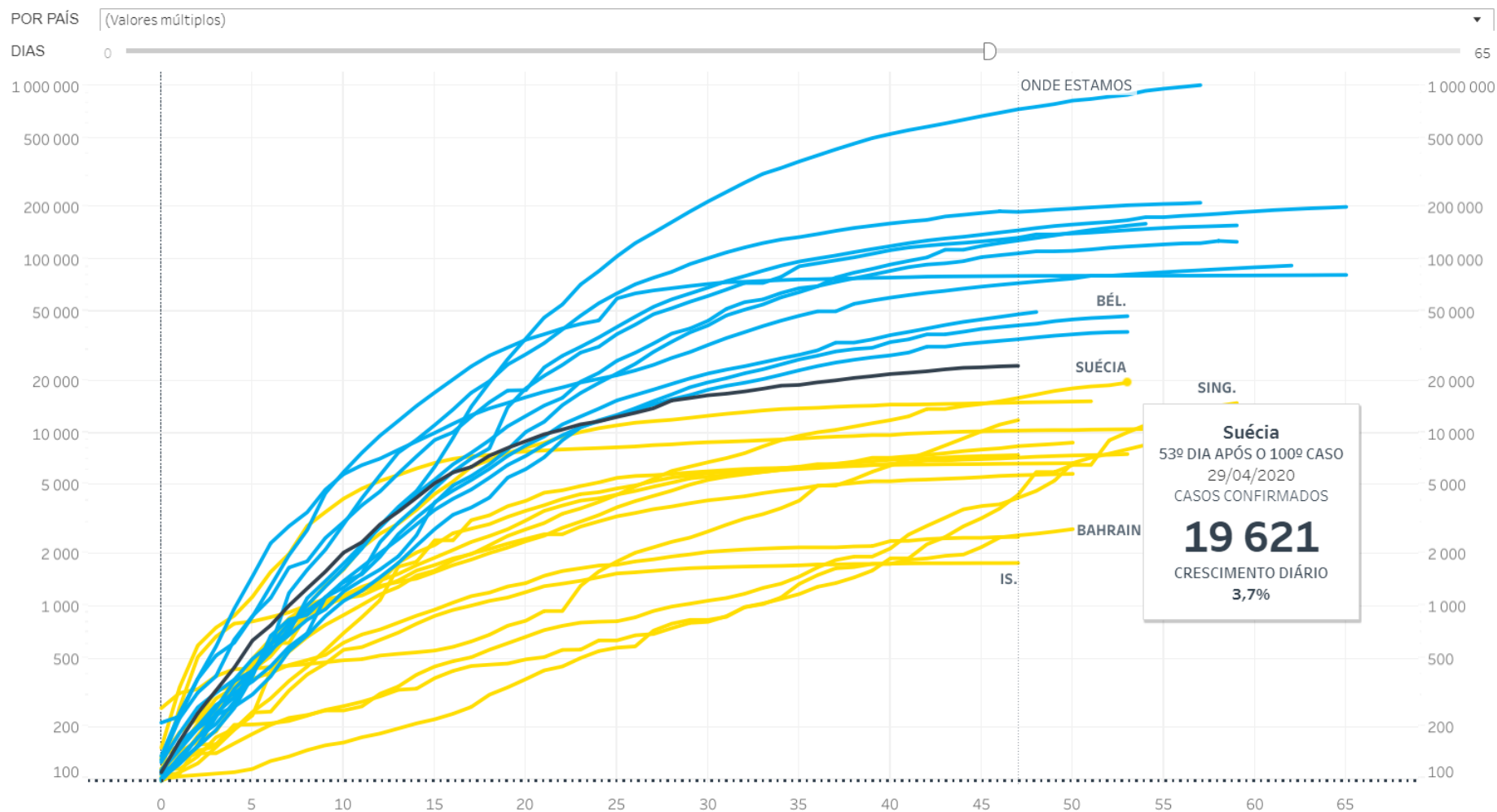
COVID 19 Portugal report; EUSEM

General Data; Health System; SNS (NHS)



COVID 19 Portugal report; EUSEM

General Data; Health System; SNS (NHS)

