

Doença pelo Coronavírus 2019 (COVID-19)

Aspetos clínicos

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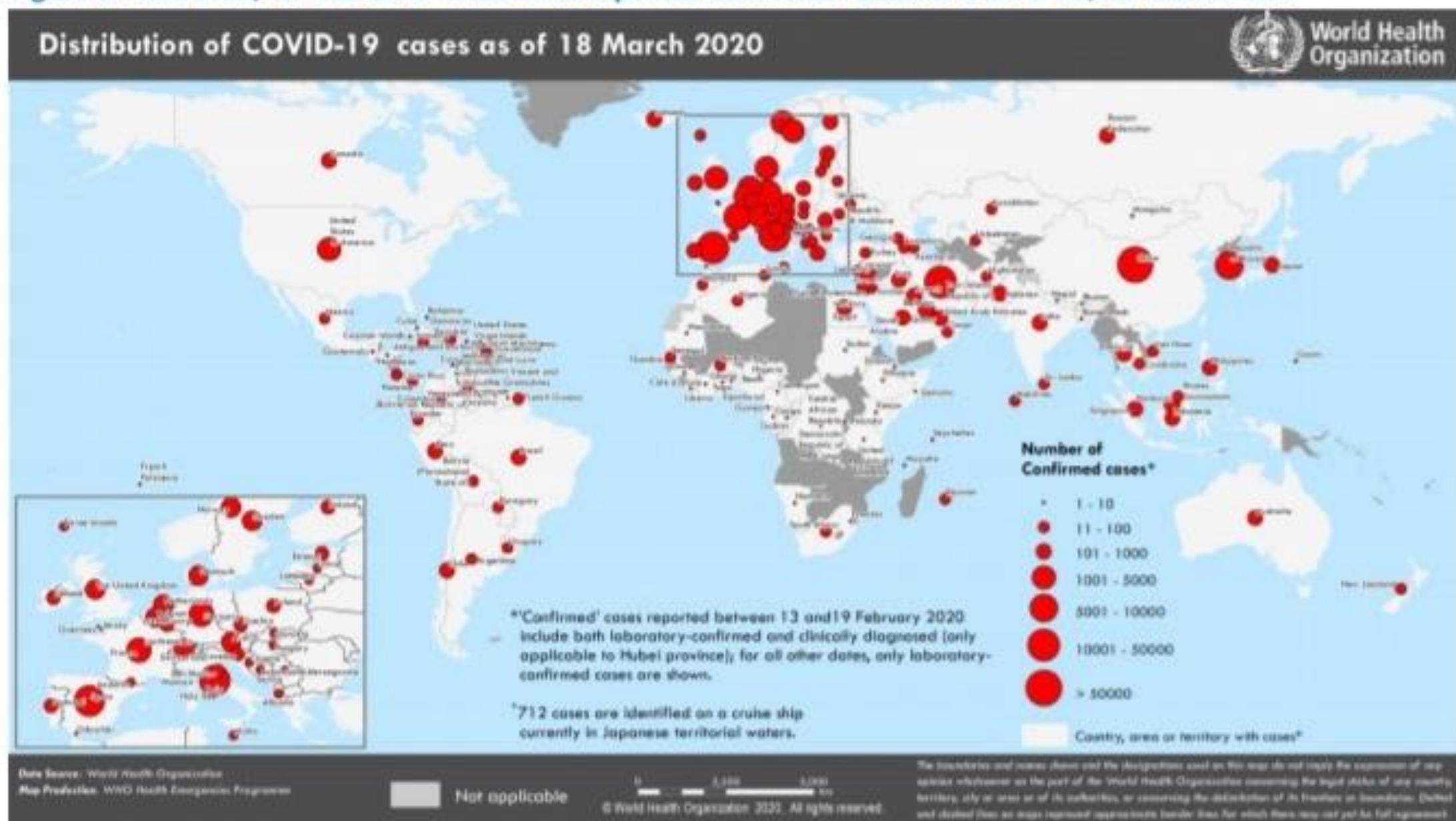
Pneumologista

Praia, 19 de março de 2020

Enquadramento

- **dezembro de 2019** – registrados casos de pneumonia de etiologia desconhecida na cidade de Wuhan, província de Hubei na China, com características de pneumonias virais
- **7 de janeiro de 2020** – isolamento viral permitiu identificar um novo Coronavírus (SARS-CoV-2)
- **16 de janeiro de 2020** – distribuído o novo RT-PCR em Hubei

