



Departamento de Medicina Preventiva y Social  
Cátedra de Salud Pública  
Departamento de Medicina Tropical



# **CLASE acerca del 2019 n-coV (CORONAVIRUS – WUHAN)**

## **EL VIRUS**

Dra. María Eugenia Landaeta  
Departamento de Medicina Tropical

## **LA EPIDEMIA**

Dr. Alejandro Rísquez  
Departamento de MPS

## **PREVENCIÓN Y VIGILANCIA**

Dr. José Chique  
Cátedra de Salud Pública

**PREGUNTAS Y RESPUESTAS DE 3PM A 330PM**

**Día y Fecha: MIÉRCOLES 05/02/2020**

**Hora: 2:00pm a 3:30pm**

**Lugar: Auleta Andrés Geraldi – Decanato de medicina**



# La epidemia de 2019-nCoV declarada por la OMS emergencia sanitaria de preocupación internacional (30 de enero de 2020)



**Alejandro Rísquez Parra**

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# AGENDA

1. Declaración de la epidemia OMS
2. Epidemia y su agente en el tiempo, espacio y persona
3. Cadena epidemiológica:  
Transmisión.
4. Medidas de control



“This is the time for science, not rumors”

“Este es el tiempo de la ciencia, no de los rumores”



***Director general Tedros Adhanom. OMS***

*Al salir de la reunión después de la declaración del coronavirus una emergencia de salud pública de preocupación internacional 30 de enero de 2020*

[Health Topics](#) ▾[Countries](#) ▾[Newsroom](#) ▾[Emergencies](#) ▾[About Us](#) ▾

**Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV) 30 January 2020 Statement. Geneva, Switzerland**

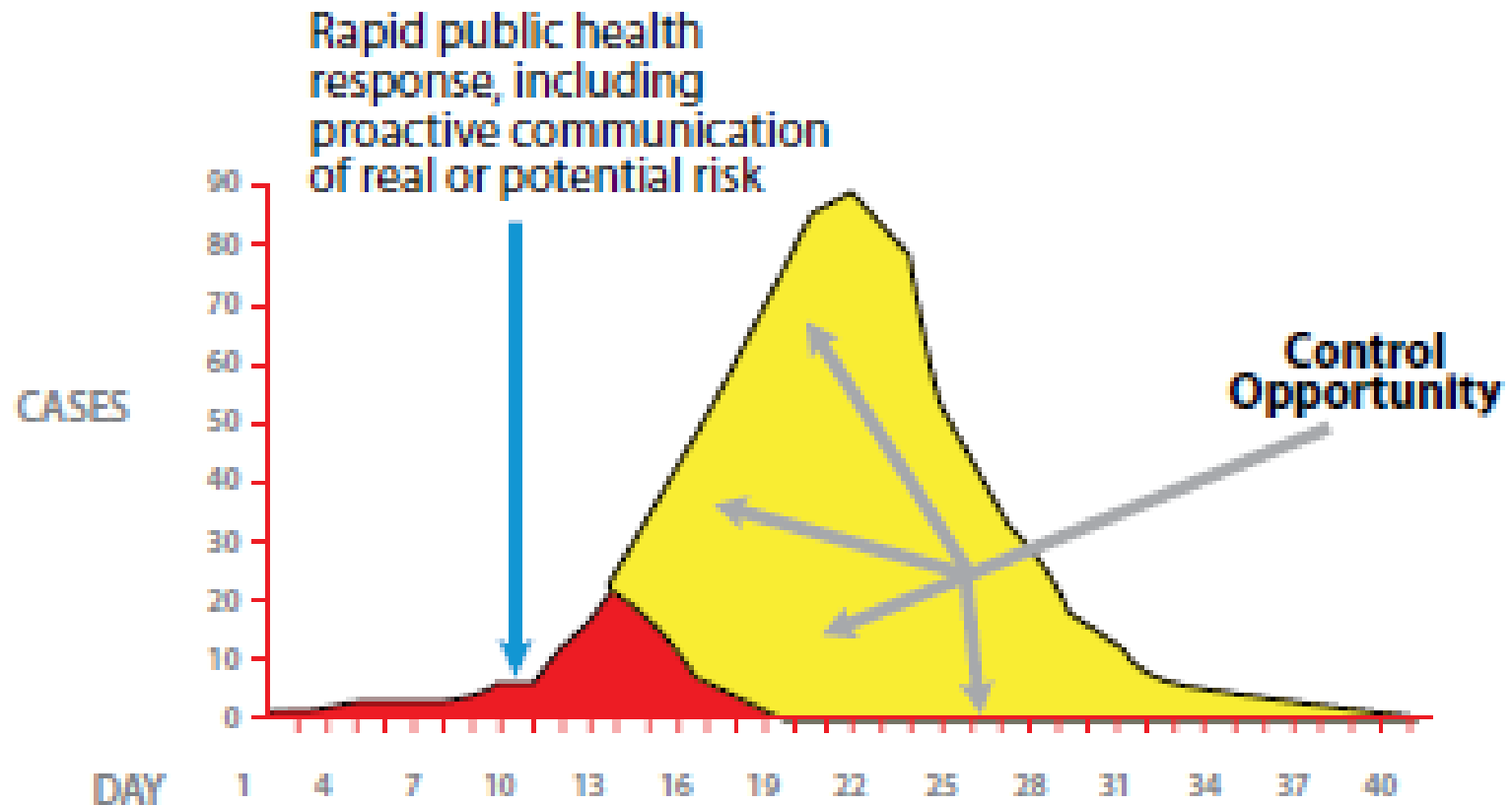
<https://www.who.int/home>


FIGURE 1



World Health Organization

# Proactive Communication in Infection Control





## PRIORIZACIÓN DE ENFERMEDADES PARA LA INVESTIGACIÓN Y DESARROLLO EN CONTEXTOS DE EMERGENCIAS DE SALUD PÚBLICA

Credits



For the purposes of the R&D Blueprint, WHO has developed a special tool for determining which diseases and pathogens to prioritize for research and development in public health emergency contexts.

- Crimean-Congo haemorrhagic fever (CCHF)
- Ebola virus disease and Marburg virus disease
- Lassa fever • Rift Valley fever (RVF) • Zika
- **Middle East respiratory syndrome coronavirus (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS)**
- Nipah and henipaviral diseases

# 2018

**En 2018, la OMS reviso, considero e incluyo a los coronavirus en la lista de enfermedades prioritarias.**

**Por su potencial de causar emergencias de salud pública de preocupación internacional (PHEIC) y la falta de drogas eficaces y vacunas, se consideran en necesidad de investigación y desarrollo acelerado.**

SARS-CoV, MERS-CoV and now the 2019-novel CoV: have we investigated enough about Coronaviruses? – A bibliometric analysis Alfonso J. Rodriguez-Morales

<https://doi.org/10.1016/j.tmaid.2020.101566>

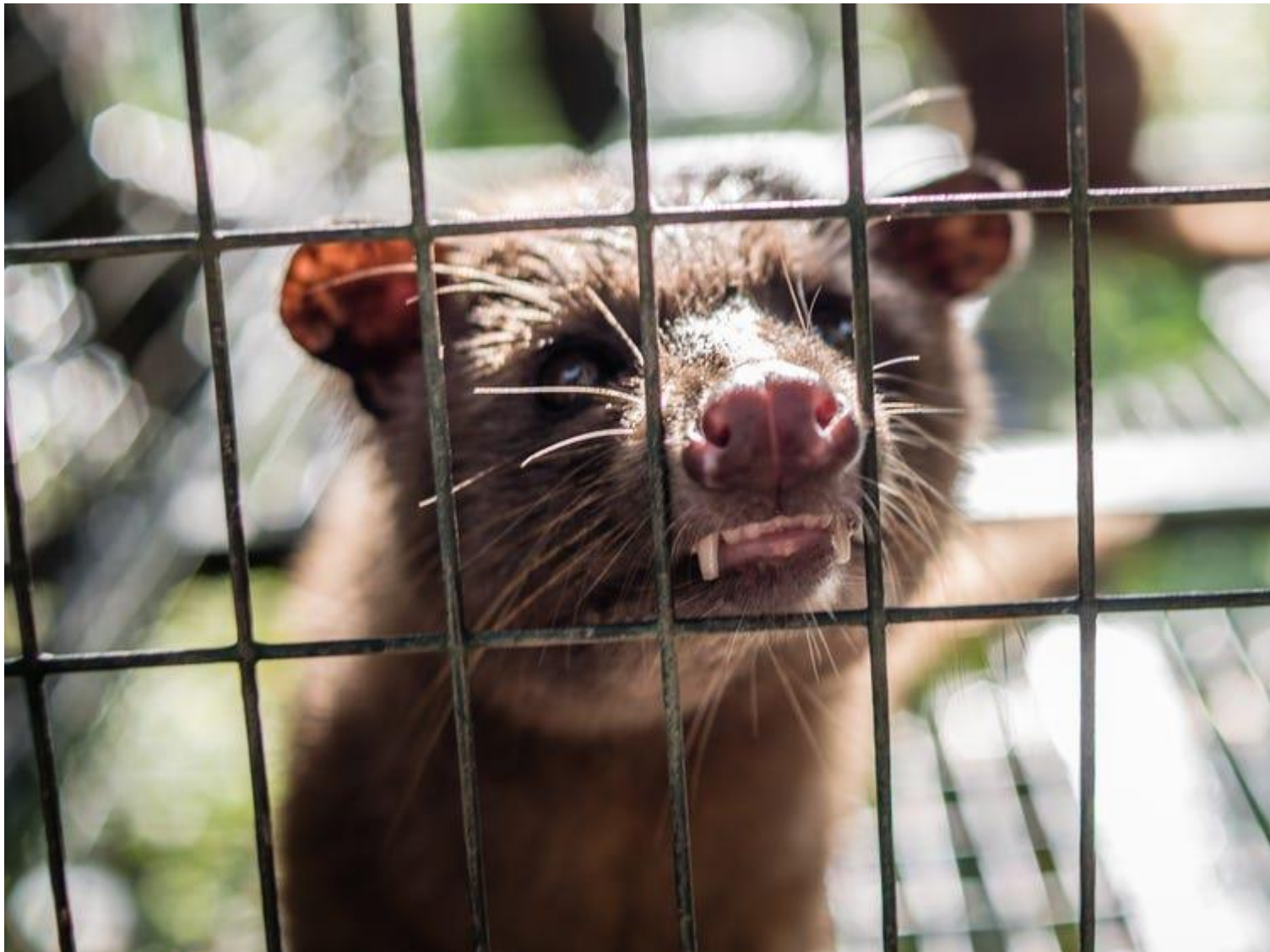


# Zoonosis



A greater horseshoe bat, a relative of the *Rhinolophus sinicus* bat species from China that was the original host of the SARS virus. De Agostini/Getty

<https://www.businessinsider.com/wuhan-coronavirus-sars-bats-animals-to-humans-2020-1>

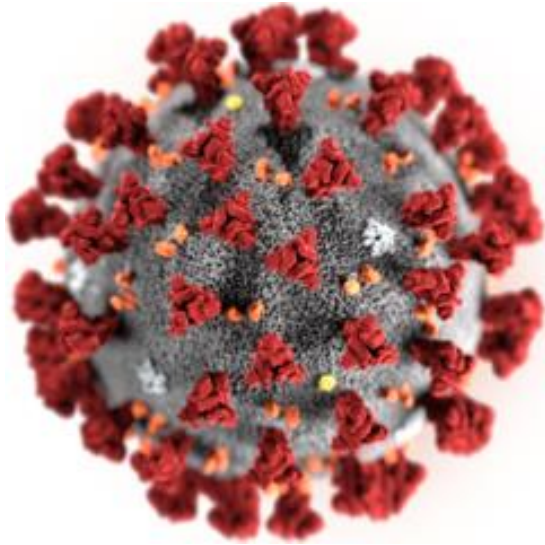


An Asian palm civet sits in a cage at the Kopi luwak farm and plantation in Ubud on the Indonesian island of Bali, November 20, 2018. Oleksandr Rupeta/NurPhoto/Getty