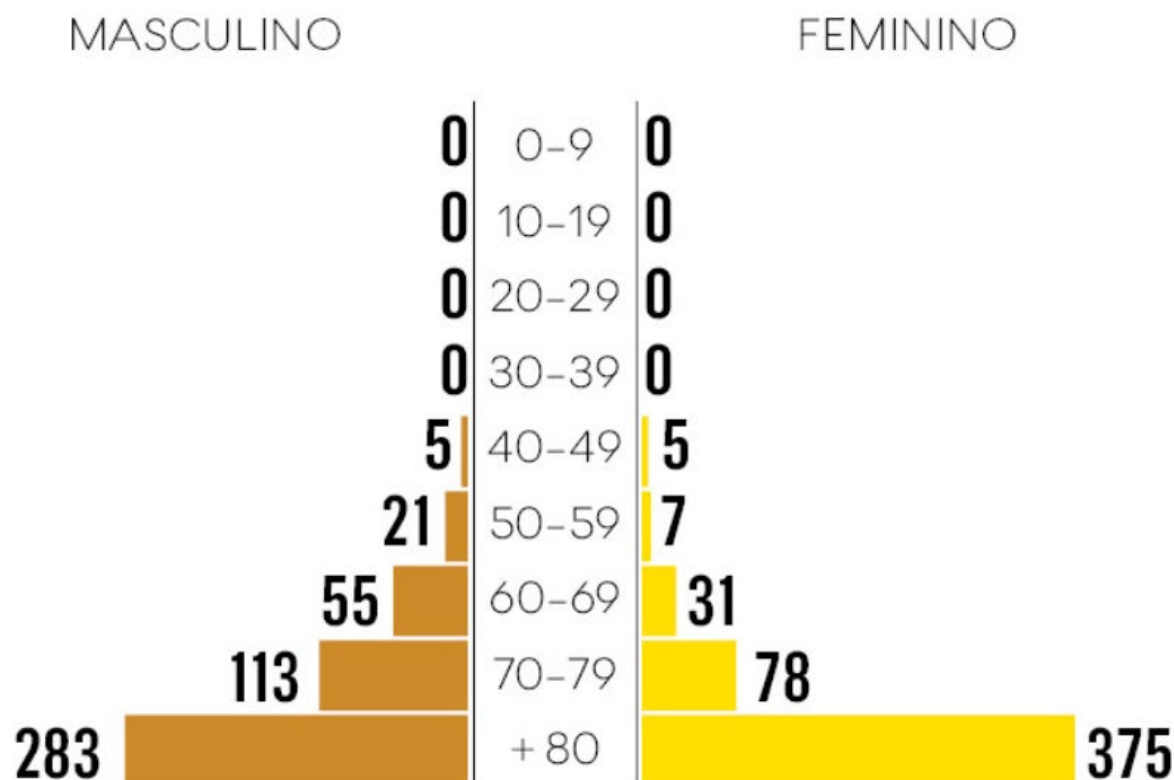


COVID 19 Portugal report; EUSEM

General Data; Health System; SNS (NHS)

MORTOS POR GRUPO ETÁRIO

Dados de 29 de abril



COVID 19 Portugal report; EUSEM Prehospital Dedicated phone line



SNS 24
808 24 24 24



SNS 24 CENTRO DE CONTACTO
SERVIÇO NACIONAL DE SAÚDE



Contacto acessível
Cidadão surdo



RSE
Área do Cidadão

[Temas da saúde](#)

[Serviços online](#)

[Guias da saúde](#)

[Alertas](#)

[Avaliar sintomas](#)

[O que é o SNS 24](#)

[Contacte-nos](#)

Sente-se doente?

Faça uma pré-análise do seu estado de saúde. Descreva os sintomas para uma orientação mais rápida e eficaz.

Avaliar Sintomas



Serviços Online do SNS

O Serviço Nacional de Saúde disponibiliza-lhe diversos serviços online.
Queremos estar mais próximos de si.

**Aceder ao Registo de Saúde
Eletrónico**



**Pedir comprovativo de contacto
com o SNS 24**



**Consultar certificado de
incapacidade temporária**



**Consultar comprovativo de
pagamento das taxas
moderadoras**



Marcar consultas



**Pedir isenção de taxa
moderadora**



Ver todos os serviços



COVID 19 Portugal report; EUSEM Prehospital Dispatch Centers

112
808 24 24 24



ÁREA RESERVADA



INEM INSTITUCIONAL SERVIÇOS TRANSPARÊNCIA



Presidente do INEM em entrevista ao Observador

O jornal Observador publicou no passado dia 24 de abril uma entrevista realizada ao Presidente do Conselho Diretivo do Instituto Nacional de Emergência Médica, Luis Meira. ➔

27-04-2020



Primeiro trimestre de 2020
com 327.662

intervenção de meios de
emergência



INEM disponibiliza
formação online sobre
COVID-19 a parceiros do
Sistema de Emergência
Médica ➔



INEM reforça Recursos
Humanos ➔

23-04-2020

COVID-19 | Recomendações para isolamento em LGP



COVID-19 | Recomendações INEM/DGS em LGP



COVID-19 | Ligue 112 só em caso de emergência

- **112 Calls drop from 4000 to 3500/day**
- **Prehospital adapting, national guidelines**
- **Prehospital teams do testing**
- **Interhospital Transfer**
- **HEMS limited**
- **Civil Defense (Red Cross and Fire Brigades cooperate)**

