IPCRG 2020: Weekly Series of Hot Topic

Clinical Practice Webinars & Abstract Presentations

A warm welcome to the the 8th IPCRG Webinar

Breathing and feeling well through universal access to right care

Today's Agenda

1500hrs BST	**Welcome and Introductions** Janwillem Kocks, Webinar Chair
1505hrs	**COVID-19 & the Importance of Public Information & Education in Primary Care** Sundeep Salvi, India & Javiera Corbalán, Chile
1535hrs	**Discussion with your questions**
1550hrs	**COPD video / Comfort Break / Tai Chi with Siân**
1600hrs	**Oral Abstract Presentations**
1700hrs	**Close** Janwillem Kocks

Oral Abstract Presentations

1. **Ademgenoot – a serious game to motivate and empower asthma patients in adherence to their maintenance medication: a user-centered design study**
   Charlotte Poot, The Netherlands
2. **Virtual Home-Based Pulmonary Rehabilitation Programme for COPD Patients**
   Cathy Gillen, Ireland
3. **Prevalence of vitamin D deficiency and insufficiency in patients with chronic obstructive pulmonary disease** *Malek Chaabouni, Tunisia*
4. **Chronic respiratory disease (CRD) surveys in low- and middle-income countries (LMICs): A systematic scoping review of methodologies and outcomes**
   Nik Sherina Hanafi, Malaysia
5. **Development and validation of reference equations for lung function in healthy Sri Lankan Tamils** *Mathanki Sooriyakanthan, Sri Lanka*
6. **Assessing feasibility of methods to estimate cost of illness of COPD in western rural India** *Ankita Shrivastava, India*

Presentation 1

Sundeep Salvi, India

COVID-19 Challenges in Healthcare Delivery in India

PURE Foundation
Pulmocare Research and Education

Dr Sundeep Salvi

MD, DNB, PhD(UK), FCCP, Hon FRCP (Lon)

Director

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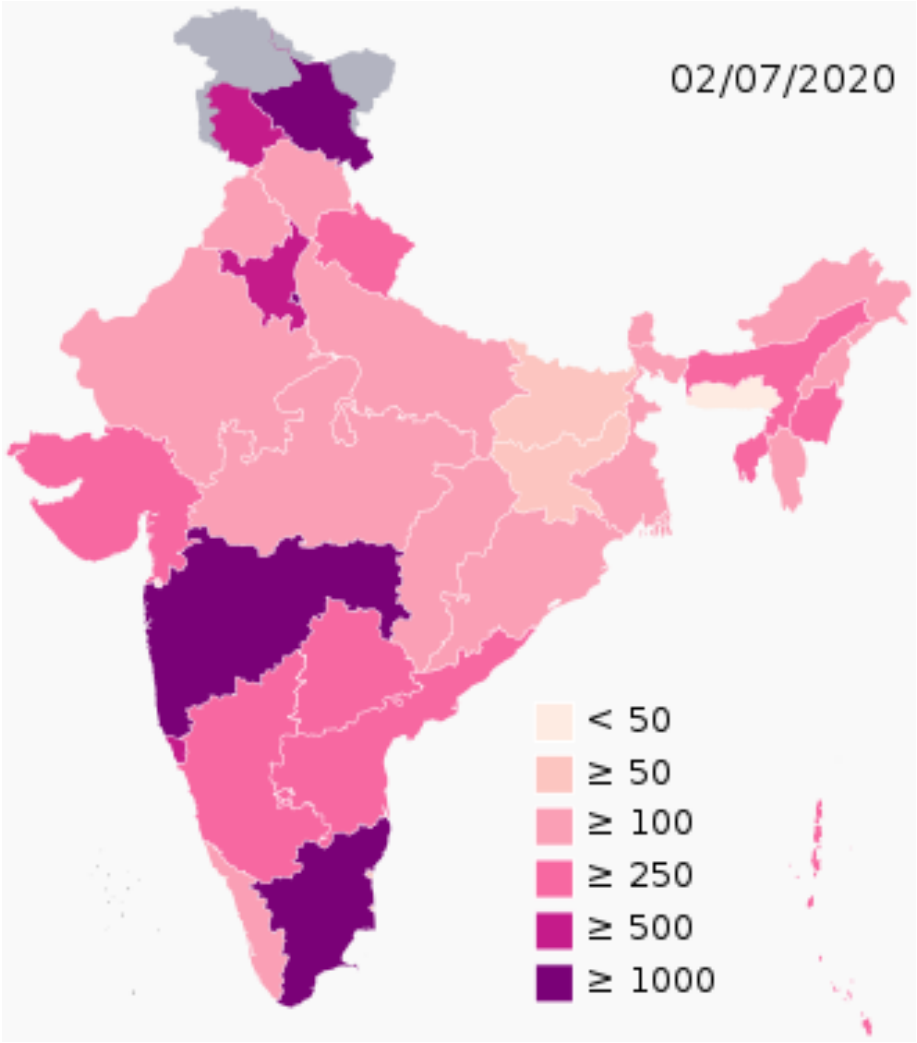
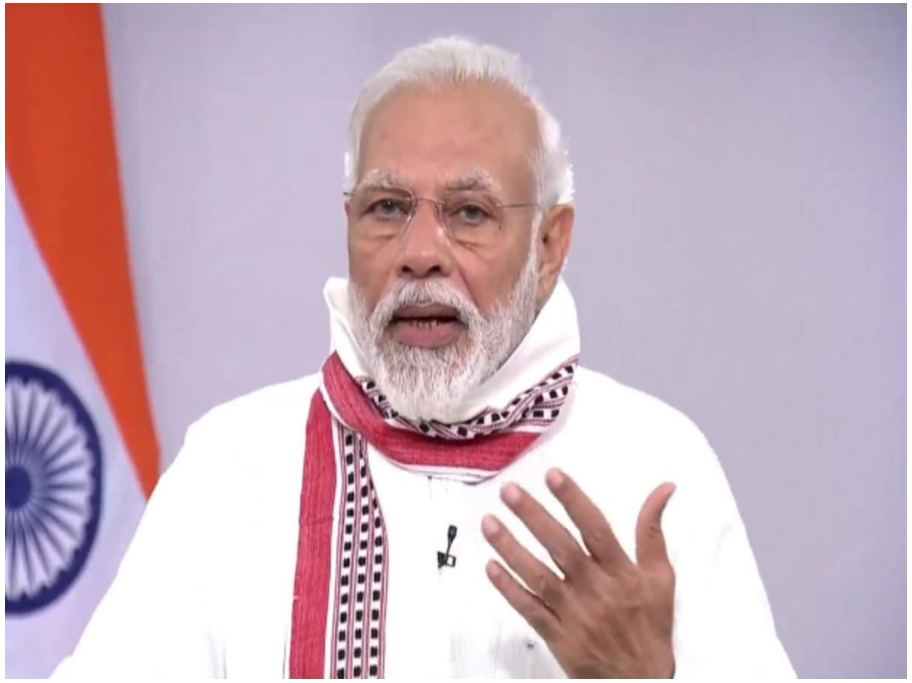
COVID-19 in India