<https://www.businessinsider.com/wuhan-coronavirus-sars-bats-animals-to-humans-2020-1>



A chicken vendor sleeps on top of chicken cages at the Hau Wong road wet market in Kowloon City, China, in 2004. Dickson Lee/South China Morning Post/Getty



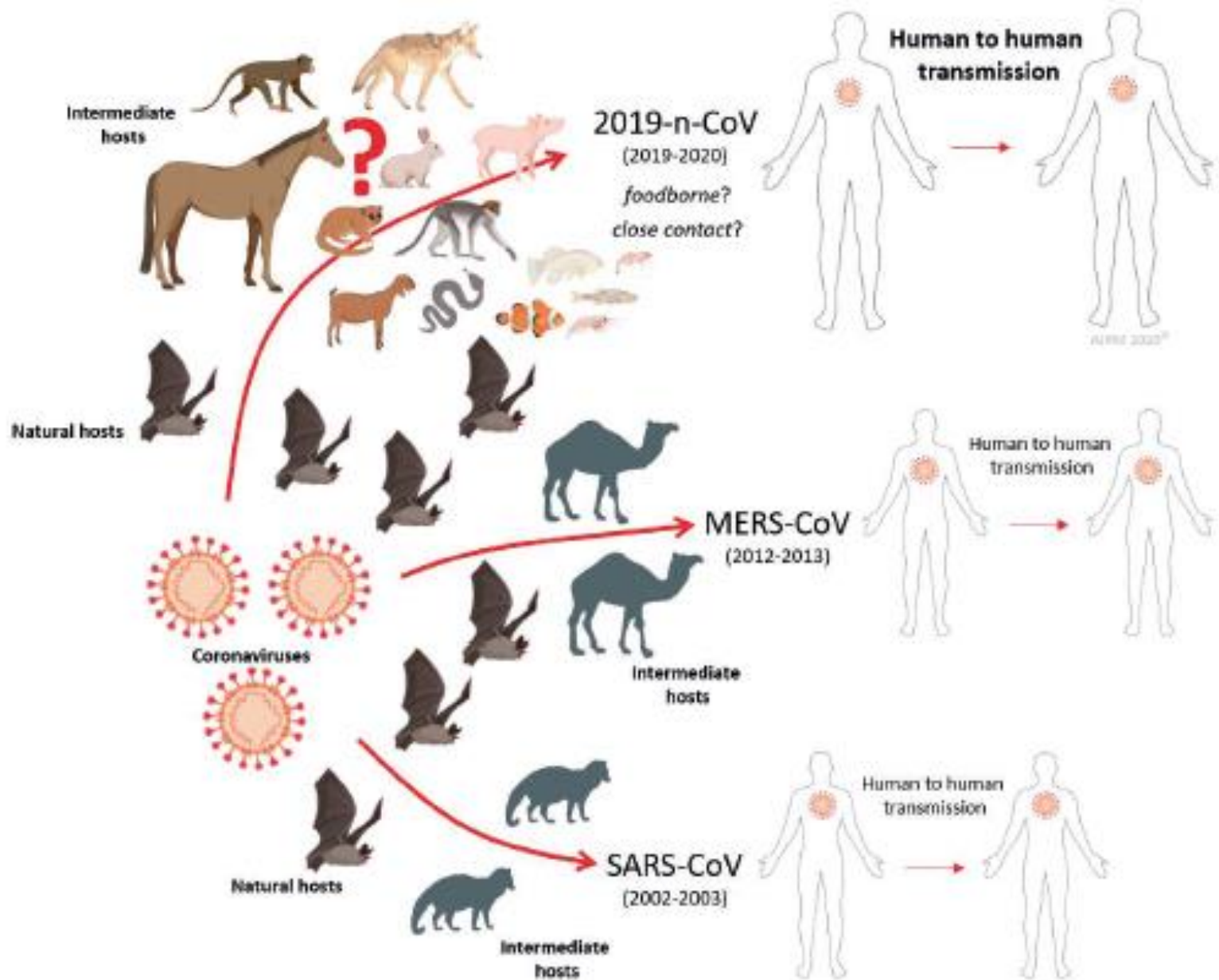
Los coronavirus son una gran familia de virus que pueden causar enfermedad respiratoria tanto en humanos como en animales. SARS

[ARN monocatenario positivo.](#)

**La secuencia del betacoronavirus de Wuhan muestran semejanzas con los betacoronavirus encontrados en [murciélagos](#), pero son genéticamente distintos de otros coronavirus como el [SARS Co-V](#) y el [MERS-CoV](#).**

Cinco genomas del nuevo coronavirus han sido aisladas y reportadas, incluyendo BetaCoV/Wuhan/IVDC-HB-01/2019, BetaCoV/Wuhan/IVDC-HB-04/2020, BetaCoV/Wuhan/IVDC-HB-05/2019, BetaCoV/Wuhan/WIV04/2019, y BetaCoV/Wuhan/IPBCAMS-WH-01/2019.

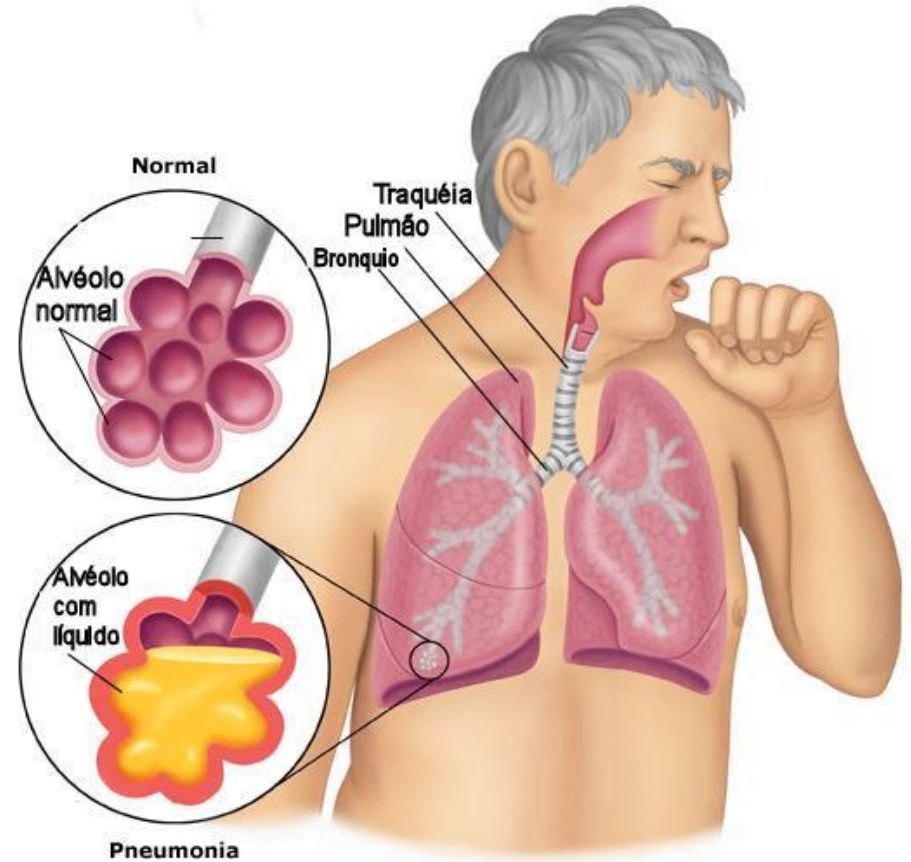
**Figure 1 – Potential animal origins of human coronaviruses.**