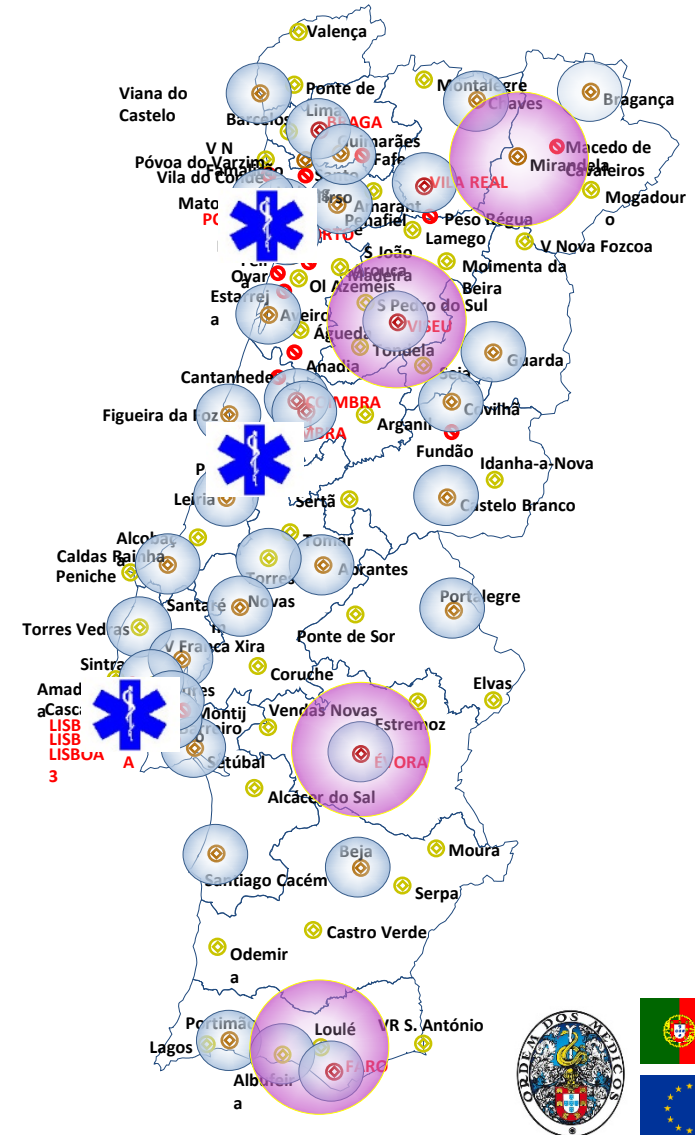
- **NON COVID !**

COVID 19 Portugal report; EUSEM

Prehospital

Dispatch Centers

- 112 Calls drop from 4000 to 3500/day
- Prehospital adapting, national guidelines
- Prehospital teams do testing
- Interhospital Transfer
- HEMS limited
- Civil Defense (Red Cross and Fire Brigades cooperate)



COVID 19 Portugal report; EUSEM

actual situation in the ED's, triage modification

ed management

SISTEMA DE TRIAGEM DE MANCHESTER

- 1 Necessitam de atendimento imediato.
CASOS DE EMERGÊNCIA
- 2 Necessitam de atendimento praticamente imediato.
CASOS MUITO URGENTES
- 3 Necessitam de atendimento rápido, mas podem aguardar.
CASOS DE URGÊNCIA
- 4 Podem aguardar atendimento ou serem encaminhados para outros serviços de saúde.
CASOS POUCO URGENTES
- 5 Podem aguardar atendimento ou serem encaminhados para outros serviços de saúde.
CASOS NÃO URGENTES



COVID 19 Portugal report; EUSEM

actual situation in the ED's, triage modification ed management

actual mitigation fase

- 1) pre-triage in the ambulance / suspect or not suspect
- 2) If patient arrives on his own: tent pretriage/CORIMEC, follows predetermined circuits
- 3) separate circuits
- 4) definition of suspected case (fever, cough, dyspnea)
- 5) emergency case / criteria for the emergency room
- 6) definition of clean zones
- 7) avoiding crossed circuits



COVID 19 Portugal report; EUSEM actual situation in the ED's, triage modification ed management

Problems:

- COVID19 asymptomatics
- every hospital on his own, national guidelines but transposing them often difficult
- trauma patients
- no specialty in EM : heterogeneous response levels
- non-COVID19 arrive in worse condition; less patients but more critical
- allocation of human resources
- internal medicine under massive pressure : who runs the NON-COVID ?
- limited testing capacity
- labour and childbirth, pediatrics



COVID 19 Portugal report; EUSEM actual situation in the ED's, triage modification ed management

Problems:

- training levels of physicians : are we prepared for this challenge ?
- disaster medicine planning
- Control and Command
- National planning lacks behind Chamber of Physician recommendations
- Lack of PPE limited initially response capacity and safety



COVID 19 Portugal report; EUSEM

role of nursing homes

National norms approved by the government:

Despacho n.º 4097-B/2020

Diário da República n.º 66/2020, 2º Suplemento, Série II de 2020-04-02,

Defines:

- chain of command
 - prevention measures
 - identification and testing
 - follow-UP
 - role of the several partners in the system
 - civil defense and local authorities
-
- Ministries of: health, internal affairs, defense, work and social affairs



COVID 19 Portugal report; EUSEM

role of nursing homes

Problems:

- regional differences
- High numbers of elderly population in nursing homes
- lack of Doctors / Nurses
- limited personnel and resources, reorganization of workload, infected professionals, doctors/nurses working in hospitals
- limited training of personnel
- limited testing capacity
- clusters
- government response differs from region to region: political influence and lobbying ?
- local response heterogeneous: local mayor as an important factor



COVID 19 Portugal report; EUSEM

Impact on the health professionals (hp's)

Infected:

Health professionals:

- Doctors: 276
- Nurses: 488
- No official data about EMT's
- Chamber of Physicians estimates 20% of the total number are HP's



COVID 19 Portugal report; EUSEM

Impact on the health professionals (hp's)

Impact:

- reduced manpower
- need to shift labour force
- maintain non-covid preparedness
- psychological impact
- resilience
- Command and Control readjustment
- justice
- human behaviour in crisis; leadership on test; team cohesion
- family and social network in confinement



COVID 19 Portugal report; EUSEM

Use of information of other countries

Macau, China

- Former Over-Seas territory
- Portuguese doctors early warnings via social networks
- Previous experience



COVID 19 Portugal report; EUSEM

Use of information of other countries

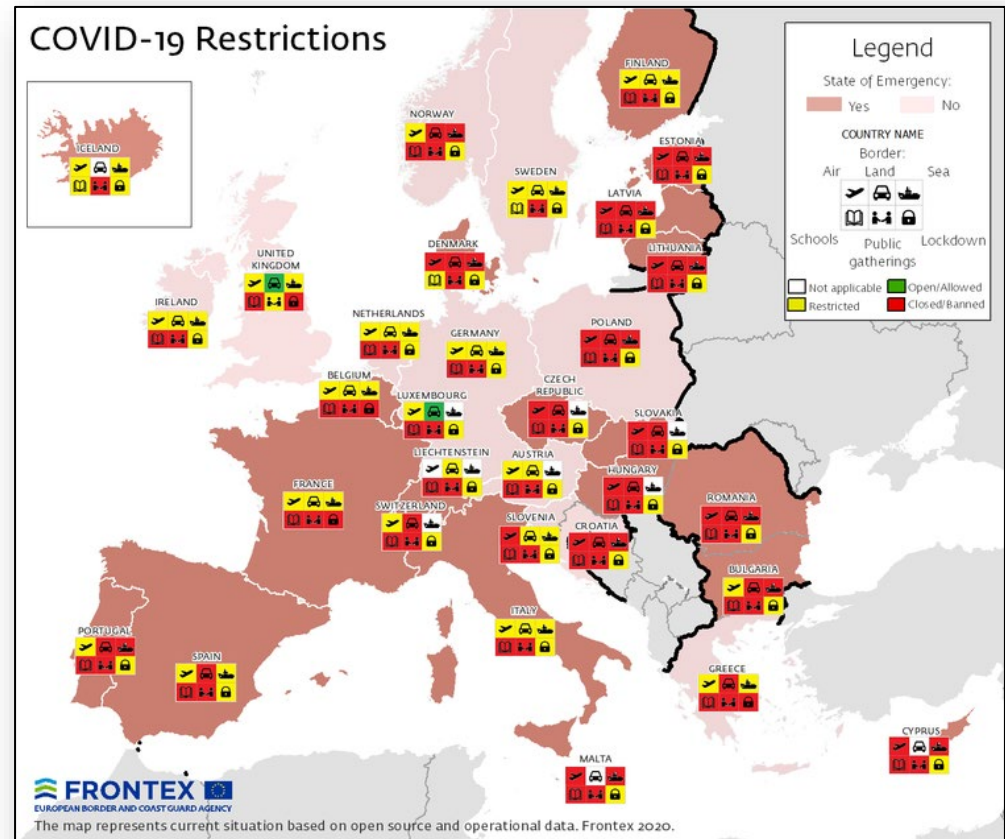
Madrid, Spain

- Spanish tragedy as warning
- Early closing of border and State of Emergency



COVID 19 Portugal report; EUSEM Balance

- state of emergency
- strict confinement in an early phase
- resilient public health system
- testing
- public and industry united to support the HP's



COVID 19 Portugal report; EUSEM

Balance

- historical / cultural behaviour: adapting and initiative in case of external menace, discipline and “militia response”.
- civilian / military cooperation
- national unity (opposition cooperates with government)
- reopening of society high risk

Caution !