	Cases	Deaths	%Death
Global	**11.04 M**	**524 K**	**4.7**
USA	2.79 M	129 K	4.6
Brazil	1.53 M	61.8 K	4.0
Russia	0.66 M	44.2 K	6.6
India	0.62 M	18.2 K	2.9
UK	0.28 M	44 K	15.7
Spain	0.25 M	28 K	11.2



INDIA UNDERGOES COVID-19 LOCKDOWN

Hon Prime Minister Narendra Modi



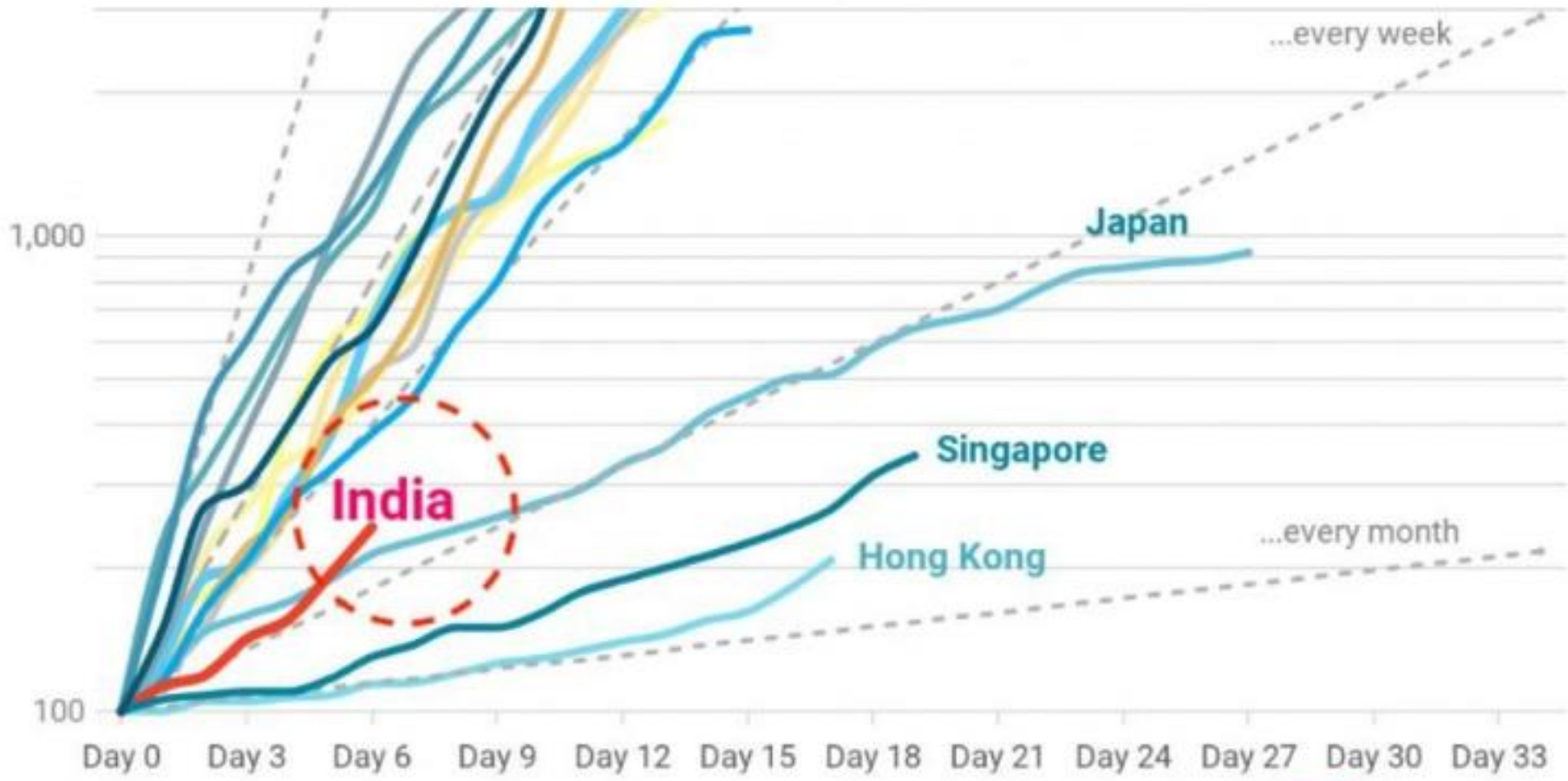
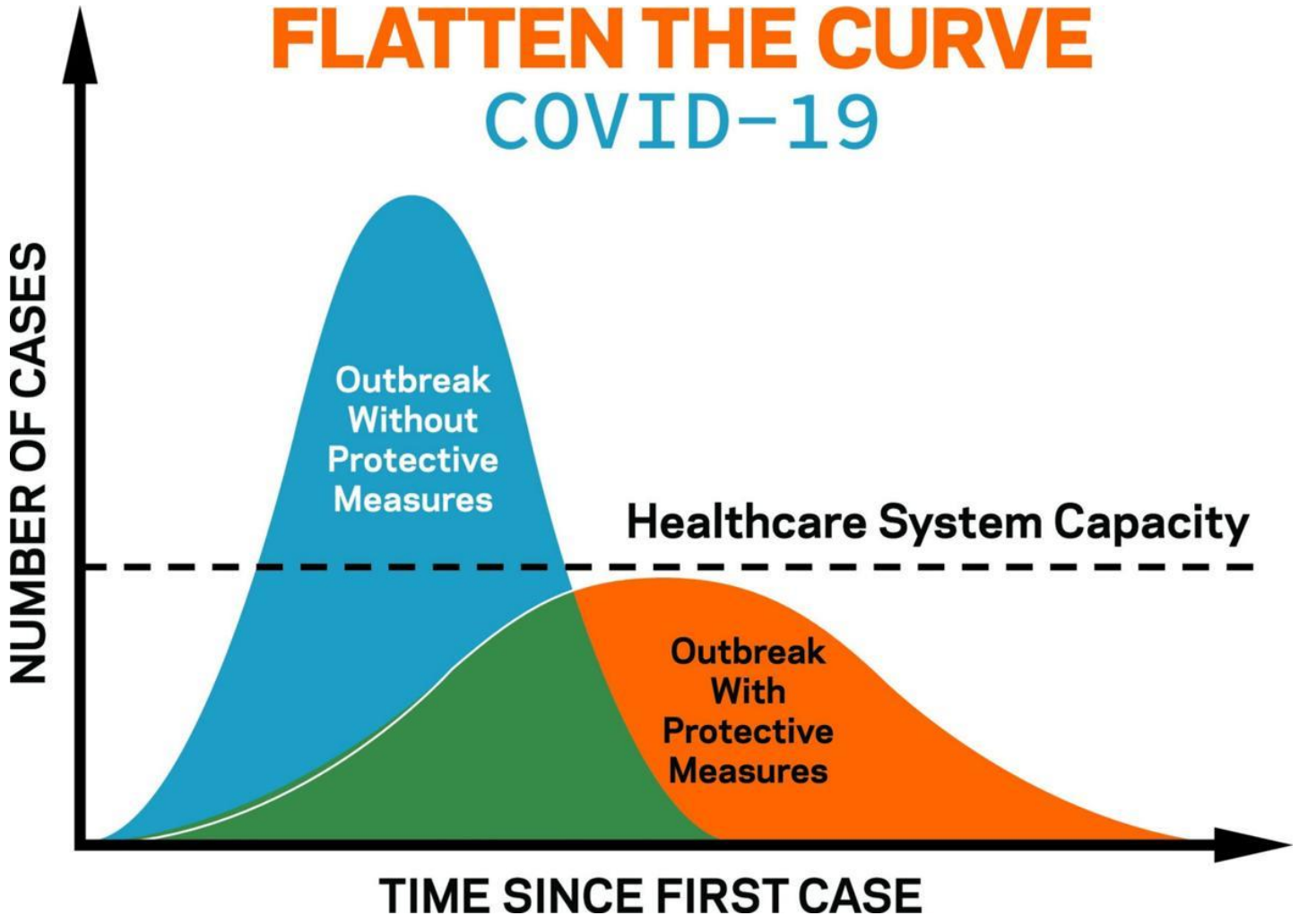
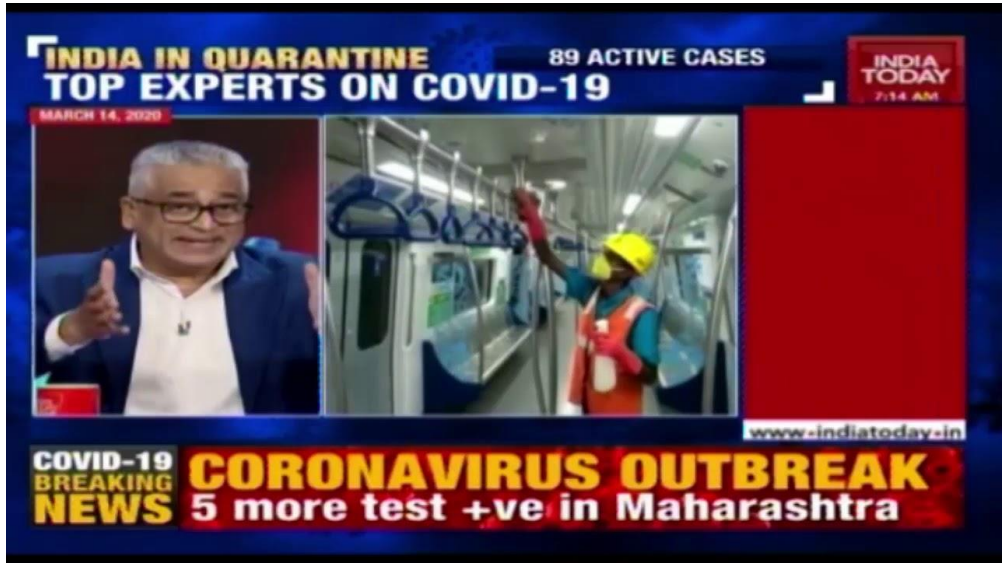