Figure 1. Countries, territories or areas with reported confirmed cases of COVID-19, 18 March 2020



SITUATION IN NUMBERS

total (new) cases in last 24 hours

Globally

191 127 confirmed (15 123)

7807 deaths (786)

Western Pacific Region

91 845 confirmed (312)

3357 deaths (23)

European Region

74 760 confirmed (10 911)

3352 deaths (604)

South-East Asia Region

538 confirmed (63)

9 deaths (1)

Eastern Mediterranean Region

18 060 confirmed (1552)

1010 deaths (140)

Regions of the Americas

4979 confirmed (2243)

68 deaths (18)

African Region

233 confirmed (42)

4 deaths (0)

WHO RISK ASSESSMENT

Global Level Very High

Taxa de letalidade por COVID-19 comparado com a de outras epidemias

Vírus	Ano da epidemia	Número de casos	Óbitos	Taxa de letalidade
Marburg	1967	466	373	80%
SARS	2002	8096	774	9,6%
MERS	2012	2494	858	34,4%
Ebola	2013-2016	28616	11310	39,5%
Ebola (RDC)	2018-...	3423	2244	65,5%
COVID-19	2019-2020	37558	812	2,2%

Formas de transmissão

- **Via aérea:** gotículas de saliva, espirro, tosse, expetoração
- Também no sangue e nas fezes

- **Contato**
 - pessoal próximo, como toque ou aperto de mão;
 - com objetos ou superfícies contaminadas, seguido de contato com a boca, nariz ou olhos

Período de incubação – 1-14 dias (média 5-6 dias)

DEFINIÇÕES DE CASO

Caso suspeito

A. Um doente com doença respiratória aguda (febre e pelo menos um sinal / sintoma de doença respiratória (por exemplo, tosse, falta de ar), **E** uma histórico de viagens ou residência em um país / área ou território com transmissão local de COVID-19 durante os 14 dias anteriores ao início dos sintomas.

OU

B. Um doente com qualquer doença respiratória aguda **E** tendo estado em contato com um caso confirmado ou provável de COVID19 nos últimos 14 dias antes do início dos sintomas;

OU

C. Paciente com infecção respiratória aguda grave (febre e pelo menos um sinal / sintoma de doença respiratória (por exemplo, tosse, falta de ar) **E** necessidade de hospitalização **E** sem outra etiologia que explique completamente a apresentação clínica.

Caso provável

Um caso suspeito para quem o teste para COVID-19 é inconclusivo.

Caso confirmado

Pessoa com confirmação laboratorial da infecção por COVID-19, independentemente de sinais e sintomas clínicos.

SURVEILLANCE

Table 1. Countries, territories or areas with reported laboratory-confirmed COVID-19 cases and deaths. Data as of 18 March 2020*

Reporting Country/ Territory/Area ^a	Total confirmed cases	Total confirmed new cases ^b	Total deaths	Total new deaths ^b	Transmission classification ^c	Days since last reported case
Western Pacific Region						
China	81116	39	3231	13	Local transmission	0
Republic of Korea	8320	84	81	6	Local transmission	0
Japan	829	15	28	4	Local transmission	0
Malaysia	553	0	0	0	Local transmission	1
Australia	414	78	5	0	Local transmission	0
Singapore	266	23	0	0	Local transmission	0
Philippines	187	45	12	0	Local transmission	0
Viet Nam	61	4	0	0	Local transmission	0
Brunei Darussalam	54	4	0	0	Local transmission	0
Cambodia	24	12	0	0	Local transmission	0
New Zealand	11	5	0	0	Local transmission	0
Mongolia	4	0	0	0	Imported cases only	1
Territories^d						
French Polynesia	3	0	0	0	Imported cases only	2
Guam	3	3	0	0	Local transmission	0
European Region						
Italy	31506	3526	2503	345	Local transmission	0
Spain	11178	1987	491	182	Local transmission	0
France	7652	1079	175	27	Local transmission	0
Germany	7156	1144	13	0	Local transmission	0
Switzerland	2650	450	14	5	Local transmission	0
The United Kingdom	1954	407	55	5	Local transmission	0
Netherlands	1705	292	43	19	Local transmission	0
Belgium	1486	401	14	9	Local transmission	0
Austria	1332	373	3	2	Local transmission	0
Norway	1308	139	3	0	Local transmission	0
Sweden	1167	108	3	0	Local transmission	0
Denmark	977	79	4	3	Local transmission	0
Portugal	448	117	1	1	Local transmission	0
Czechia	434	136	0	0	Local transmission	0
Greece	387	56	4	0	Local transmission	0
Finland	319	47	0	0	Local transmission	0
Israel	304	0	0	0	Local transmission	1
Ireland	292	69	2	0	Local transmission	0
Slovenia	275	22	1	1	Local transmission	0
Poland	246	96	5	2	Local transmission	0
Estonia	225	20	0	0	Local transmission	0
Iceland	225	45	0	0	Local transmission	0
Romania	184	26	0	0	Local transmission	0
Luxembourg	140	59	1	0	Local transmission	0
San Marino	104	2	11	2	Local transmission	0
Slovakia	97	25	0	0	Local transmission	0
Russian Federation	93	0	0	0	Imported cases only	1
Bulgaria	81	14	2	0	Local transmission	0
Serbia ^{††}	85	23	0	0	Local transmission	0
Croatia	65	9	0	0	Local transmission	0