COVID 19 Portugal report

EUSEM



dr. med vitor almeida
serviço de anestesiologia, chtv, viseu, portugal
rettungsdienst goslar, kwb, deutschland





EUSEM

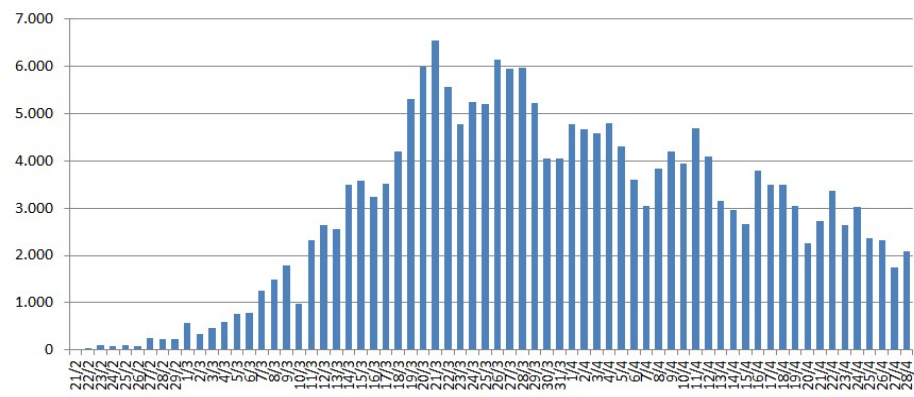
EUROPEAN SOCIETY FOR EMERGENCY MEDICINE

WEBINAR COVID-19: Sharing experiences of high COVID- 19 impact countries.

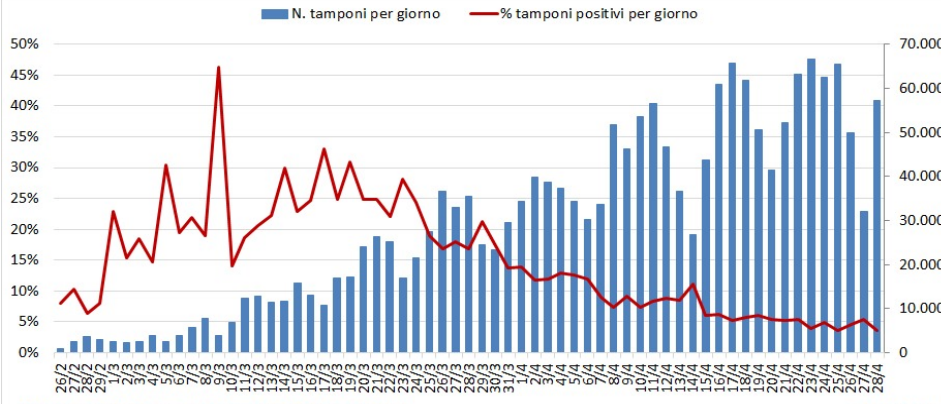
Name: Paolo Groff

Position: Director ED, Perugia H; SIMEU
representative in EUSEM

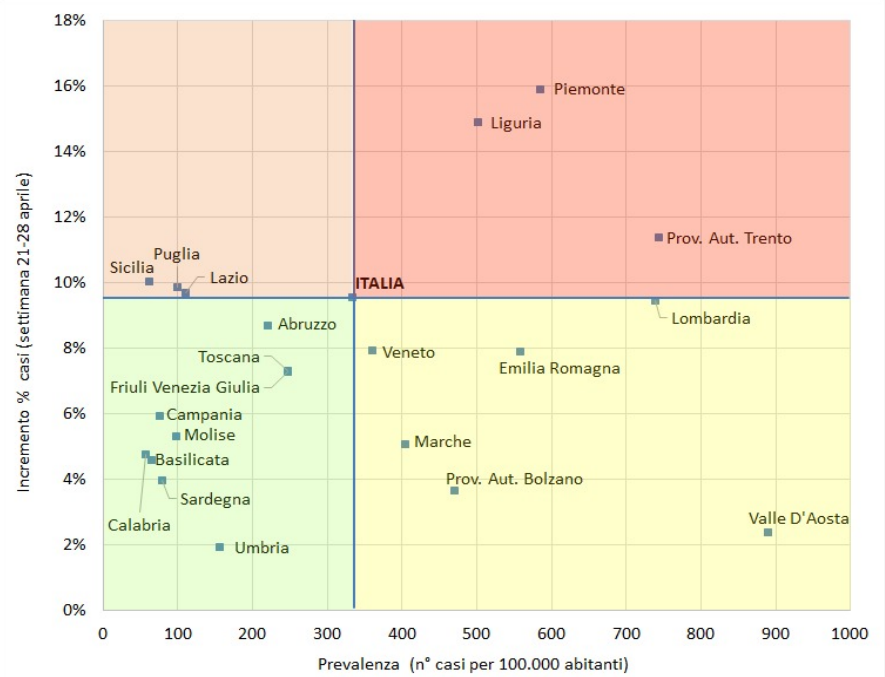
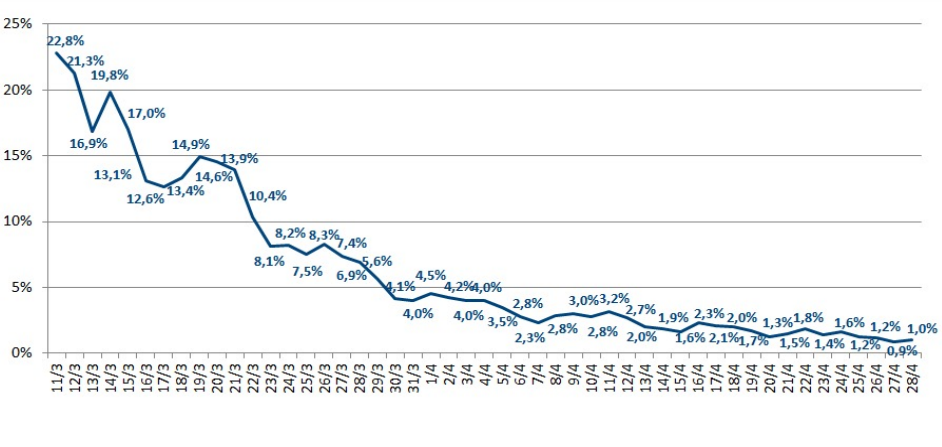
Country: Italy