Chart: Dipu Rai with help of Lisa Charlotte Rost's Idea. • Source: Johns Hopkins CSSE

POLITICAL Versus HEALTH DECISIONS



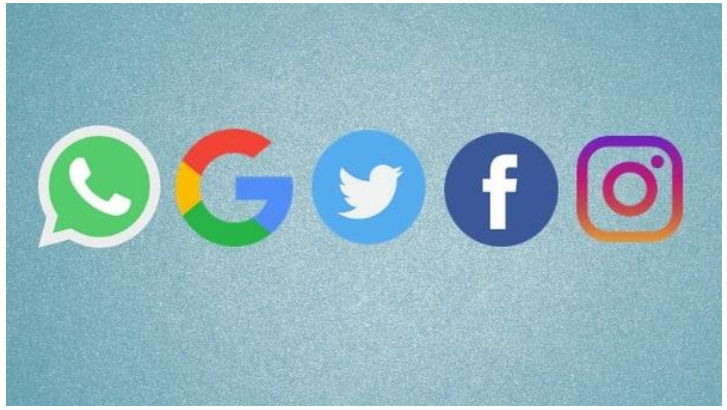

INDIA IN QUARANTINE
89 ACTIVE CASES
TOP EXPERTS ON COVID-19
INDIA TODAY
MARCH 14, 2020
www.indiatoday.in
COVID-19 BREAKING NEWS
CORONAVIRUS OUTBREAK
5 more test +ve in Maharashtra

ANI

INDIAN COUNCIL OF MEDICAL RESEARCH
NEW DELHI

icmr
INDIAN COUNCIL OF MEDICAL RESEARCH
Serving the nation since 1911

World Health Organization India
Take care of your body as you
#StayHome
Ensure you stay hydrated
Eat a balanced diet
Rest well
#StaySafe #StayHealthy
#COVID-19 We are in it together!



COVID-19
CORONAVIRUS DISEASE

CHALLENGES FOR PRIMARY CARE

Clinics shut down due to scare

Delhi shuts cancer institute after third doctor tests positive for Covid-19

GP Clinic for giving medical certificate to migrants wanting to go home

COVID-19: 'Panic' among India health workers over PPE shortages

Stigma: the other enemy India's overworked doctors face in the battle against Covid-19