Latvia	60	24	0	0	Imported cases only	0
Albania	55	4	1	0	Local transmission	0
Armenia	52	0	0	0	Local transmission	1
Hungary	50	11	1	0	Local transmission	0
Turkey	47	0	0	0	Imported cases only	1
Malta	38	8	0	0	Imported cases only	0
Belarus	36	0	0	0	Local transmission	1
Georgia	34	1	0	0	Imported cases only	0
Cyprus	33	0	0	0	Imported cases only	1
Kazakhstan	33	27	0	0	Imported cases only	0
North Macedonia	31	12	0	0	Local transmission	0
Republic of Moldova	30	1	0	0	Local transmission	0
Lithuania	25	8	0	0	Imported cases only	0
Azerbaijan	21	0	0	0	Imported cases only	2
Bosnia and Herzegovina	19	0	0	0	Local transmission	2
Andorra	16	2	0	0	Imported cases only	0
Uzbekistan	16	12	0	0	Imported cases only	0
Ukraine	14	9	2	1	Local transmission	0
Monaco	9	0	0	0	Under investigation	1
Liechtenstein	7	0	0	0	Imported cases only	1
Montenegro	2	2	0	0	Imported cases only	0
Holy See	1	0	0	0	Under investigation	11
Territories^{dd}						
Faroe Islands	47	36	0	0	Imported cases only	0
Jersey	5	3	0	0	Imported cases only	0
Gibraltar	3	0	0	0	Under investigation	1
Guernsey	1	0	0	0	Imported cases only	8
South-East Asia Region						
Thailand	177	30	1	0	Local transmission	0
Indonesia	172	0	5	0	Local transmission	1
India	137	23	3	1	Local transmission	0
Sri Lanka	29	10	0	0	Local transmission	0
Maldives	13	0	0	0	Local transmission	2
Bangladesh	8	0	0	0	Local transmission	1
Bhutan	1	0	0	0	Imported cases only	11
Nepal	1	0	0	0	Imported cases only	54
Eastern Mediterranean Region						
Iran (Islamic Republic of)	16169	1178	988	135	Local transmission	0
Qatar	442	41	0	0	Local transmission	0
Bahrain	237	16	1	0	Local transmission	0
Pakistan	187	134	0	0	Imported cases only	0
Saudi Arabia	171	38	0	0	Local transmission	0
Egypt	166	40	4	2	Local transmission	0
Iraq	154	30	11	2	Local transmission	0
Kuwait	130	7	0	0	Local transmission	0
Lebanon	120	21	3	0	Local transmission	0
United Arab Emirates	98	0	0	0	Local transmission	2
Morocco	38	9	2	1	Local transmission	0
Jordan	35	29	0	0	Imported cases only	0
Oman	24	2	0	0	Imported cases only	0
Tunisia	24	4	0	0	Local transmission	0
Afghanistan	22	1	0	0	Imported cases only	0