Elaborazione GIMBE da casi confermati dalla Protezione Civile
 Aggiornamento: 28 aprile 2020



Elaborazione GIMBE da casi confermati dalla Protezione Civile
 Aggiornamento: 28 aprile 2020



Elaborazione GIMBE da casi confermati dalla Protezione Civile
 Aggiornamento: 28 aprile 2020



Countries in deescalate phase (France, Spain, Italy, Turkey)

201.505 cases at april 28 2020

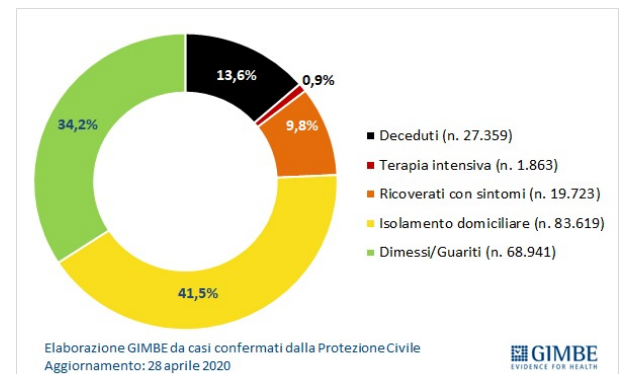
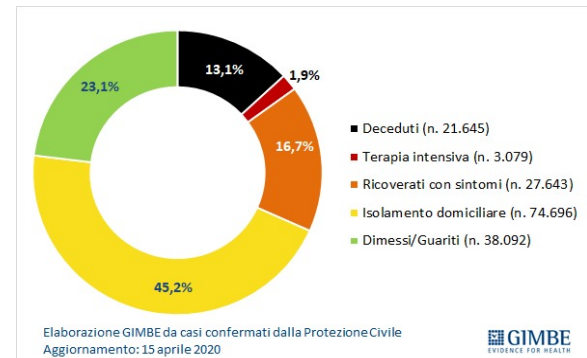
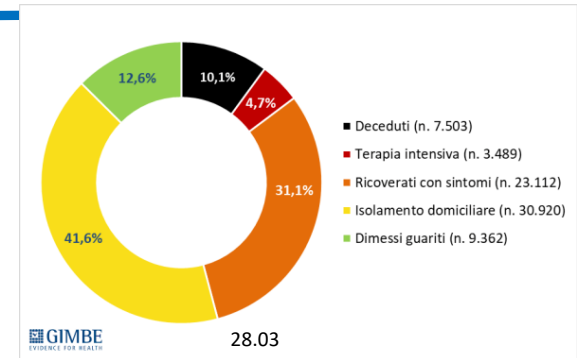
**Recovered and discharged from H
68.941**

**Isolated at home
83.619**

**Admitted with symptoms
19.723**

**ICU
1.863**

**Fatalities
27.359**



Countries in deescalate phase (France, Spain, Italy, Turkey)

Phase 2 in Italy: reopening of main productive activities; extension of the lockdown for schools, shops (small retailers), hair dressers, restaurants, team sports.