Doctors not allowed to enter inside
their residential society homes

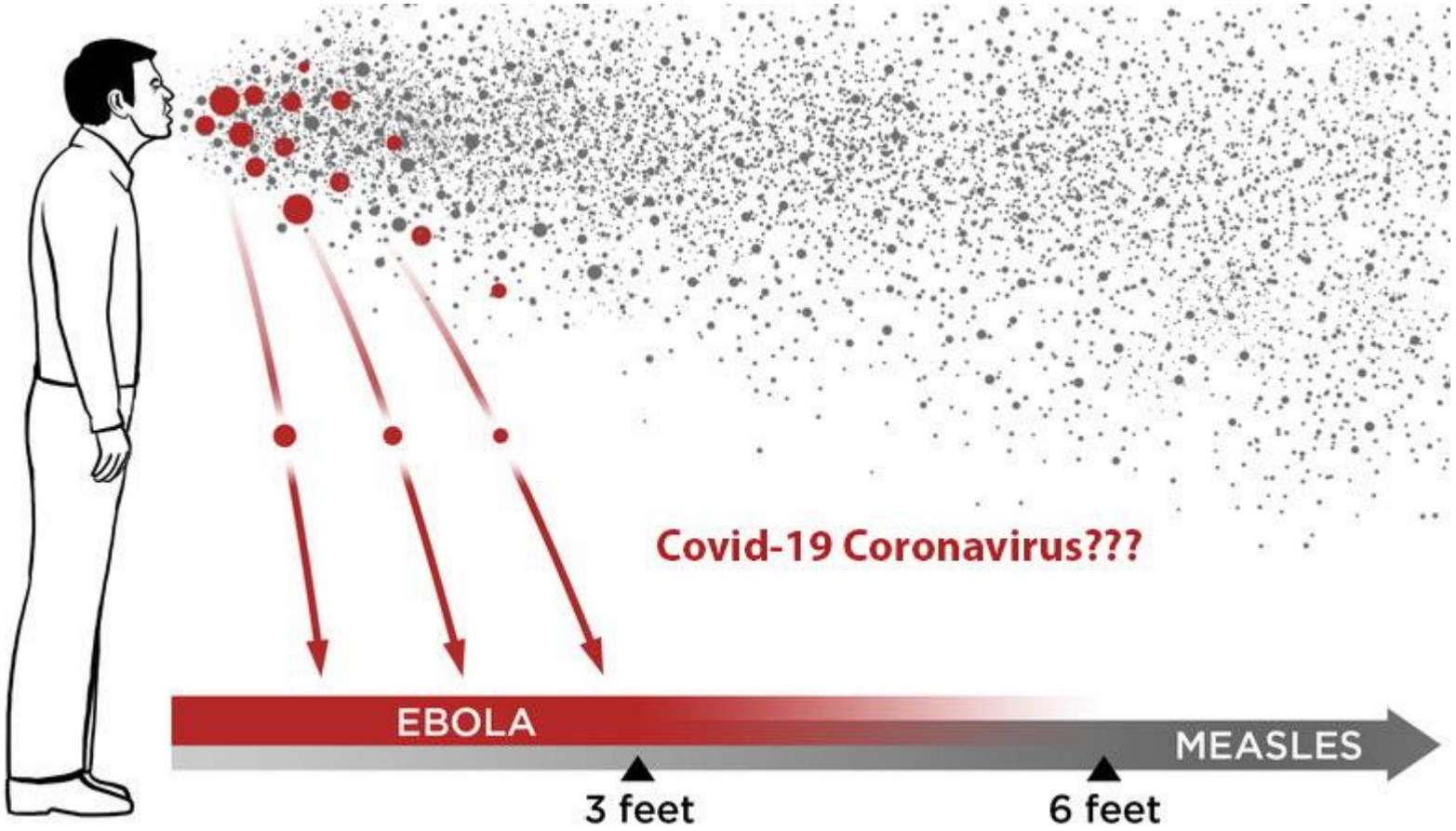
India unites to thank health workers; clap hands, bang utensils from houses

21st March 2020
5 pm

Migrants sprayed with Disinfectant Chemicals when they reach their hometown

India opens one of the world's largest hospitals to fight coronavirus July 3, 2020

10,000 beds



- Sneezing
- Coughing
- Shouting
- Singing Loudly
- Whispering
- Talking
- Breathing

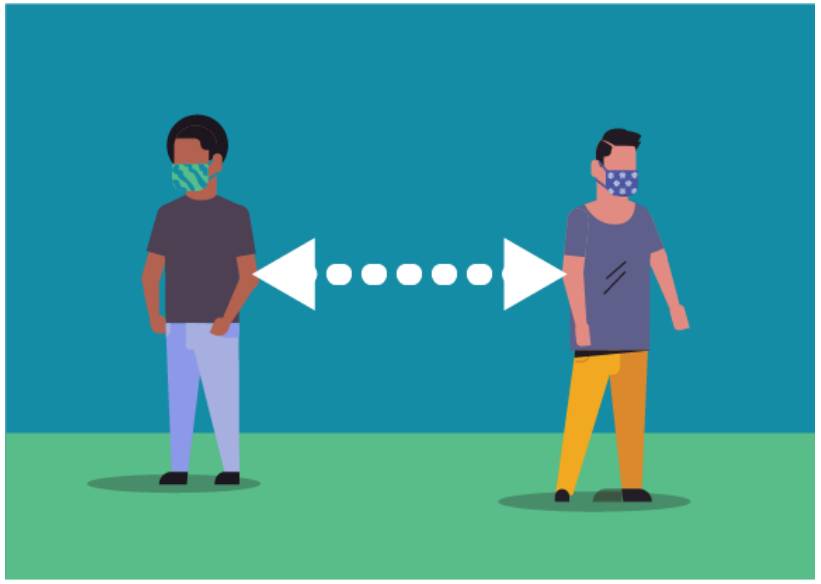
Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis

*Derek K Chu, Elie A Akl, Stephanie Duda, Karla Solo, Sally Yaacoub, Holger J Schünemann, on behalf of the COVID-19 Systematic Urgent Review Group Effort (SURGE) study authors**

Lancet 2020; 395: 1973–87

(172 Observational Studies, 44 Comparative studies)

Social Distancing



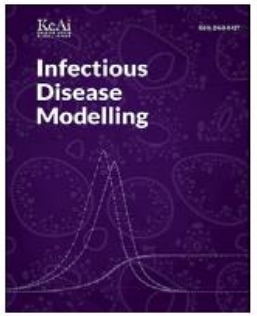
Reduced Transmission by **82%**
(62% - 91%)

Masks

Reduced Transmission by **85%**
(66% - 93%)