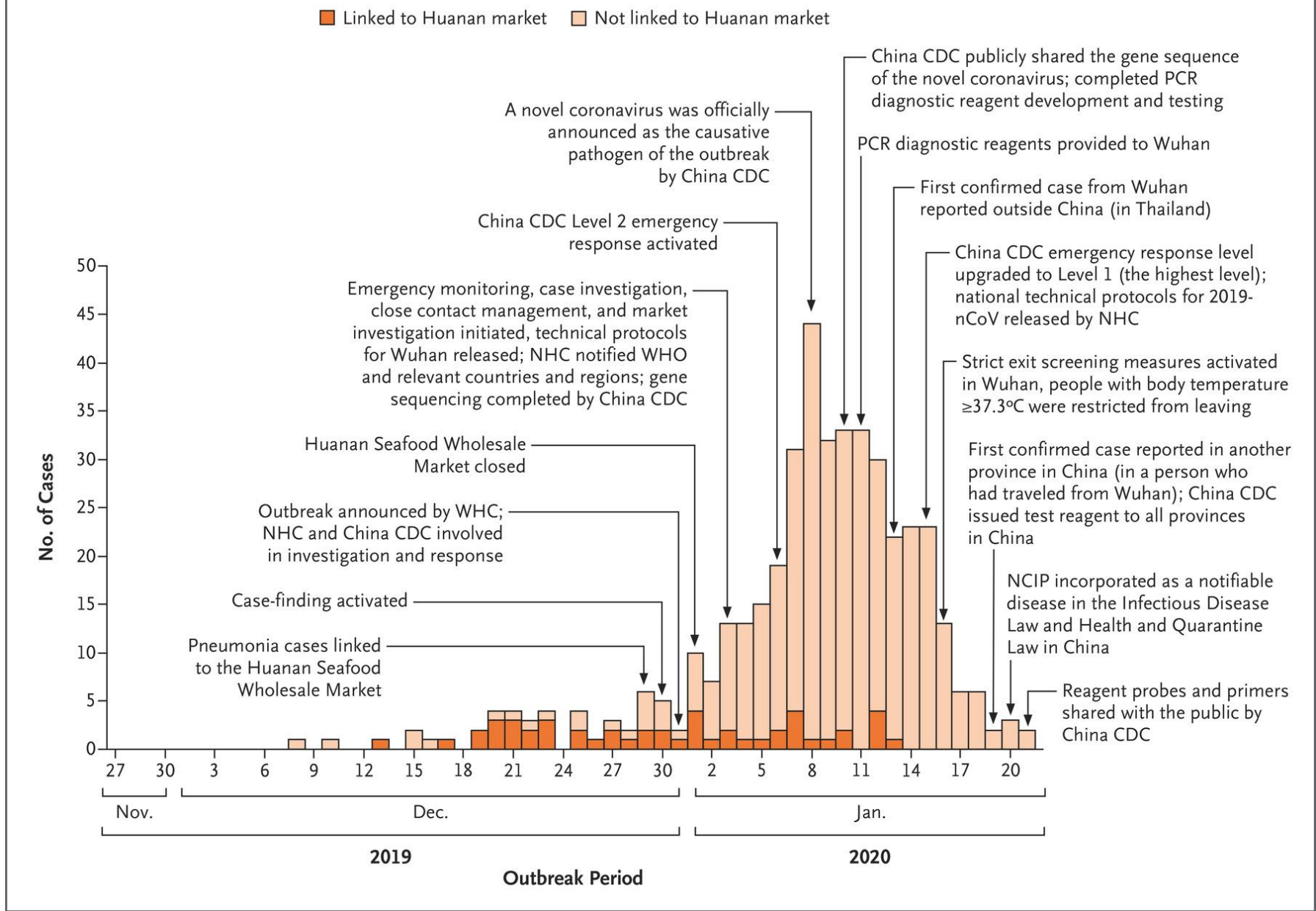


# Início del brote de SARS en un mercado de mariscos de Wuhan.

Diciembre 2019

## SINDROME AGUDO RESPIRATORIO GRAVE / NEUMONÍA GRAVE



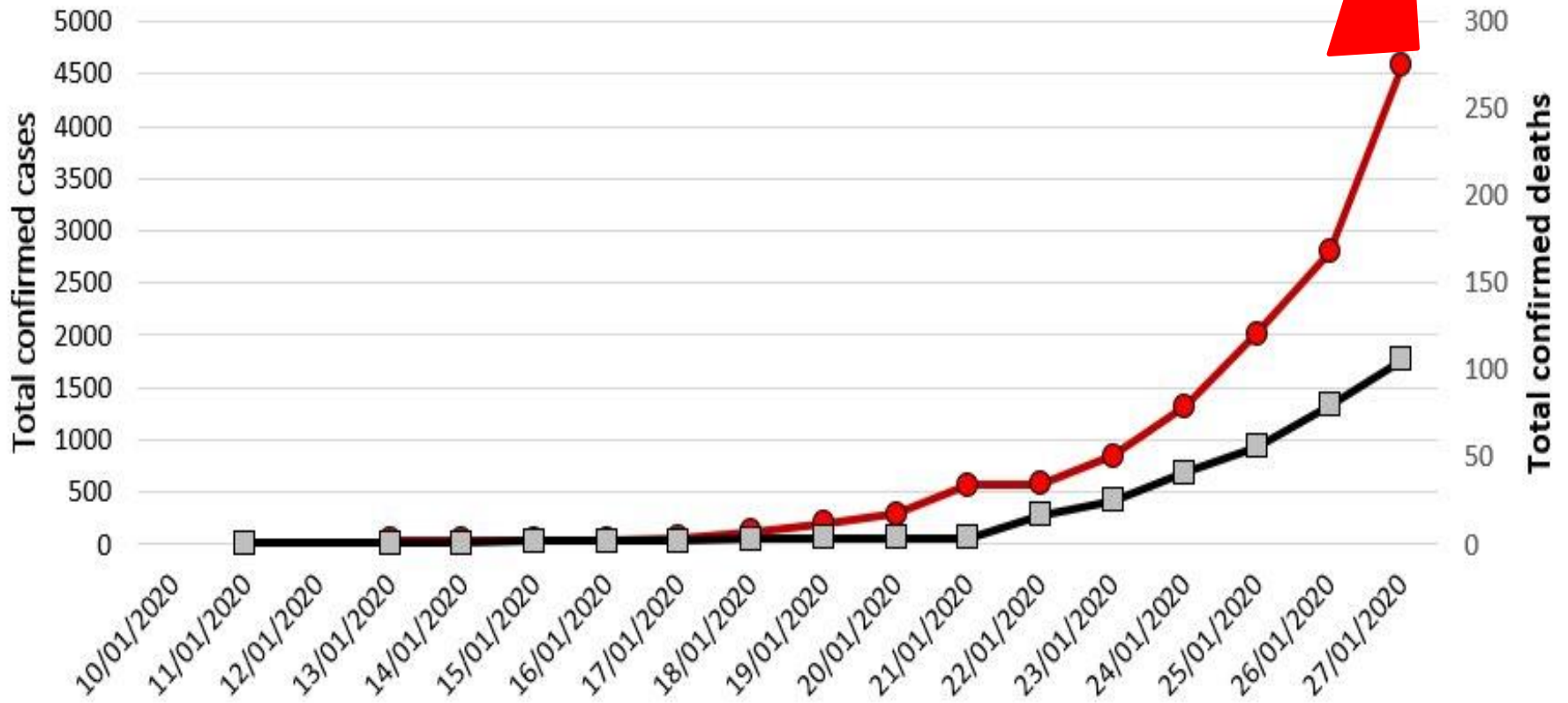


**Figure 1. Onset of Illness among the First 425 Confirmed Cases of Novel Coronavirus (2019-nCoV)-Infected Pneumonia (NCIP) in Wuhan, China.** The decline in incidence after January 8 is likely to be due to delays in diagnosis and laboratory confirmation. China CDC denotes Chinese Center for Disease Control and Prevention, NHC National Health Commission of the People’s Republic of China, PCR polymerase chain reaction, WHC Wuhan Health Commission, and WHO World Health Organization.

**+20.000 CASOS 04/02/2020**

# Wuhan seafood market pneumonia coronavirus

Global cumulative case totals

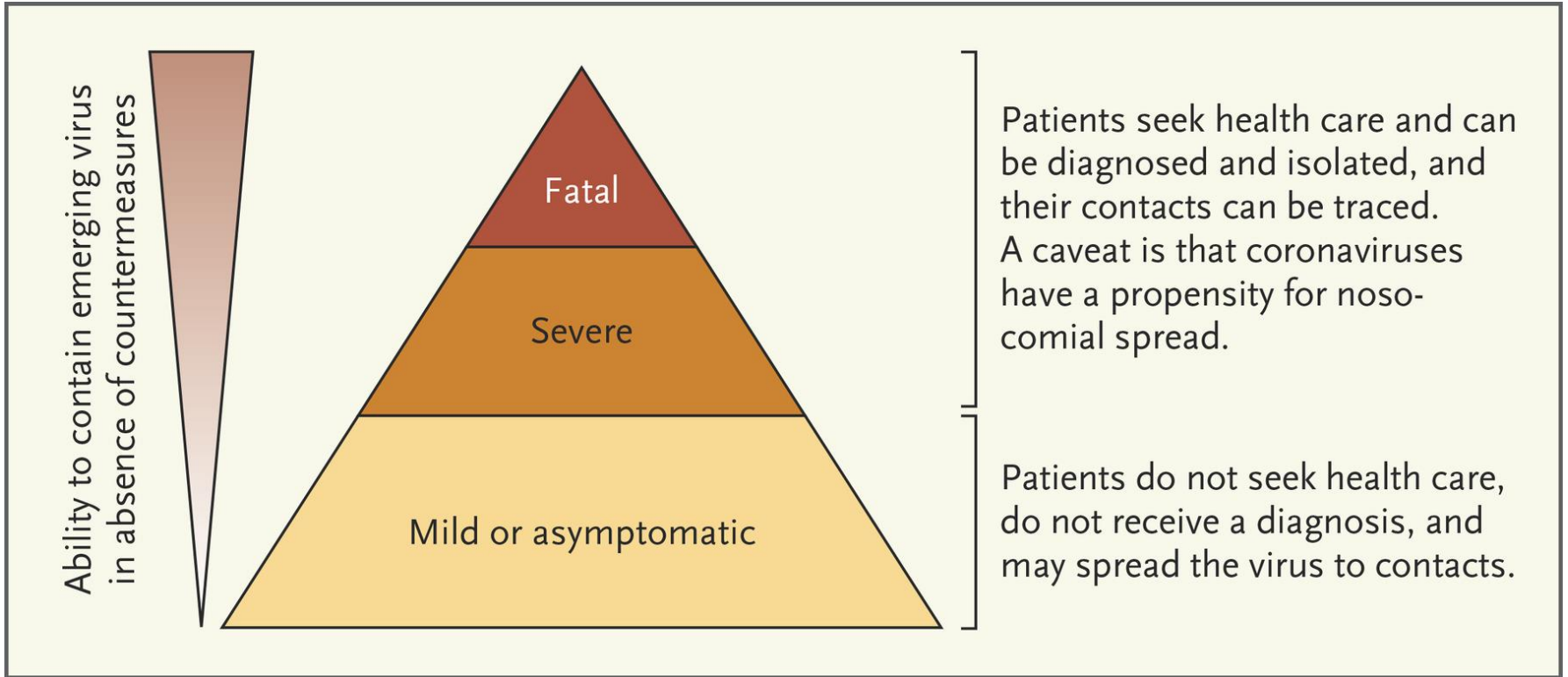


Data from Flutrackers.com, National Health Commission of the PRC, WHO, Wuhan Municipal Health Commission

Prepared by Ian M Macjkay, virologydownunder.com

Last update: 28JAN2020 AEST





**Figure 1. Surveillance Pyramid and Its Relation to Outbreak Containment.** The proportion of mild and asymptomatic cases versus severe and fatal cases is currently unknown for 2019-nCoV — a knowledge gap that hampers realistic assessment of the virus’s epidemic potential and complicates the outbreak response.

INFECCIÓN			
INAPARENTE	APARENTE		
	MODERADA	GRAVE	FATAL
a	b	c	d

$$\text{Patogenicidad} = \frac{b + c + d}{a + b + c + d} = \frac{\text{casos de enfermedad aparente}}{\text{total de infectados}}$$

$$\text{Virulencia} = \frac{c + d}{b + c + d} = \frac{\text{casos graves y fatales}}{\text{total de casos aparentes}}$$

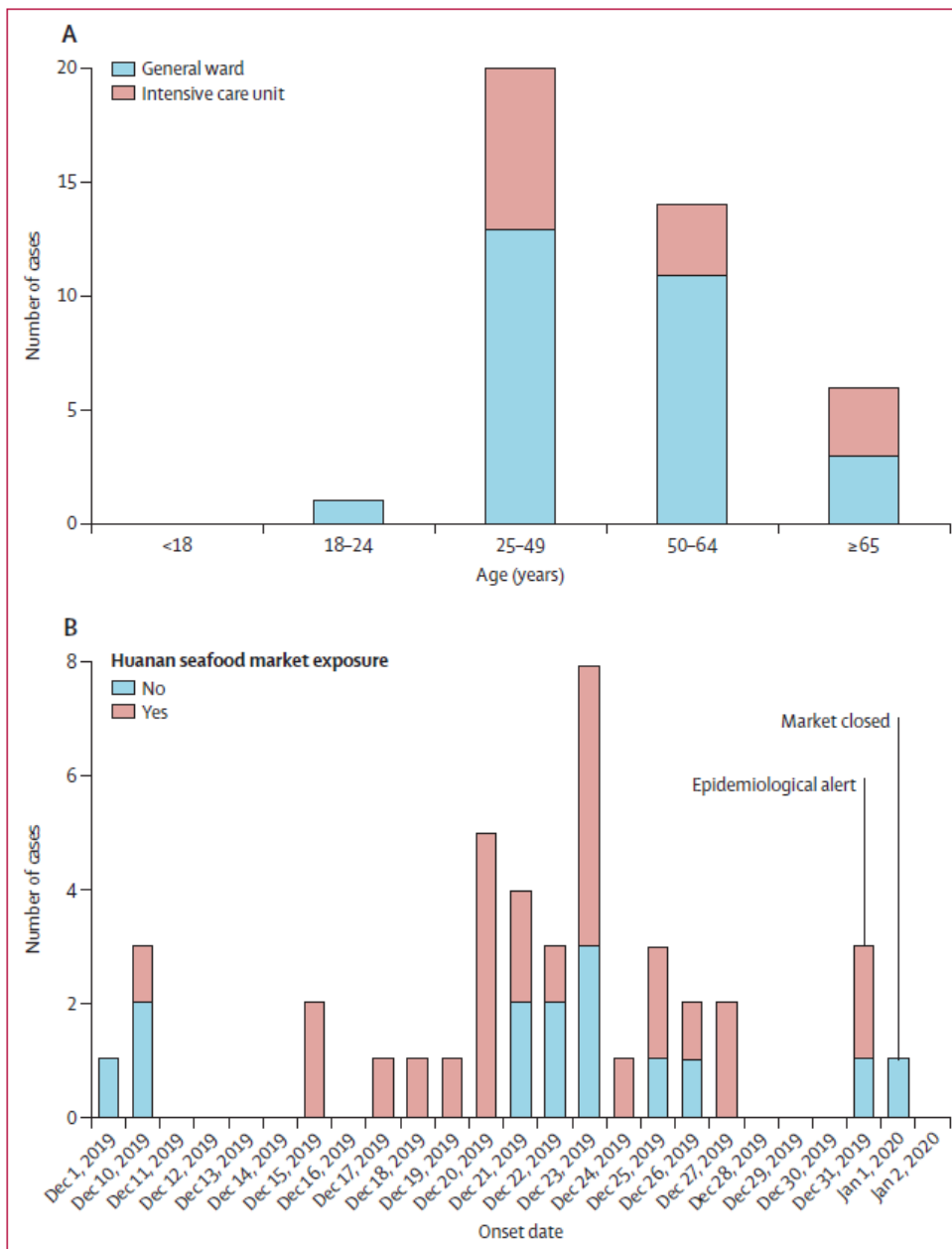
$$\text{Letalidad} = \frac{d}{b + c + d} = \frac{\text{casos fatales}}{\text{total de casos aparentes}}$$