Travel allowed inside one region for seeing parents, relatives or for health reasons; allowed through different regions only for retourning home; gathering of persons forbidden

Rebound of new covid-19 cases expected in the next 2 weeks-1month period;

Phase 2 in Italy

- ED (non Covid-related) visits gradually increasing since the beginning of april
- Confirmed Covid-19 positive pts in the ED decreasing
- «incidental» positivities in pts with non Covid 19-related symptoms still few but increasing
- Perugia (low prevalence area): 907 swabs in the ED; 72 positive (7.9%) (Milan, high prevalence area: 60%)

Countries in deescalate phase (France, Spain, Italy, Turkey)

- Retention of different tracks in the ED
- Extension of the “grey” area in the Hospital
- Swab-PCR made in the ED before admission for all admitted pts
- Admission to Covid-wards for all positive pts
- Admission to “grey” areas for all pts with a suggestive (or dubious) presentation and a negative swab
- Swab-PCR made in the ED to all pts affected by time-dependent diseases and treatment “as they were positive” waiting for the result

Concerns

- Availability of beds for ED pts in the «grey» areas
- Stationing of pts in the ED waiting for swab-PCR
- Availability of «white» beds for ED pts **AND** for discharge from the «grey» areas
- Reluctance of «white» areas to admit directly from the ED

***Approach to COVID-19
an Indian tertiary care center***

Dr. T S Srinath Kumar MD

Objectives

1. The main approach during the expanding phase
2. Deescalate procedure
3. Actual protocols in the ED
4. Future measurement in the everyday work in the ED

Preparation is the key

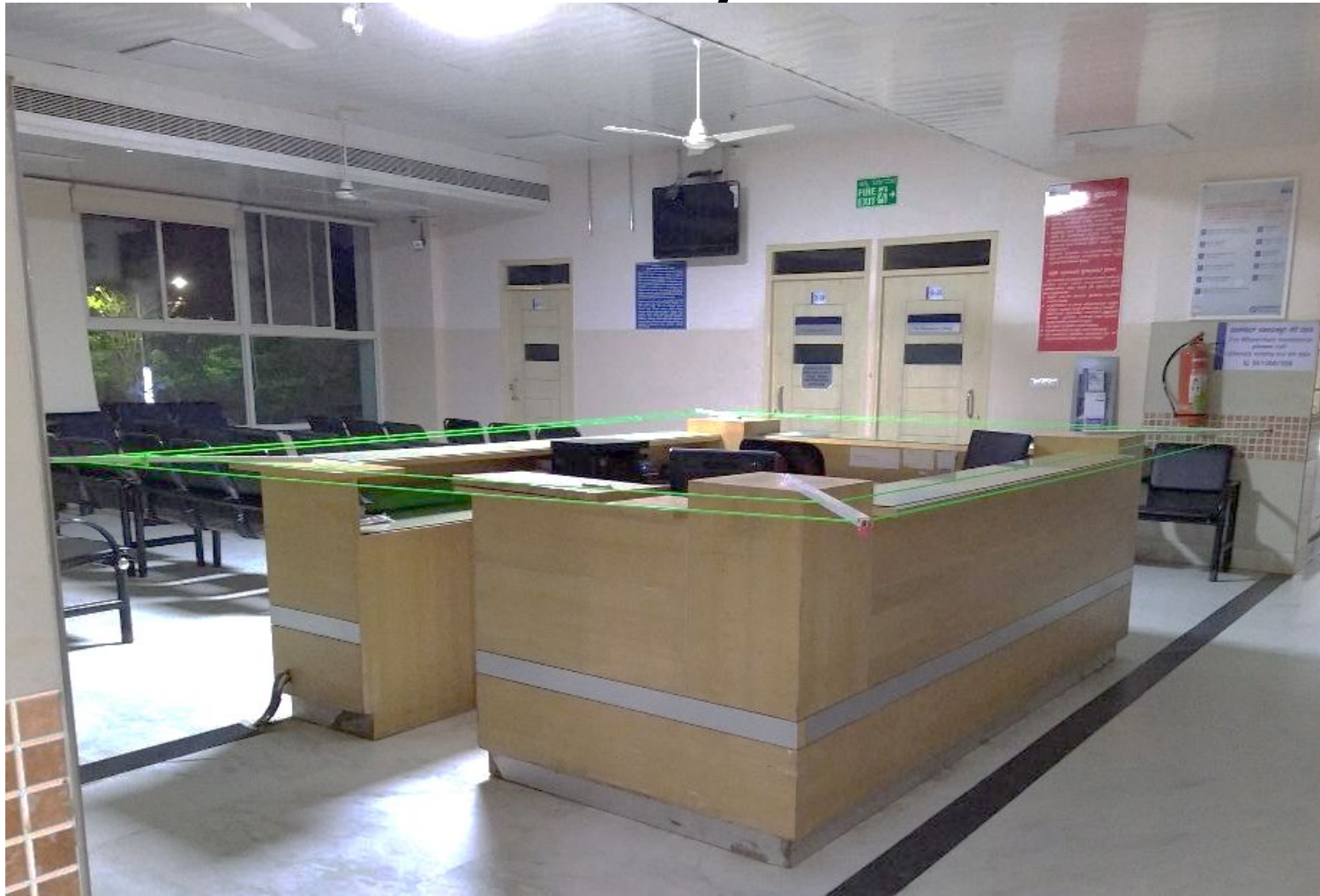
- It is essential to have an external disaster plan for every institution; however the plan is subjected to vary depending on the nature of the incident :-
 - Pandemic / Epidemic
 - Mass casualty from RTA
 - Toxic gas inhalation
 - VIP situation
 - Riots
 - Terrorism attack