Eye Protection

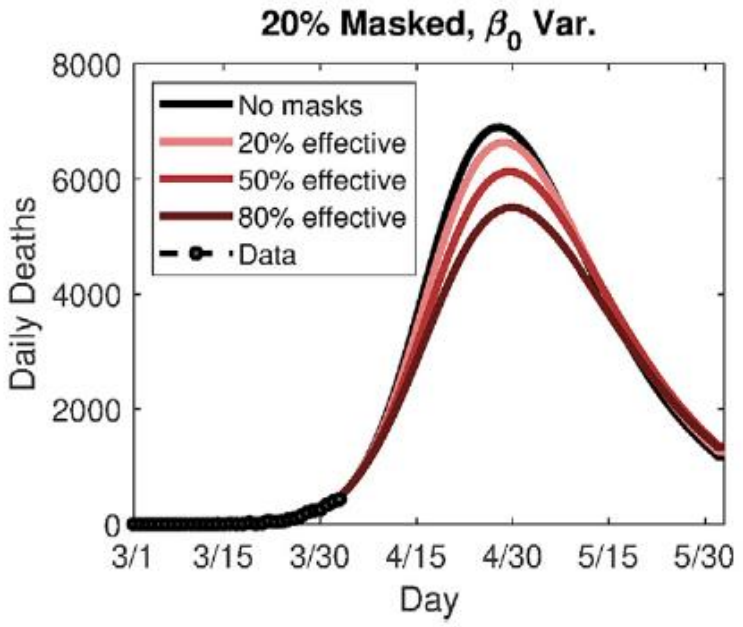
Reduced Transmission by **78%**
(61% - 88%)

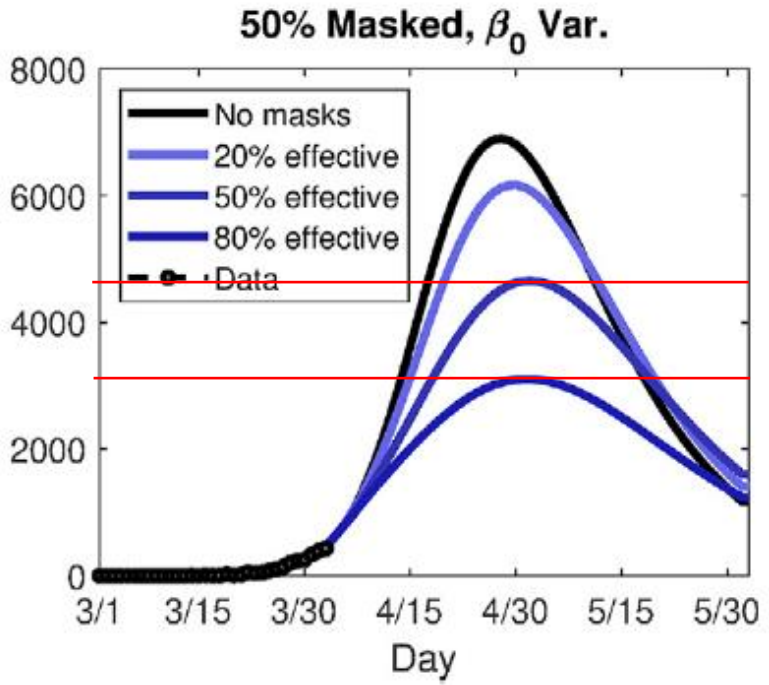


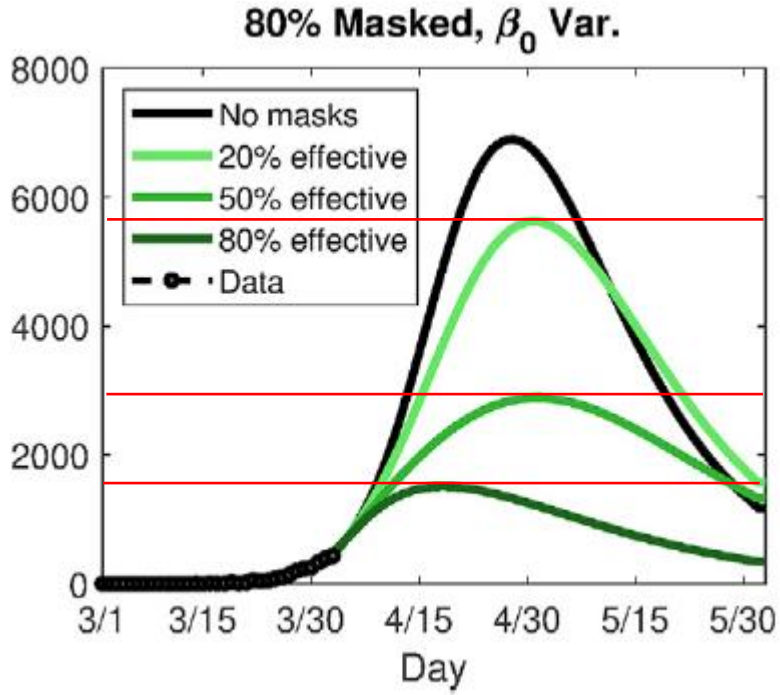
To mask or not to mask: Modeling the potential for face mask use by the general public to curtail the COVID-19 pandemic

Eikenberry SE et al, Infectious Dis Modeling 2020; 5: 293-308 (Arizona State University)

Mathematical Modeling for New York and Washington







- Use of face mask reduces the risk of transmission and deaths significantly
- Wearing face mask should be implemented across the whole country immediately even if most masks are homemade and of relatively low quality