# SERIES DE CASOS EXPRESIÓN CLÍNICA

**Pacientes adultos  
25 a más de 65 a.**

**15-20% CASOS GRAVES  
REQUIEREN CUIDADOS INTENSIVOS**

**Expuestos al mercado de Huan en rojo**



**Figure 1: Date of illness onset and age distribution of patients with laboratory-confirmed 2019-nCoV infection**

	All patients (n=41)	ICU care (n=13)	No ICU care (n=28)	p value
<b>Characteristics</b>				
Age, years	49.0 (41.0–58.0)	49.0 (41.0–61.0)	49.0 (41.0–57.5)	0.60
Sex	..	..	..	0.24
Men	30 (73%)	11 (85%)	19 (68%)	..
Women	11 (27%)	2 (15%)	9 (32%)	..
Huanan seafood market exposure	27 (66%)	9 (69%)	18 (64%)	0.75
Current smoking	3 (7%)	0	3 (11%)	0.31
Any comorbidity	13 (32%)	5 (38%)	8 (29%)	0.53
Diabetes	8 (20%)	1 (8%)	7 (25%)	0.16
Hypertension	6 (15%)	2 (15%)	4 (14%)	0.93
Cardiovascular disease	6 (15%)	3 (23%)	3 (11%)	0.32
Chronic obstructive pulmonary disease	1 (2%)	1 (8%)	0	0.14
Malignancy	1 (2%)	0	1 (4%)	0.49
Chronic liver disease	1 (2%)	0	1 (4%)	0.68
<b>Signs and symptoms</b>				
Fever	40 (98%)	13 (100%)	27 (96%)	0.68
Highest temperature, °C	..	..	..	0.037
<37.3	1 (2%)	0	1 (4%)	..
37.3–38.0	8 (20%)	3 (23%)	5 (18%)	..
38.1–39.0	18 (44%)	7 (54%)	11 (39%)	..
>39.0	14 (34%)	3 (23%)	11 (39%)	..
Cough	31 (76%)	11 (85%)	20 (71%)	0.35
Myalgia or fatigue	18 (44%)	7 (54%)	11 (39%)	0.38
Sputum production	11/39 (28%)	5 (38%)	6/26 (23%)	0.32
Headache	3/38 (8%)	0	3/25 (12%)	0.10
Haemoptysis	2/39 (5%)	1 (8%)	1/26 (4%)	0.46
Diarrhoea	1/38 (3%)	0	1/25 (4%)	0.66
Dyspnoea	22/40 (55%)	12 (92%)	10/27 (37%)	0.0010
Days from illness onset to dyspnoea	8.0 (5.0–13.0)	8.0 (6.0–17.0)	6.5 (2.0–10.0)	0.22
Days from first admission to transfer	5.0 (1.0–8.0)	8.0 (5.0–14.0)	1.0 (1.0–6.5)	0.002
Systolic pressure, mm Hg	125.0 (119.0–135.0)	145.0 (123.0–167.0)	122.0 (118.5–129.5)	0.018
Respiratory rate >24 breaths per min	12 (29%)	8 (62%)	4 (14%)	0.0023

Data are median (IQR), n (%), or n/N (%), where N is the total number of patients with available data. p values comparing ICU care and no ICU care are from  $\chi^2$  test, Fisher's exact test, or Mann-Whitney U test. 2019-nCoV=2019 novel coronavirus. ICU=intensive care unit.

www.thelancet.com Published online January 24, 2020 [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5)

Table 1: Demographics and baseline characteristics of patients infected with 2019-nCoV

6736(20)30183-5

**Adultos de 50 años**

**Sexo: 60-70% masculinos**

**Fiebre casi todos 98%**

**Tos 76%**

**Mialgias y fatiga 44%**

**Secreción y esputo 28%**

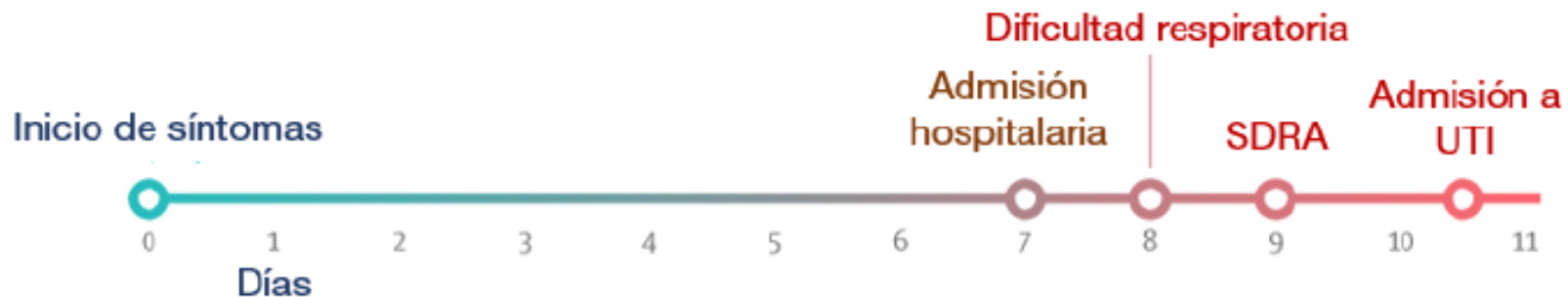
**Disnea 55%**

## Principales características de Coronavirus emergentes

	<b>2019-nCoV</b>	<b>MERS-CoV</b>	<b>SARS-CoV</b>
Fecha	2019-12	2012-06	2002-11
Lugar	Wuhan, China	Jeddah, Arabia	Guangdong, China
Edad	49 (21-76)	56 (14-94)	40 (1-91)
Hombre/Mujer	2.7/1	3.3/1	1/1.25
Casos confirmados	4586	2494	8096
Mortalidad	106 (2.3%)	858 (37%)	744 (10%)
Personal de salud	n=16	9.8%	23.1%
Síntomas			
Fiebre	98%	98%	99%
Tos	76%	47%	29-75%
Disnea	55%	72%	40%
Diarrea	3%	26%	25%
Dolor de garganta	0	21%	13-25%
ARM	9.8%	80%	20%

Zhu N, Zang D, Wang W et al - A Novel Coronavirus from Patients with Pneumonia in China, 2019 - N Zhu et al. N Engl J Med. 2020

## TIMELINE DE LA INFECCIÓN POR 2019-nCoV



Media de tiempo desde el inicio de los síntomas  
(fiebre 98%, tos 75%, mialgias o fatiga 44% y otros)

Basado en infografía de  
**THE LANCET**

	All patients (n=41)	ICU care (n=13)	No ICU care (n=28)	p value
Duration from illness onset to first admission	7.0 (4.0-8.0)	7.0 (4.0-8.0)	7.0 (4.0-8.5)	0.87
<b>Complications</b>				
Acute respiratory distress syndrome	12 (29%)	11 (85%)	1 (4%)	<0.0001
RNAemia	6 (15%)	2 (15%)	4 (14%)	0.93
Cycle threshold of RNAemia	35.1 (34.7-35.1)	35.1 (35.1-35.1)	34.8 (34.1-35.4)	0.3545
Acute cardiac injury*	5 (12%)	4 (31%)	1 (4%)	0.017
Acute kidney injury	3 (7%)	3 (23%)	0	0.027
Secondary infection	4 (10%)	4 (31%)	0	0.0014
Shock	3 (7%)	3 (23%)	0	0.027
<b>Treatment</b>				
Antiviral therapy	38 (93%)	12 (92%)	26 (93%)	0.46
Antibiotic therapy	41 (100%)	13 (100%)	28 (100%)	NA
Use of corticosteroid	9 (22%)	6 (46%)	3 (11%)	0.013
Continuous renal replacement therapy	3 (7%)	3 (23%)	0	0.027
<b>Oxygen support</b>				
Oxygen support	..	..	..	<0.0001
Nasal cannula	27 (66%)	1 (8%)	26 (93%)	..
Non-invasive ventilation or high-flow nasal cannula	10 (24%)	8 (62%)	2 (7%)	..
Invasive mechanical ventilation	2 (5%)	2 (15%)	0	..
Invasive mechanical ventilation and ECMO	2 (5%)	2 (15%)	0	..
<b>Prognosis</b>				
Prognosis	..	..	..	0.014
Hospitalisation	7 (17%)	1 (8%)	6 (21%)	..
Discharge	28 (68%)	7 (54%)	21 (75%)	..
Death	6 (15%)	5 (38%)	1 (4%)	..

Data are median (IQR) or n (%). p values are comparing ICU care and no ICU care. 2019-nCoV=2019 novel coronavirus. ICU=intensive care unit. NA=not applicable. ECMO=extracorporeal membrane oxygenation. \*Defined as blood levels of hypersensitive troponin I above the 99th percentile upper reference limit (>28 pg/mL) or new abnormalities shown on electrocardiography and echocardiography.

www.thelancet.com Published online January 24, 2020 [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5)

Table 3: Treatments and outcomes of patients with 2019-nCoV

**Complicaciones Respiratorias 29%**

**Anemia 15%**

**Lesión aguda cardíaca 12%**

**Lesión aguda riñón 10%**

**Infección secundaria 10%**

**Shock 7%**

**Ventilación asistida 5%**

Data as reported by 4 February 2020\*

### SITUATION IN NUMBERS

total and new cases in last 24  
hours

#### Globally

20630 confirmed (3241 new)

#### China

20471 confirmed (3235 new)

2788 severe (492 new)

425 deaths (64 new)

#### Outside of China

159 confirmed (6 new)

23 countries

1 death

### WHO RISK ASSESSMENT

China Very High

Regional Level High

Global Level High

## 2019 -nCoV

“2019-nCoV acute respiratory disease”

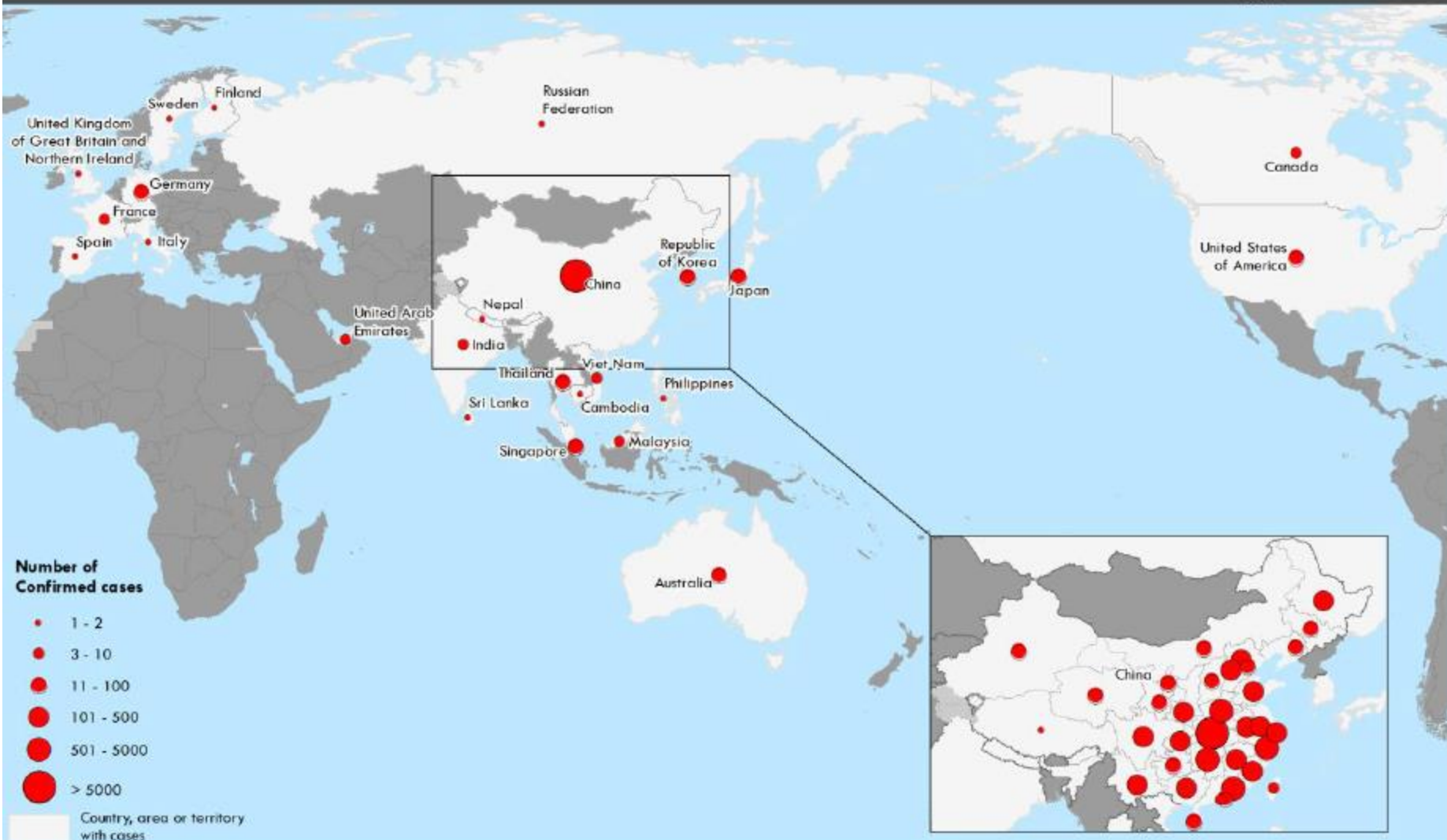
MEDICIÓN DE GRAVEDAD DE LA INFECCIÓN

Letalidad confirm. =  $425/20.630 = 2,1\%$

Graves + muertes (confirm.) =  $15,7\%$



# Distribution of 2019-nCoV cases as of 4 February 2020



Data Source: World Health Organization, National Health Commission of the People's Republic of China  
 Map Production: WHO Health Emergencies Programme

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The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever as the part of the World Health Organization 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 approximately border lines for which there may not yet be full agreement.