Precautionary measures



Precautionary measures



Dedicated Triage/ED/ICU/Observation rooms



Triage – Entry



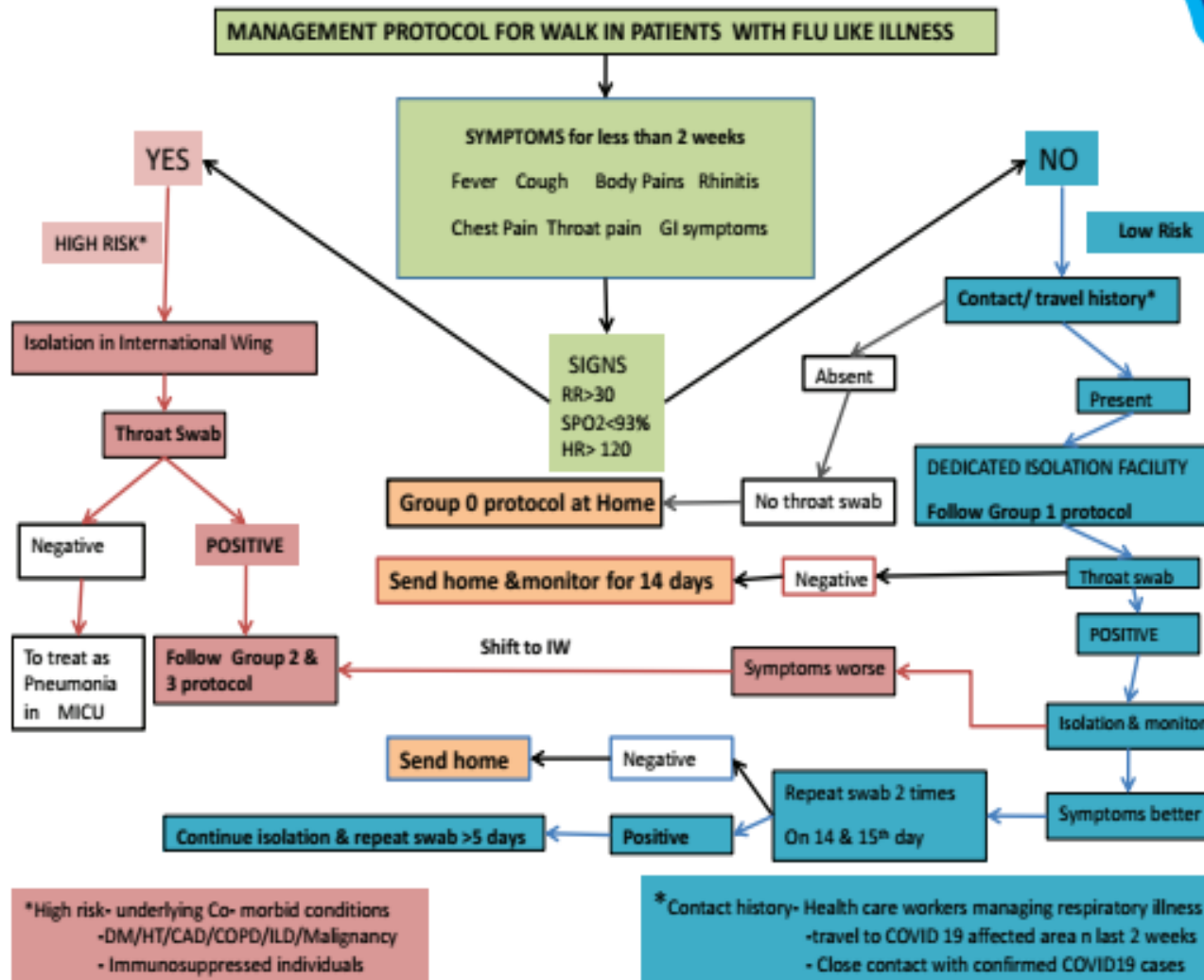
Screening



OPD-Screening



Institutional based protocol



Stay awake, spread awareness, take action

Advice for stopping virus spread



Wash hands frequently with soap and water or use a sanitiser gel



Catch coughs and sneezes with **disposable tissues**



Throw away used tissues
(then wash hands)



If you don't have a tissue
use your sleeve



Avoid touching your eyes, nose and mouth with unwashed hands



Avoid close contact with people who are unwell

Thank you