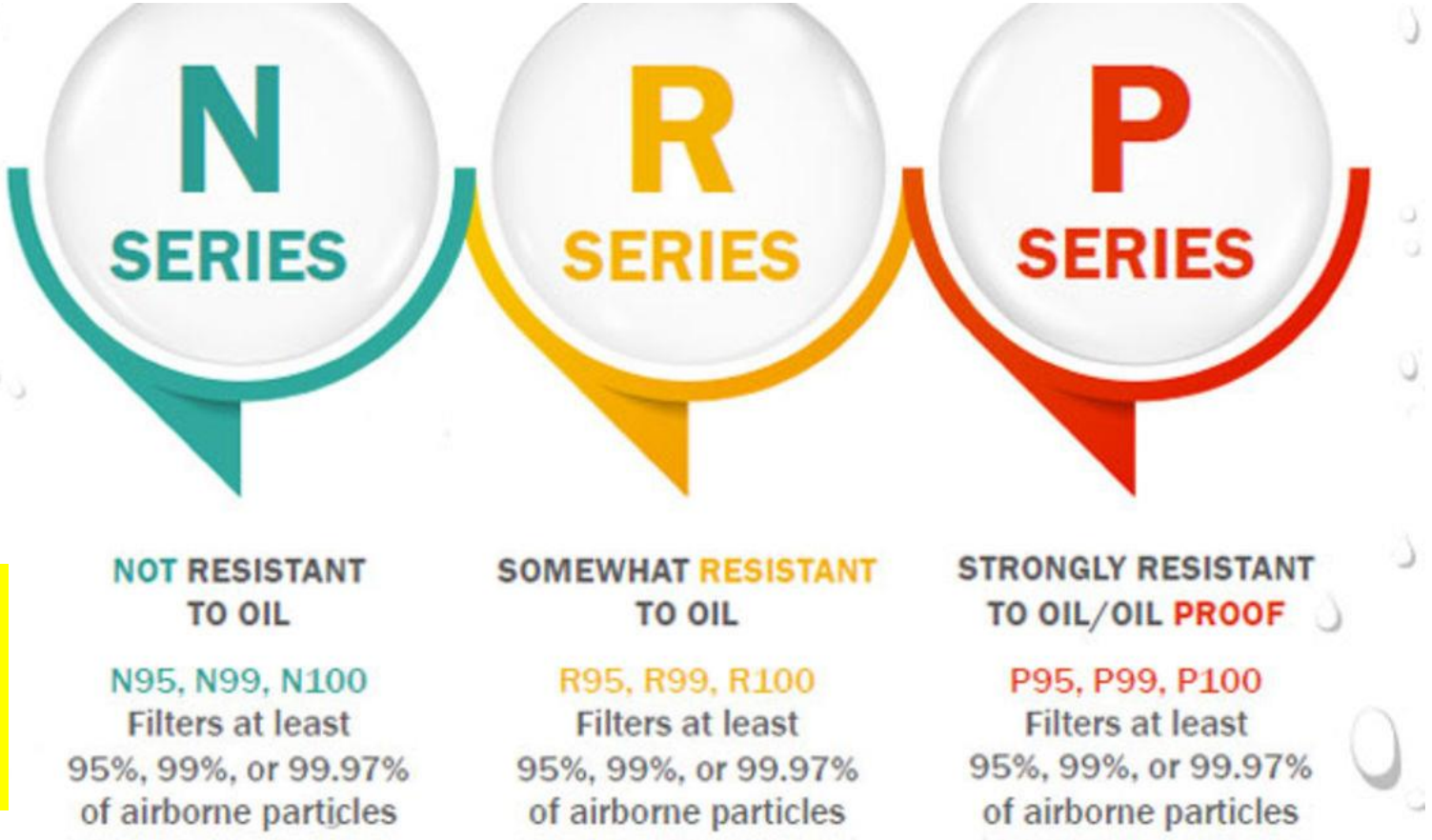
NIOSH Respirator Filter Classes

Based on Resistance to Oil

N95

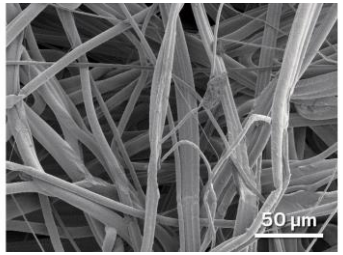
N99

N100



N95
Filters off >95% of the particles that are more than 0.3 microns

Oil Aerosols
- Sealants
- Lubricants
- Coolants



N95 Respirator Masks

Molded, non-foldable
No Valve

Molded, non-foldable
Valve

Should **NOT** be used for COVID-19 protection

Foldable
No-Valve

Single layer face mask

Dust mask

ACS NANO

2020; Ahead of Print

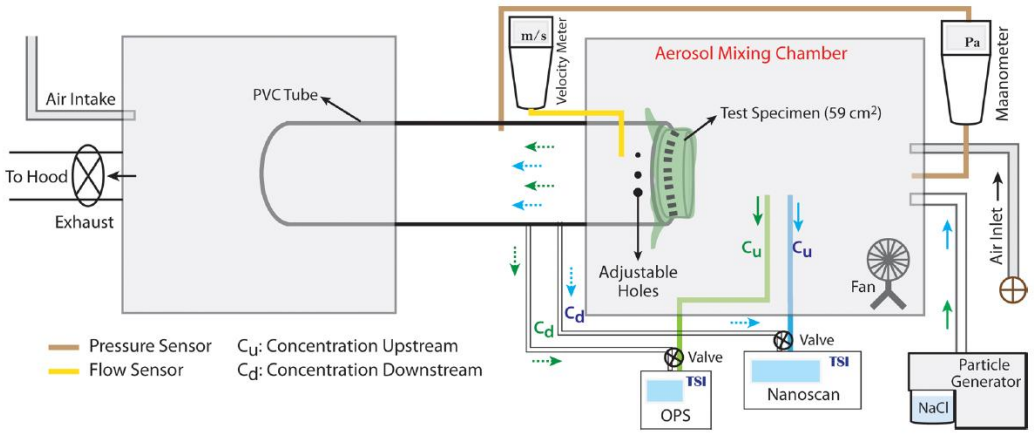
Aerosol Filtration Efficiency of Common Fabrics Used in Respiratory Cloth Masks

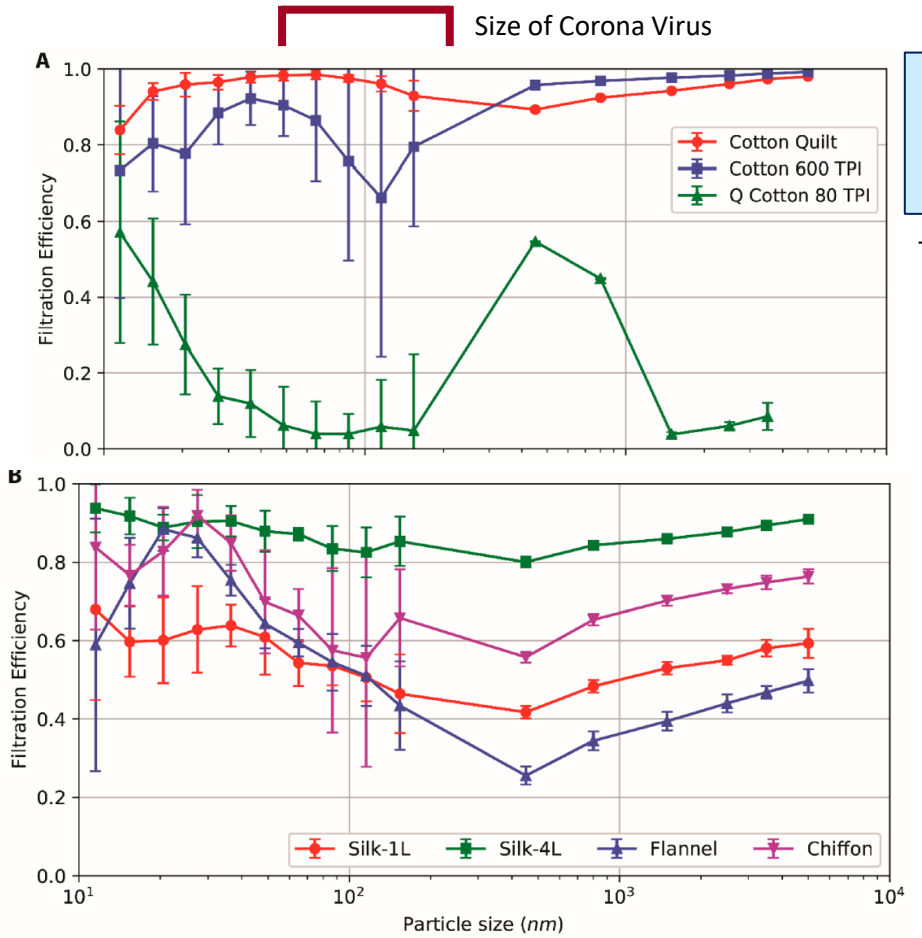