Área: 9 897 961 km<sup>2</sup>

**República Popular China**

Población: 1, 343, 239,923 habitantes

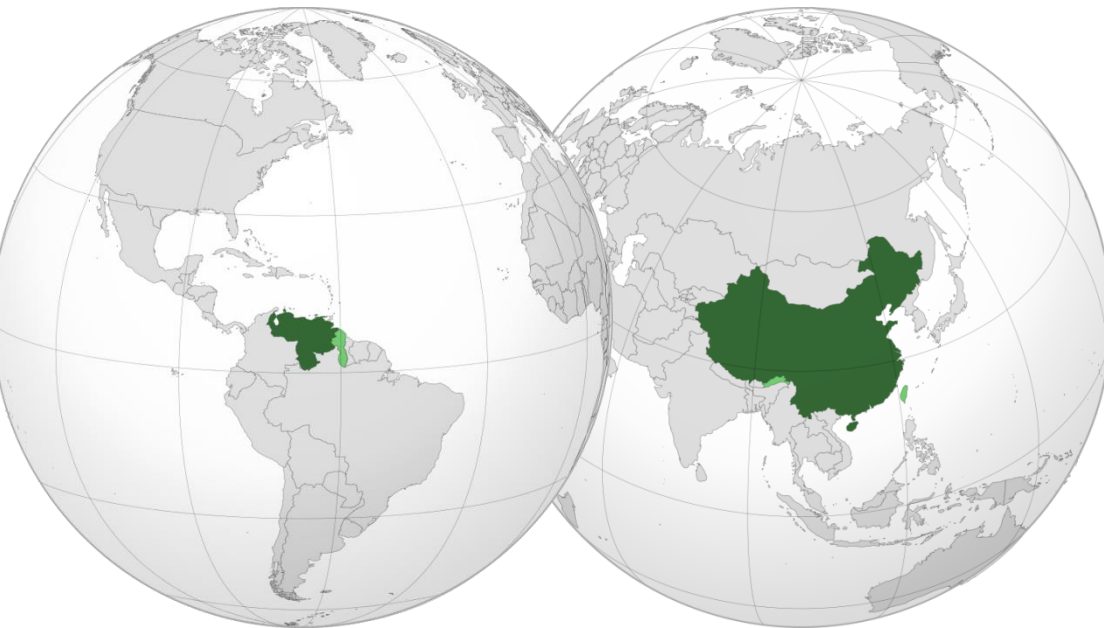
Idioma oficial: chino mandarín

Capital: Pekín

Moneda oficial: Yuan chino (CNY)

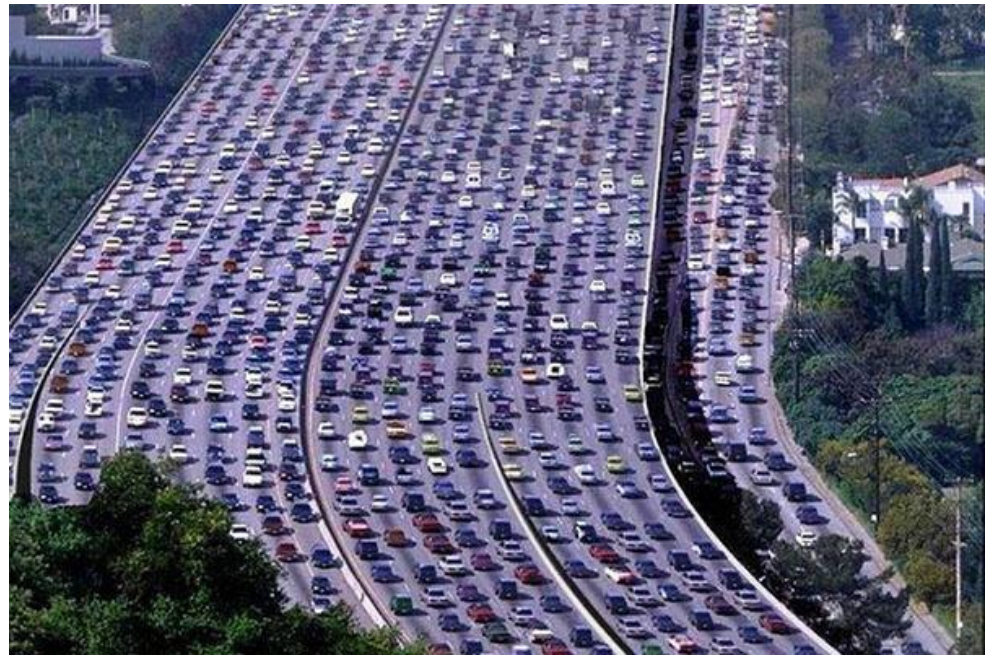


**Casi 11 veces la extensión territorial de Venezuela**  
**45 veces la población de Venezuela**



# Sistema Nacional de Carreteras Troncales China





## 10 CIUDADES MÁS POBLADAS DE CHINA

- Shanghai Shanghai 22, 315,426 habitantes
- Beijing Beijing 18, 827,069 habitantes
- Tianjin Tianjin 11, 090,314 habitantes
- Guangzhou Guangdong 11, 070,654 habitantes
- Shenzhen Guangdong 10, 357,938 habitantes
- Dongguan Guangdong 8, 008,135 habitantes
- Chengdu Sichuan 7, 123,697 habitantes
- Hong Kong Hong Kong 7, 055,071 habitantes
- Nanjing Jiangsu 6, 852,984 habitantes

**Wuhan Hubei 6, 434,373 habitantes**



Sistema Nacional de Carreteras Troncales China



**Wuhan**



**Figure 1. Countries, territories or areas with reported confirmed cases of 2019-nCoV, 30 January 2020**

**Distribution of 2019-nCoV cases as of 30 January 2020**

**SITUATION IN NUMBERS**

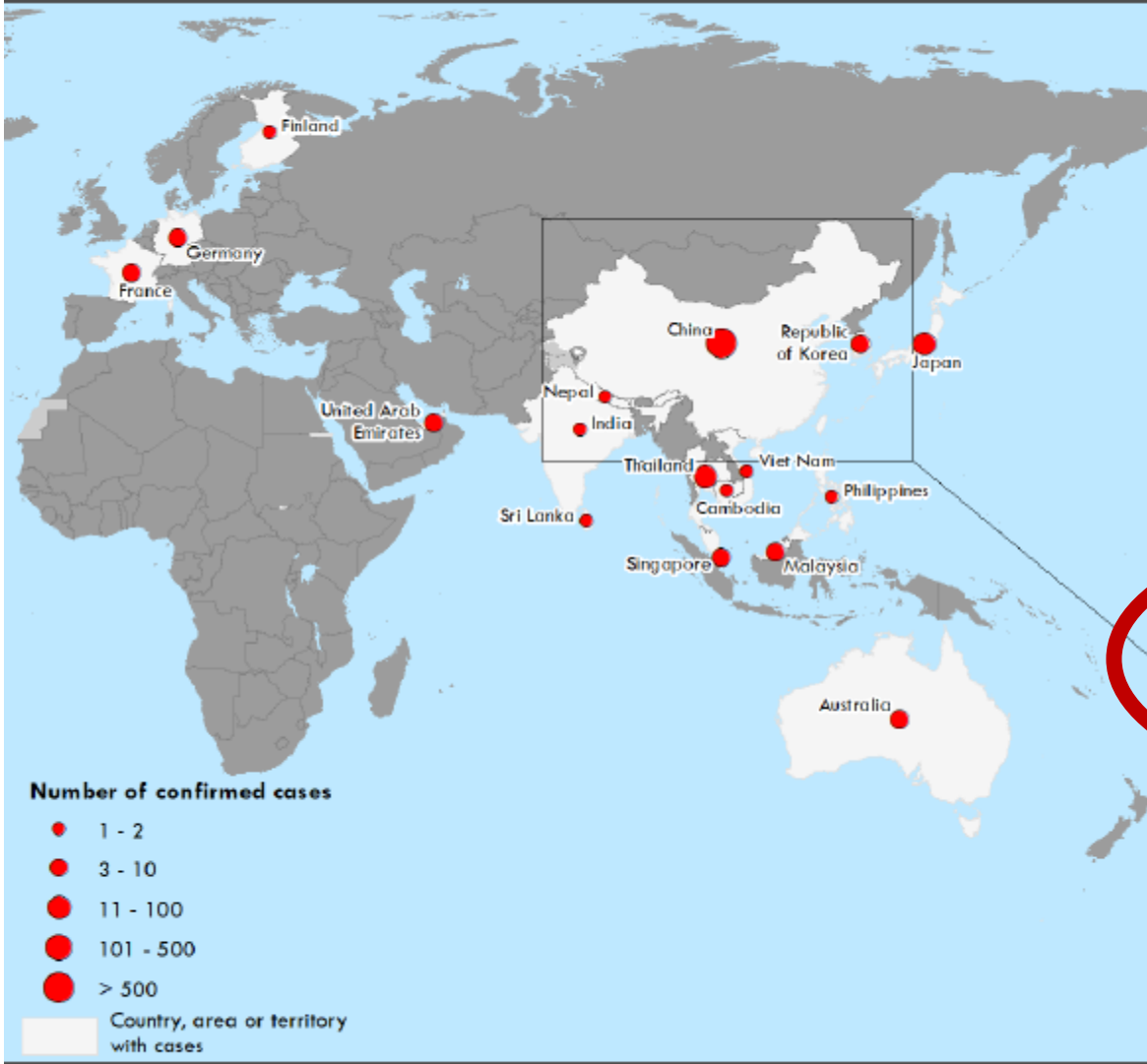
**Globally**  
7818 confirmed

**China**  
7736 confirmed  
12167 suspected  
1370 severe  
170 deaths

**Outside of China**  
82 confirmed  
18 countries

**WHO RISK ASSESSMENT**

China	Very High
Regional Level	High
Global Level	High



Data Source: World Health Organization, National Health Commission of the People's Republic of China  
Map Production: WHO Health Emergencies Programme