Somalia	1	0	0	0	Imported cases only	1
Sudan	1	0	1	0	Imported cases only	3
Territories**						
occupied Palestinian territory	41	2	0	0	Local transmission	0
Region of the Americas						
United States of America	3536	1822	58	17	Local transmission	0
Canada	424	120	1	0	Local transmission	0
Brazil	234	34	0	0	Local transmission	0
Chile	156	81	0	0	Local transmission	0
Peru	86	15	0	0	Local transmission	0
Mexico	82	29	0	0	Imported cases only	0
Panama	69	26	1	0	Local transmission	0
Argentina	65	9	2	0	Local transmission	0
Ecuador	58	21	2	0	Local transmission	0
Colombia	45	11	0	0	Local transmission	0
Costa Rica	41	6	0	0	Local transmission	0
Venezuela (Bolivarian Republic of)	33	16	0	0	Imported cases only	0
Dominican Republic	21	16	1	1	Local transmission	0
Jamaica	12	2	0	0	Local transmission	0
Bolivia (Plurinational State of)	11	0	0	0	Imported cases only	1
Paraguay	9	1	0	0	Local transmission	0
Honduras	8	6	0	0	Imported cases only	0
Guatemala	6	5	1	0	Imported cases only	0
Uruguay	6	2	0	0	Imported cases only	0
Cuba	5	1	0	0	Imported cases only	0
Trinidad and Tobago	5	3	0	0	Imported cases only	0
Guyana	4	0	1	0	Local transmission	2
Saint Lucia	2	0	0	0	Imported cases only	2
Antigua and Barbuda	1	0	0	0	Imported cases only	4
Bahamas	1	1	0	0	Local transmission	0
Saint Vincent and the Grenadines	1	0	0	0	Imported cases only	4
Suriname	1	0	0	0	Imported cases only	2
Territories**						
Guadeloupe	18	12	0	0	Imported cases only	0
Martinique	16	0	0	0	Imported cases only	1
French Guiana	7	0	0	0	Imported cases only	3
Curacao	3	1	0	0	Imported cases only	0
Puerto Rico	3	0	0	0	Imported cases only	3
Saint Barthélemy	3	0	0	0	Under investigation	2
Aruba	2	2	0	0	Imported cases only	0
Saint Martin	2	0	0	0	Under investigation	15
United States Virgin Islands	2	1	0	0	Imported cases only	0
Cayman Islands	1	0	1	0	Imported cases only	4
African Region						
South Africa	62	11	0	0	Local transmission	0
Algeria	60	11	4	0	Local transmission	0
Senegal	27	1	0	0	Local transmission	0
Burkina Faso	20	5	0	0	Imported cases only	0

Rwanda	7	2	0	0	Local transmission	0
Cote d'Ivoire	6	3	0	0	Imported cases only	0
Ghana	6	4	0	0	Imported cases only	0
Cameroon	5	0	0	0	Local transmission	1
Ethiopia	5	1	0	0	Imported cases only	0
Seychelles	4	0	0	0	Imported cases only	1
Democratic Republic of the Congo	3	1	0	0	Imported cases only	0
Kenya	3	0	0	0	Local transmission	1
Namibia	2	0	0	0	Imported cases only	3
Nigeria	2	0	0	0	Imported cases only	8
Benin	1	1	0	0	Imported cases only	0
Central African Republic	1	0	0	0	Imported cases only	3
Congo	1	0	0	0	Imported cases only	2
Equatorial Guinea	1	0	0	0	Imported cases only	3
Eswatini	1	0	0	0	Imported cases only	3
Gabon	1	0	0	0	Imported cases only	3
Guinea	1	0	0	0	Imported cases only	3
Liberia	1	1	0	0	Imported cases only	0
Mauritania	1	0	0	0	Imported cases only	3
Togo	1	0	0	0	Imported cases only	10
United Republic of Tanzania	1	1	0	0	Imported cases only	0
Territories**						
Réunion	9	0	0	0	Imported cases only	2
Mayotte	1	0	0	0	Imported cases only	3
Subtotal for all regions	190415	15123	7800	786		
International conveyance (Diamond Princess)	712	0	7	0	Local transmission	2
Grand total	191127	15123	7807	786		

*Numbers include both domestic and repatriated cases

**The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

*Case classifications are based on [WHO case definitions](#) for COVID-19.

**Transmission classification is based on WHO analysis of available official data and may be subject to reclassification as additional data become available. Countries/territories/areas experiencing multiple types of transmission are classified in the highest category for which there is evidence; they may be removed from a given category if interruption of transmission can be demonstrated. It should be noted that even within categories, different countries/territories/areas may have differing degrees of transmission as indicated by the differing numbers of cases and other factors. Not all locations within a given country/territory/area are equally affected.

Terms:

- **Community transmission** is evidenced by the inability to relate confirmed cases through chains of transmission for a large number of cases, or by increasing positive tests through sentinel samples (routine systematic testing of respiratory samples from established laboratories).
- **Local transmission** indicates locations where the source of infection is within the reporting location.
- **Imported cases only** indicates locations where all cases have been acquired outside the location of reporting.
- **Under investigation** indicates locations where type of transmission has not been determined for any cases.
- **Interrupted transmission** indicates locations where interruption of transmission has been demonstrated (details to be determined)

** "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status

**Including 13 (8 new) cases from Kosovo^[1]

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

Due to differences in reporting methods, retrospective data consolidation, and reporting delays, the number of new cases may not always reflect the exact difference between yesterday's and today's totals.

New countries/territories/areas are shown in red.

Contato próximo de COVID-19

O contato próximo de um caso provável ou confirmado é definido como:

- Uma pessoa que vive na mesma casa que um caso COVID-19;
- Uma pessoa que teve contato físico direto com um caso de COVID-19 (por exemplo, apertando as mãos);
- Uma pessoa que tenha contato direto desprotegido com secreções infecciosas de um caso de COVID-19 (por exemplo, sendo tossida, tocando tecidos de papel usados com a mão);
- Uma pessoa que teve contato frente a frente com um caso COVID-19 dentro de 2 metros e > 15 minutos;

Contato próximo de COVID-19

- Uma pessoa que estava em um ambiente fechado (por exemplo, sala de aula, sala de reunião, sala de espera do hospital etc.) com um caso COVID-19 por 15 minutos ou mais e a uma distância inferior a 2 metros;
- Um profissional de saúde ou outra pessoa que cuida diretamente de um caso COVID-19 ou de laboratório que manipula amostras de um caso COVID-19 **sem EPI** recomendado ou com uma possível **violação do EPI**;
- Um contato em uma aeronave sentada a dois assentos (em qualquer direção) do caso COVID-19, pessoas que prestam assistência e tripulantes servindo na seção da aeronave em que o caso-índice estava sentado...

Sintomas e Sinais (baseado em 55924 casos confirmados)

- **Febre (87,9%)**
- **Tosse seca (67,7%)**
- Fadiga (38,1%)
- Expectoração (33,4%)
- Dispneia (18,6%)
- Dor torácica (13,9%)
- Cefaleia (13,6%)
- Mialgia e artralgia (14,8%)
- Calafrios (11,4%)
- Náuseas e vômitos (5%)
- Congestão nasal (4,8%)
- Diarreia (3,7%)
- Hemoptises (0,9%)
- Congestão conjuntival (0,8%)

Formas de apresentação clínica

- A maioria dos doentes com COVID-19 tem doença ligeira e recupera
- 80% dos casos confirmados teve doença ligeira ou moderada
- 13% teve doença severa (FR \geq 30, Saturação \leq 93%, PaO₂/FiO₂ $<$ 300, infiltrados pulmonares)
- 6,1% doentes críticos (falência respiratória, choque septico, disfunção e/ou falência multiorgânica)

Formas de apresentação clínica

Table 2. Clinical syndromes associated with 2019-nCoV infection

Uncomplicated illness	Patients with uncomplicated upper respiratory tract viral infection, may have non-specific symptoms such as fever, cough, sore throat, nasal congestion, malaise, headache, muscle pain or malaise. The elderly and immunosuppressed may present with atypical symptoms. These patients do not have any signs of dehydration, sepsis or shortness of breath.
Mild pneumonia	Patient with pneumonia and no signs of severe pneumonia. Child with non-severe pneumonia has cough or difficulty breathing + fast breathing: fast breathing (in breaths/min): <2 months, ≥ 60 ; 2–11 months, ≥ 50 ; 1–5 years, ≥ 40 and no signs of severe pneumonia.
Severe pneumonia	Adolescent or adult: fever or suspected respiratory infection, plus one of respiratory rate > 30 breaths/min, severe respiratory distress, or $SpO_2 < 90\%$ on room air (adapted from [1]). Child with cough or difficulty in breathing, plus at least one of the following: central cyanosis or $SpO_2 < 90\%$; severe respiratory distress (e.g. grunting, very severe chest indrawing); signs of pneumonia with a general danger sign: inability to breastfeed or drink, lethargy or unconsciousness, or convulsions. Other signs of pneumonia may be present: chest indrawing, fast breathing (in breaths/min): <2 months, ≥ 60 ; 2–11 months, ≥ 50 ; 1–5 years, ≥ 40 . ² The diagnosis is clinical; chest imaging can exclude complications.