Not applicable

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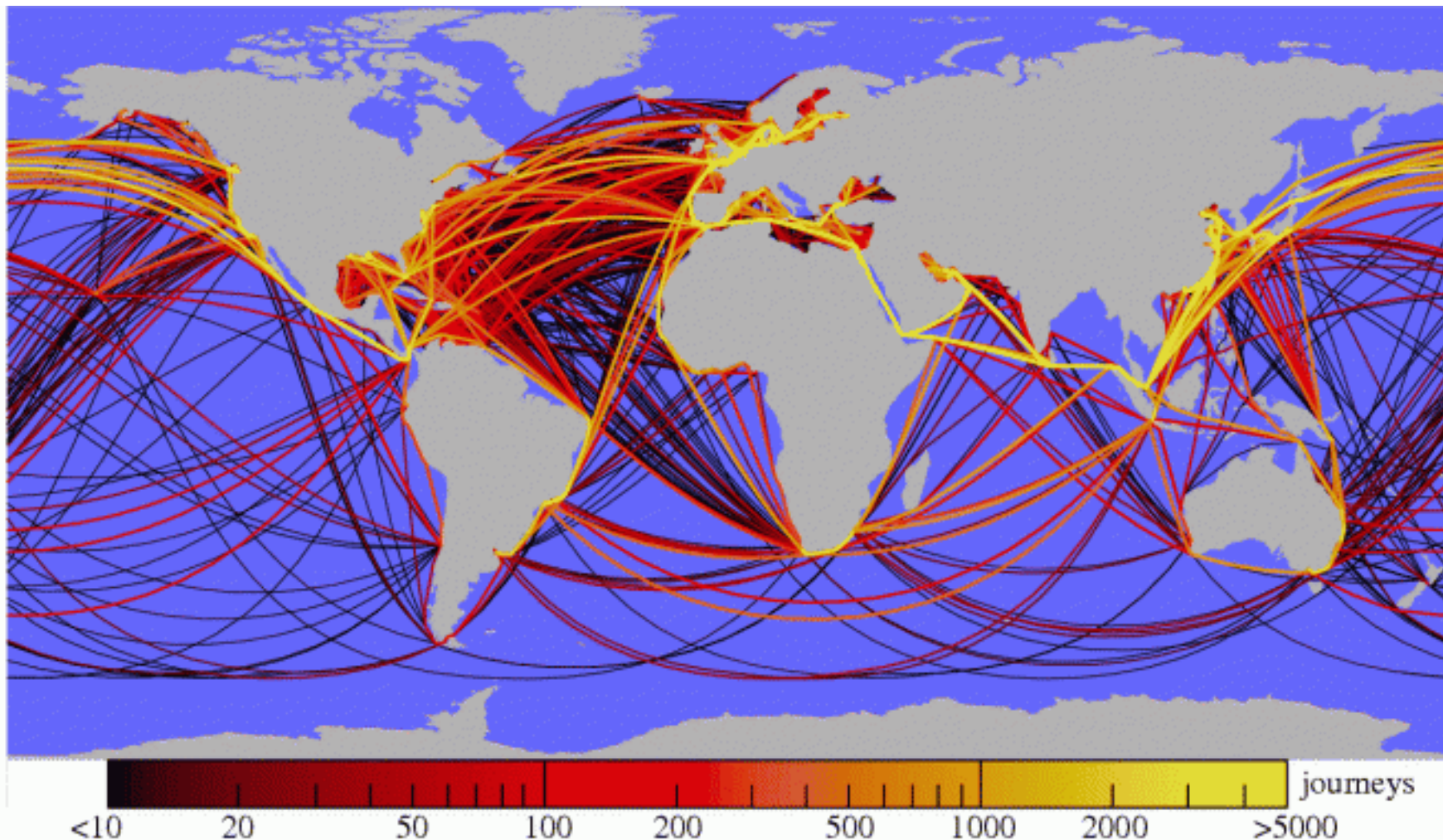
whoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

\*The situation report includes information reported to WHO Geneva by 10 AM



# Transporte aéreo: de cargas y personas.





## Transporte marítimo: de cargas y personas.





# La Ruta de la Seda en el siglo XXI



Fuente: datos propios

BAE Negocios

# CHINA Y SUS INVERSIONES EN EL MUNDO

Cifras en millones

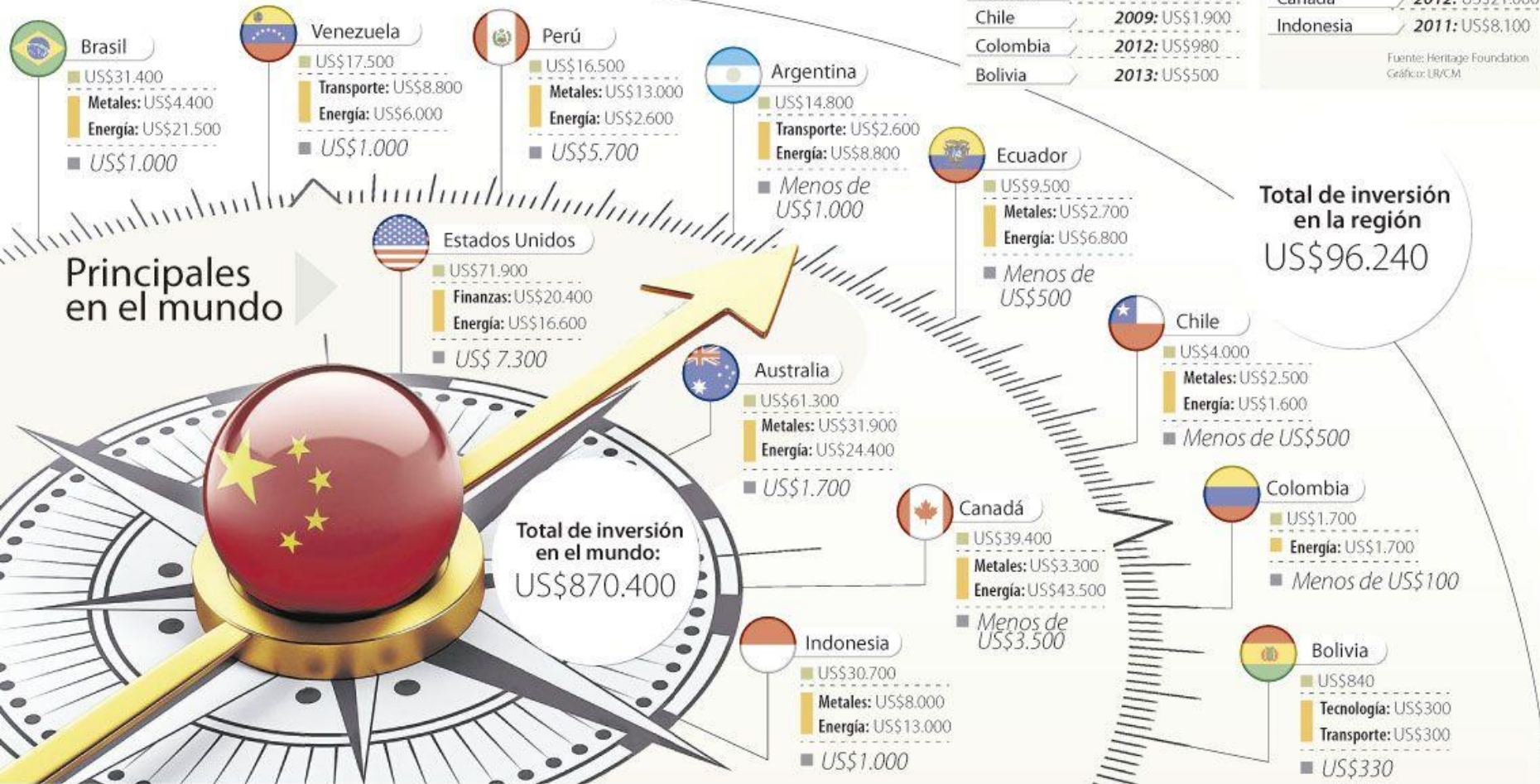
■ Monto de inversión desde 2005

■ Principales sectores

■ Inversión en 2014\*

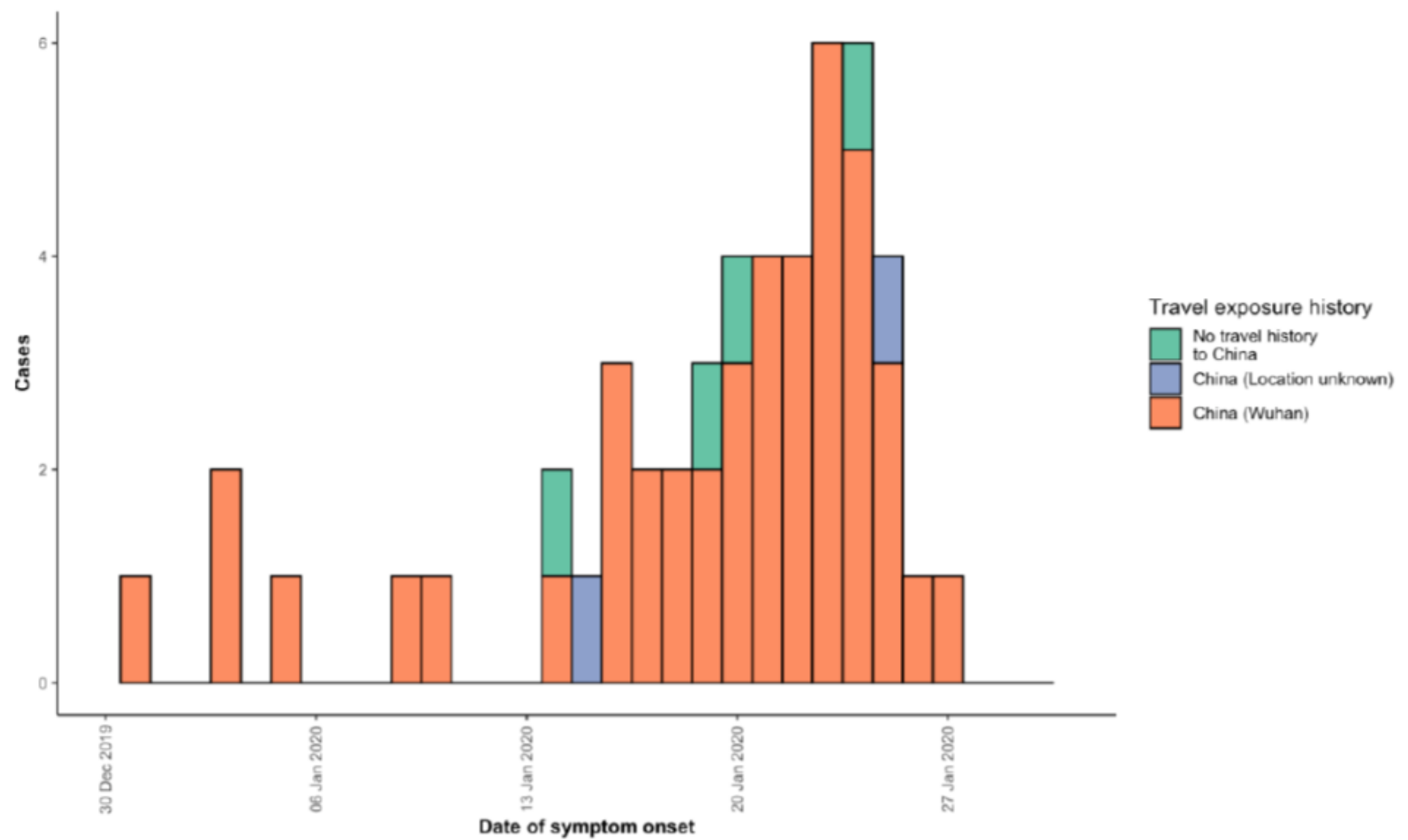
\* Cifras a primer semestre de 2014

## América Latina



Data as reported by 30 January 2020\*

Figure 2: Epidemic curve by date of onset of 2019-nCoV cases identified outside of China, 30 January 2020



Note for figure 2: Of the 82 cases reported outside China, seven were detected while asymptomatic. For the remaining 75 cases, information on date of onset is available only for the 49 cases presented in the epidemiologic curve.

# Incubation period of the virus range from 2-10 days

Figure 2: Epidemic curve by date of onset of 2019-nCoV cases identified outside of China, 27 January 2020

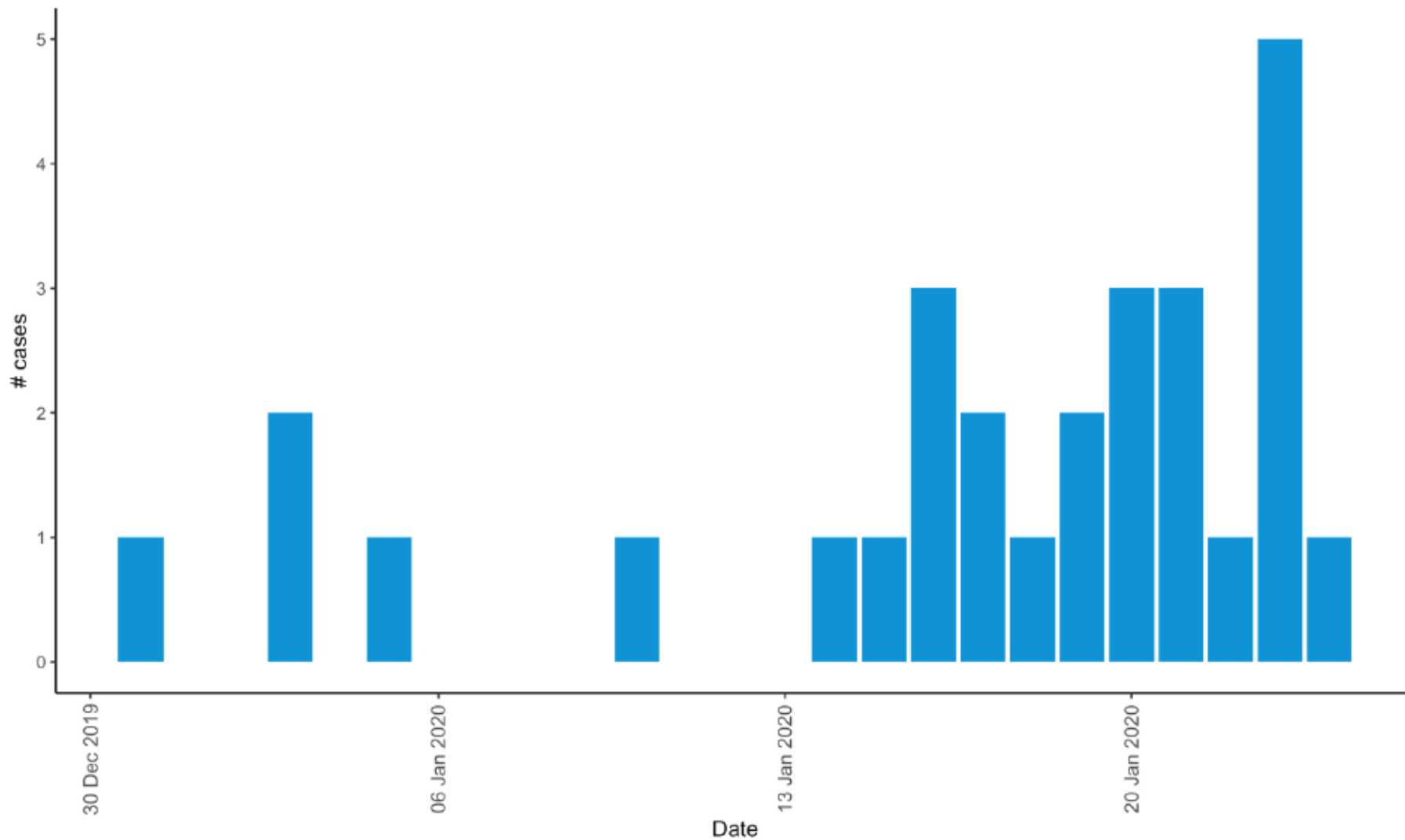


Figura 2.6 La cadena epidemiológica



# 2019 -nCoV -CADENA EPIDEMIOLÓGICA

## Fuente de infección

- Serpientes y murciélagos son reservorios.
- Humanos infectados y enfermos

## Vías de transmisión

- Contacto directo con secreciones y líquidos corporales
- Transmisión aérea
- Tos, estornudo, gotitas.



## Hospedero susceptible

- Todos, personas debilitadas con patologías crónicas y adultos.

05/02/2020

## Coronavirus: confirman el nacimiento de un bebé con el virus en Wuhan

Redacción  
BBC News Mundo

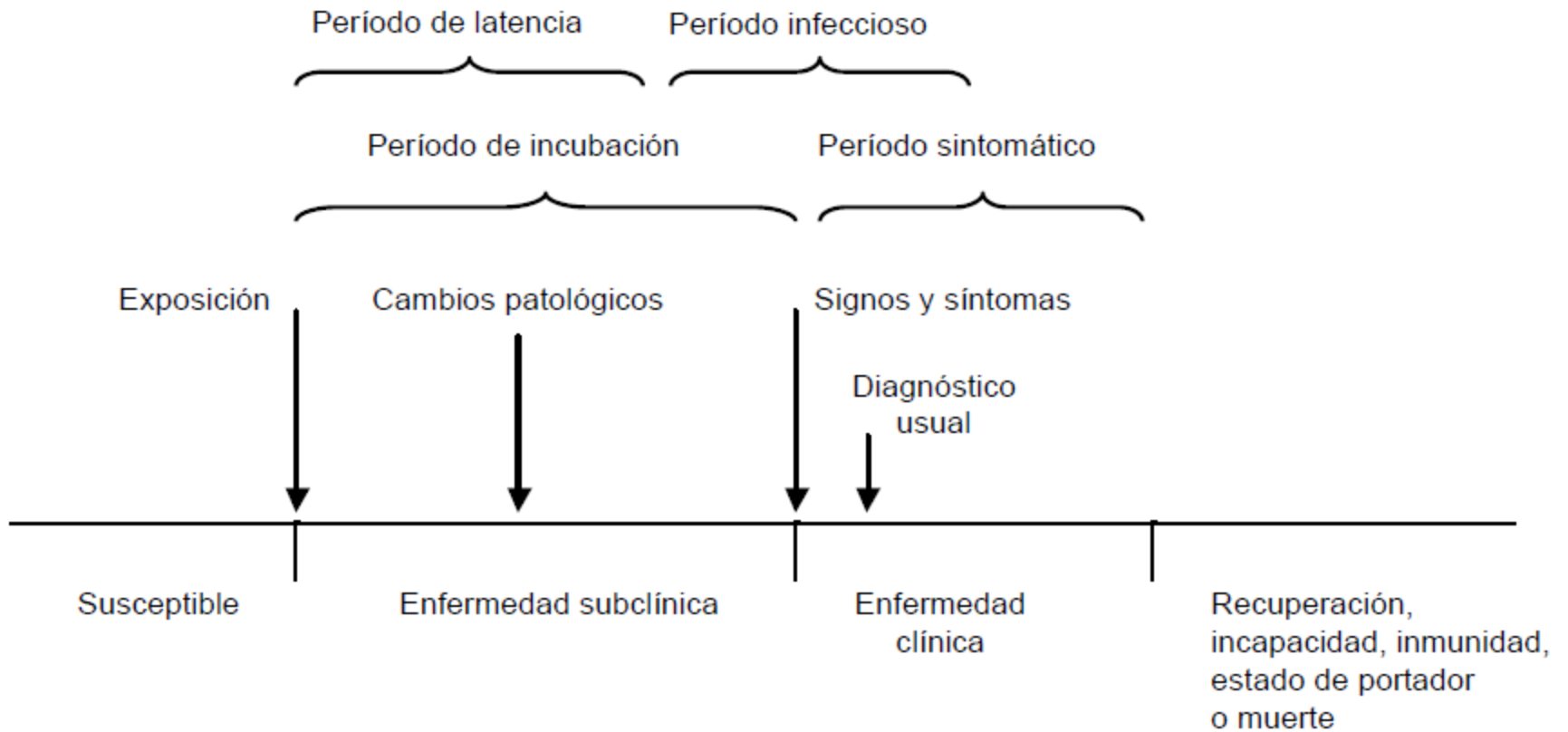
🕒 5 febrero 2020

🔗 Compartir



Una mujer lleva a un bebé con una máscara protectora en Hong Kong, donde desde el próximo sábado China Continental serán sometidos a una cuarentena obligatoria.

Figura 2.5 Historia natural de la enfermedad



?????????

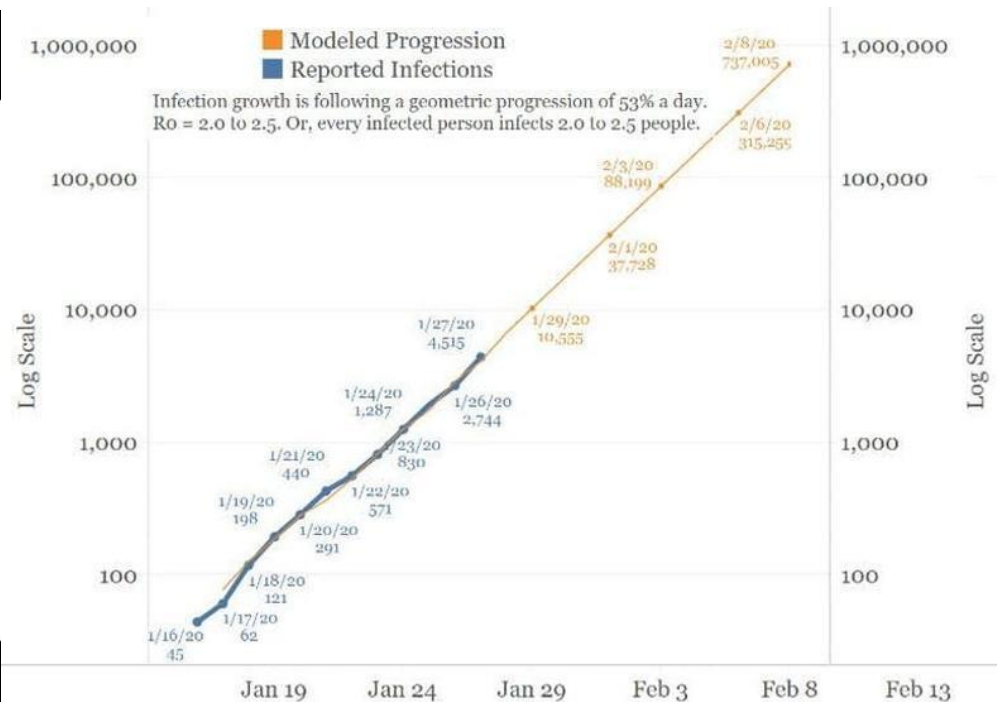
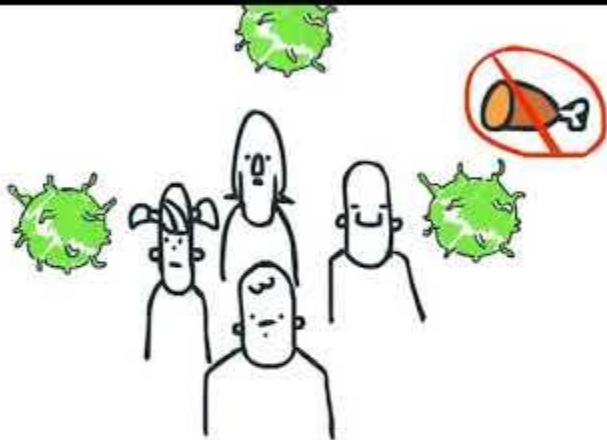


# El Ro o número de reproducción

Personas susceptibles

Período de transmisibilidad

Medidas de control



**Backgrounds** This is the first study to quantify the basic reproduction number,  $R_0$ , of 2019-nCoV in the early phase of the outbreak.

**Methods** Accounting for the impact of the variations in disease reporting rate, we modelled the epidemic curve of 2019-nCoV cases time series, in mainland China from January 10 to January 21, 2020, through the exponential growth.