Formas de apresentação clínica

Table 2. Clinical syndromes associated with 2019-nCoV infection

Sepsis ^{10,11}	Adults: life-threatening organ dysfunction caused by a dysregulated host response to suspected or proven infection, with organ dysfunction*. Signs of organ dysfunction include: altered mental status, difficult or fast breathing, low oxygen saturation, reduced urine output, fast heart rate, weak pulse, cold extremities or low blood pressure, skin mottling, or laboratory evidence of coagulopathy, thrombocytopenia, acidosis, high lactate or hyperbilirubinemia. Children: suspected or proven infection and ≥ 2 SIRS criteria, of which one must be abnormal temperature or white blood cell count.
Septic shock ^{10,12}	Adults: persisting hypotension despite volume resuscitation, requiring vasopressors to maintain MAP ≥ 65 mmHg and serum lactate level > 2 mmol/L. Children (based on [12]): any hypotension (SBP $< 5^{\text{th}}$ centile or > 2 SD below normal for age) or 2-3 of the following: altered mental state; tachycardia or bradycardia (HR < 90 bpm or > 160 bpm in infants and HR < 70 bpm or > 150 bpm in children); prolonged capillary refill (> 2 sec) or warm vasodilation with bounding pulses; tachypnea; mottled skin or petechial or purpuric rash; increased lactate; oliguria; hyperthermia or hypothermia.

Abbreviations: ARI, acute respiratory infection; BP, blood pressure; bpm, beats/minute; CPAP, continuous positive airway pressure; FiO₂, fraction of inspired oxygen; MAP, mean arterial pressure; NIV, noninvasive ventilation; OI, Oxygenation Index; OSI, Oxygenation Index using SpO₂; PaO₂, partial pressure of oxygen; PEEP, positive end-expiratory pressure; SBP, systolic blood pressure; SD, standard deviation; SIRS, systemic inflammatory response syndrome; SpO₂, oxygen saturation. *If altitude is higher than 1000m, then correction factor should be calculated as follows: PaO₂/FiO₂ x Barometric pressure/760.

* The SOFA score ranges from 0 to 24 and includes points related to 6 organ systems: respiratory (hypoxemia defined by low PaO₂/FiO₂), coagulation (low platelets), liver (high bilirubin), cardiovascular (hypotension), central nervous system (low level of consciousness defined by Glasgow Coma Scale), and renal (low urine output or high creatinine). Sepsis is defined by an increase in the Sequential [Sepsis-related] Organ Failure Assessment (SOFA) score¹³ of ≥ 2 points. Assume the baseline score is zero if data are not available

Grupos de Risco

- Indivíduos com 60 anos E com doenças subjacentes
 - Cardiovascular (13,2%)
 - Diabetes (9,2%)
 - Hipertensão arterial (8,4%)
 - Doença respiratória crónica (8,0%)
 - Cancro (7,6%)
- Indivíduos > 80 anos mortalidade 15,9%
- H/M(4,7 vs 2,8)

Diagnóstico

- RT-PCR para SARS-COV-2 RNA
- Hemograma: leucopenia e linfopenia
- LDH, GOT, GPT, Ferritina aumentada
- D-Dímero aumentado (mau prognóstico)
- TC-Torácica: infiltrados bilaterais, consolidação