**Findings** The early outbreak data largely follows the exponential growth. We estimated that the mean  $R_0$  ranges from 3.30 (95%CI: 2.73-3.96) to 5.47 (95%CI: 4.16-7.10)

**Conclusion** The mean estimate of  $R_0$  for the 2019-nCoV ranges from 3.30 (95%CI: 2.73-3.96) to 5.47 (95%CI: 4.16-7.10), and significantly larger than 1. **Our findings indicate the potential of 2019-nCoV to cause outbreaks.**

**Preliminary estimation of the basic reproduction number of novel coronavirus (2019-nCoV) in China, from 2019 to 2020: A data-driven analysis in the early phase of the outbreak**

[View ORCID Profile](#) Shi Zhao, Jinjun Ran, Salihu

S Musa, Guangpu Yang, Yijun Lou, Daozhou Gao, Lin Yang, [View ORCID Profile](#) Daihai He

**doi:** <https://doi.org/10.1101/2020.01.23.916395>

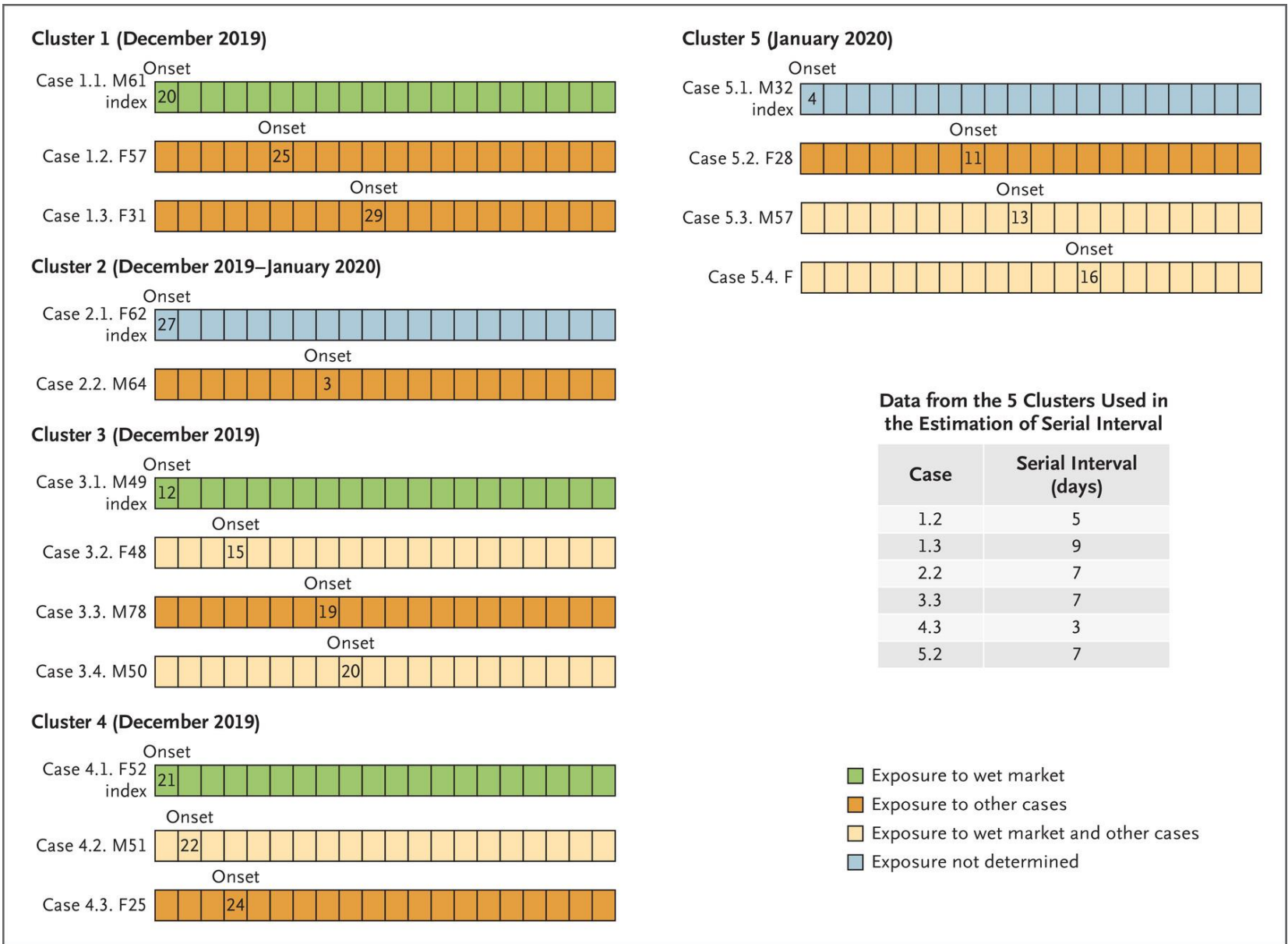
# TRANSMISIÓN DIRECTA DE PERSONA A PERSONA

## A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: a study of a family cluster

*Jasper Fuk-Woo Chan\*, Shuofeng Yuan\*, Kin-Hang Kok\*, Kelvin Kai-Wang To\*, Hin Chu\*, Jin Yang, Fanfan Xing, Jieliang Liu, Cyril Chik-Yan Yip, Rosana Wing-Shan Poon, Hoi-Wah Tsoi, Simon Kam-Fai Lo, Kwok-Hung Chan, Vincent Kwok-Man Poon, Wan-Mui Chan, Jonathan Daniel Ip, Jian-Piao Cai, Vincent Chi-Chung Cheng, Honglin Chen, Christopher Kim-Ming Hui, Kwok-Yung Yuen*

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**Figure 3. Detailed Information on Exposures and Dates of Illness Onset in Five Clusters Including 16 Cases.** Numbers in boxes are calendar dates in December 2019 and January 2020. Data from the 5 secondary cases (patients who had clear exposure to only one index case and had no other potential source of infection) were used to estimate the serial interval distribution. The first four clusters were identified in Wuhan, and the fifth cluster was identified in Huanggang.

Se levantará la muralla china o serán solo unos infiltrados.

**CONTENCIÓN CHINA, SE LEVANTÓ EL GIGANTE!!!!!!!**



# OBJETIVOS ESTRATEGICOS PARA LA RESPUESTA

Limitar la transmisión humano a humano, reduciendo infecciones secundarias entre los contactos cercanos y los trabajadores de la salud, previniendo eventos para la amplificación de la transmisión y la propagación internacional desde China\*.

- Identificar, aislar y tratar a los casos de manera rápida y oportuna.
- Identificar y reducir la transmisión de fuentes animales.
- Examinar los puntos no conocidos u oscuros del espectro de la enfermedad y su severidad, la transmisibilidad de la infección, las opciones terapéuticas, y acelerar el desarrollo de diagnóstico, tratamiento y vacunas.
- Comunicar sobre los riesgos críticos y acontecimientos a las comunidades y luchar contra la desinformación.
- Minimizar el impacto socio-económico a través de alianzas multisectoriales.

## **Medidas de salud pública específicas para evitar la propagación\*:**

- Temprana y oportuna identificación y cuidados de los casos.
- Identificación y seguimiento de los contactos
- Prevención y control en los establecimientos de salud
- Control de salud de los viajeros
- Concientización de la población
- Comunicación de los riesgos

# CONTROL SANITARIO Y DE LOS ALIMENTOS



Vendor prepares a frog for sale in a Wuhan street market

Improvised table for cutting meat

Live frogs for sale

Fish and frog remains

Frog being slaughtered for client

Nylon industrial gloves

Unwashed buckets

Dirty scale



# CONTROL SANITARIO Y DE LOS ALIMENTOS



# CUARENTENA

**Wuhan, China, and at least 15 other cities have been quarantined as China attempts to halt the spread of the coronavirus. That's about 50 million people on lockdown.**

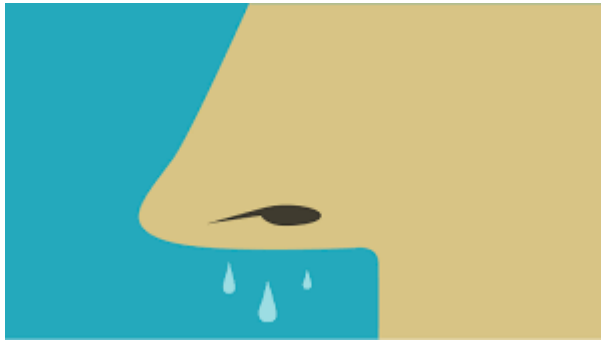
On January 23, authorities [put Wuhan under quarantine](#) — halting all public transportation, including city buses, trains, and ferries. The order prevents any buses or trains from coming into or leaving the city and grounds all planes at the Wuhan airport. Wuhan authorities started to limit car travel the next day as well, [The Guardian reported](#).

The city of Huanggang (which is home to around 7.5 million people) also went into lockdown last week, as authorities closed subway and train stations. By the following day, [10 additional cities](#) — Chibi, Enshi, Ezhou, Huangshi, Suizhou, Qianjiang, Xianning, Xiantao, Yichang, and Zhijiang — had followed suit with their own travel restrictions. As of Monday, the cities of Xiangyang, Jingmen, Xiaogan, and Dangyang were also quarantined.



## PROTECCIÓN PERSONAL

<https://www.businessinsider.com/wuhan-coronavirus-officials-quarantine-entire-city-2020-1>



**AISLAR LOS ENFERMOS**

**LAVARSE LAS MANOS**

**TAPARSE LA BOCA AL ESTORNUDAR O TOSER**

**USO DE PAÑUELOS DESECHABLES**



# CONTROLES DE PUERTOS Y AEROPUERTOS INTERNACIONAL



Public-health officials run thermal scans in Bangkok, Thailand. Lauren DeCicca/Getty

<https://www.businessinsider.com/wuhan-coronavirus-officials-quarantine-entire-city-2020-1>



## CONTROLES DE PUERTOS Y AEROPUERTOS INTERNACIONAL

# PREPARACIÓN Y PROTECCIÓN DEL PERSONAL DE SALUD





Hospital staff wash the emergency entrance of Wuhan Medical Treatment Center, where some infected with a new virus are being treated, in Wuhan, China, Wednesday, Jan. 22, 2020. AP Photo/Dake Kang

<https://www.businessinsider.com/video-inside-chinese-hospital-treating-wuhan-virus-coronavirus-2020-1>



# CONSTRUCCIÓN DE HOSPITALES



“This is the time for science, not rumors”

“Este es el tiempo de la ciencia, no de los rumores”

“This is the time para la solidaridad, no el estigma”

“Este es el tiempo de la so del estigma”



***Director general Tedros Adhanom. OMS***

*Al salir de la reunión después de la declaración del coronavirus una emergencia de salud pública de preocupación internacional 30 de enero de 2020*



**Departamento Medicina  
Preventiva y Social  
Escuela Luis Razetti, Facultad  
de Medicina, UCV**

**Agradecido por la invitación, muchas gracias!**

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Comisión de Inmunizaciones SVPP 2015-2018

**[risqueza@gmail.com](mailto:risqueza@gmail.com)**

# Preparación de Venezuela ante el 2019 nCV





# Gobierno pidió tomar precaución ante el coronavirus

*El Ministerio para la Salud activó sistema de vigilancia epidemiológica*



EL UNIVERSAL 29/01/2020 05:30 am

# FMV alerta: Venezuela no está preparada para afrontar crisis por el coronavirus

*"De entrar esta patología al país los médicos venezolanos una vez más, se dispondrán a enfrentar una (otra) crisis epidemiológica con éste nuevo virus, sin disponer de los insumos médicos para atender a los pacientes ni a nosotros mismos", dice el comunicado de la FMV*

**28 de enero de 2020**



<https://www.el-carabobeno.com/fmv-alerta-venezuela-no-esta-preparada-para-afrontar-crisis-por-el-coronavirus/>

# Cruz Roja: Venezuela no está preparada para atender eventuales casos de coronavirus

*Mario Villarroel, presidente de la Cruz Roja venezolana, indicó que el Ministerio de Salud es el organismo con atribuciones para tomar medidas ante la epidemia china del coronavirus. "La Cruz Roja solo puede apoyar", dijo*





# ¿Qué pasaría si el Coronavirus llega a Venezuela? Médicos responden



enero 30 2020

<https://www.lapatilla.com/2020/01/30/que-pasaria-si-el-coronavirus-llega-a-venezuela-medicos-responden/>

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