Tratamento

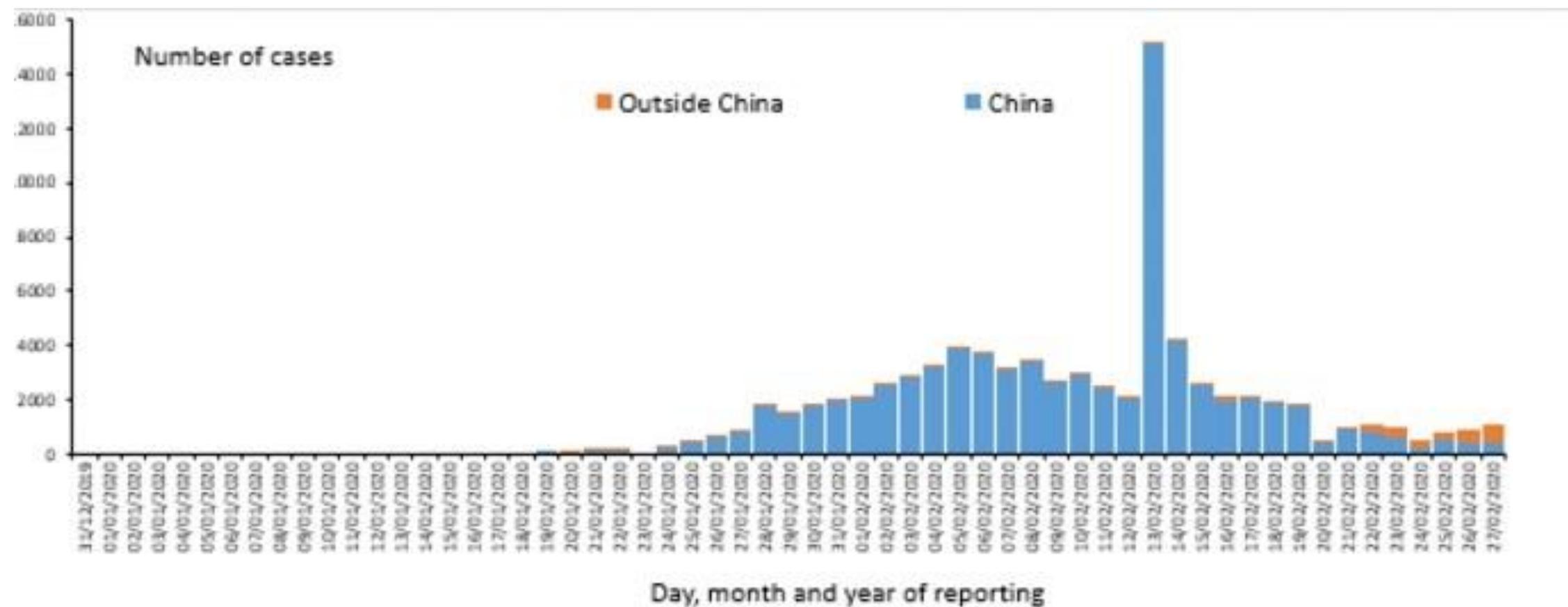
- Terapêutica de suporte
- Ensaio com antiviricos: **Remdesivir** (inibe a síntese do RNA), Lopinavir/ritonavir (bloqueiam a reprodução celular), ribavirina, interferon alfa, beta

Antimalárico: Cloroquina (bloqueia a entrada do vírus)

- Soro convalescente
- MTC

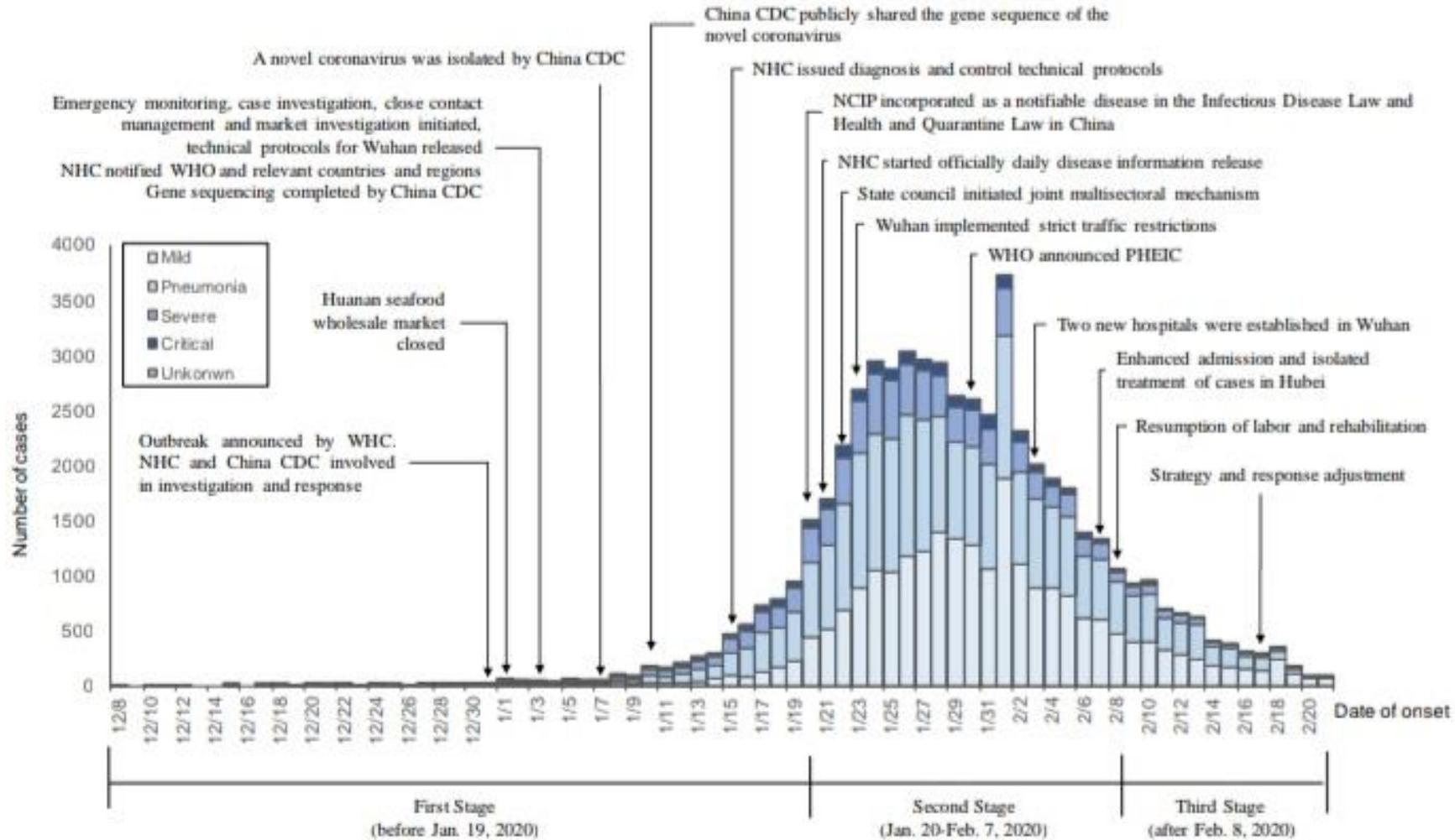
Prevenção e controlo de infeção

- Seguir as normas de prevenção e controlo de infeção
- Garantir a disponibilização dos EPIs
- Formação sobre a utilização dos EPIs
- Garantir a disponibilização de condições para a lavagem das mãos e álcool-gel
- Estabelecer e divulgar procedimentos
- Cartazes com informação sobre medidas de prevenção e controlo



On 13/02/2020 case definition changed in Ch

A



Identificação precoce

Isolamento precoce

**Diagnóstico e
tratamentos precoces**

“China has rolled out perhaps the most ambitious, agile, and aggressive disease containment effort in history.” WHO



- 3** Um homem entrega comida em um bairro isolado na cidade chinesa de Wuhan, epicentro do surto, em 23 de fevereiro. (AFP)

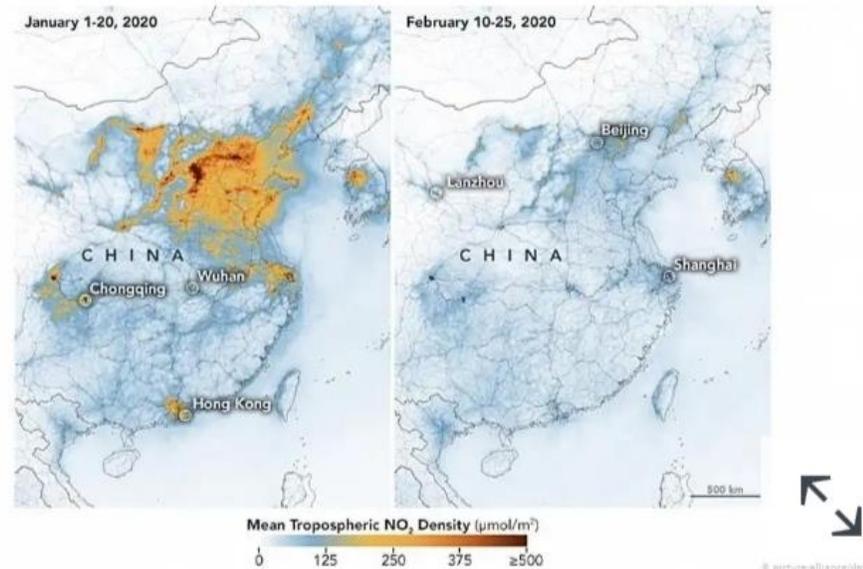


9 Dezenas de trabalhadores protegidos com máscaras na estação de trem Shinjuku, Tóquio, em 28 de fevereiro. CHARLY TRIBALLEAU (AFP)



11 Fila para comprar máscaras em Seul, em 28 de fevereiro. JEON HEON-KYUN (EFE)

15:15 Satellite images released by NASA and the European Space Agency show a dramatic decline in pollution levels across China. NASA reported Sunday that the reduction in nitrogen dioxide levels is "at least partly" due to an economic slowdown caused by the virus.



A dramatic decline in pollution levels over China is 'at least partly' due to the drop in economic activity caused by coronavirus

Março 12/03

Pandemia

Onde estamos... E para onde vamos?



Obrigada pela atenção



Recomendação de leitura

- Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19)



Em Washington já estão a fazer testes em sistema de drive thru LUSA/STEPHEN BRASHEAR