Abhiteja Konda,[⊥] Abhinav Prakash,[⊥] Gregory A. Moss, Michael Schmoldt, Gregory D. Grant, and Supratik Guha*

School for Molecular Engineering, University of Chicago, USA

- Cotton
- Silk
- Chiffon
- Flannel
- Synthetics
- Combinations

Which material gives max filtration efficiency for <300nm and >300nm sized particles?



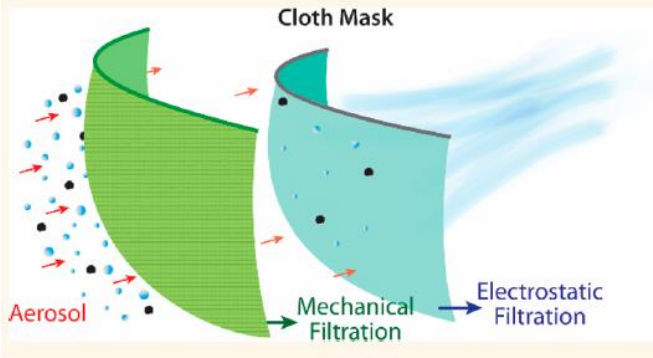


Cotton Quilt:
- 90% cotton
- 5% polyester
- 5% other fabric

TPI = threads per inch

	<300nm	>300nm
N95 No gap	85 ± 15%	99.9%
N95 gap	34 ± 15%	12%
Surgical Mask No gap	76 ± 22%	99.6%
Surgical Mask gap	50 ± 70%	44%

- A well fitting mask is crucial for its efficacy
- 600 TPI cotton should be preferred over 80 TPI cotton
- Hybrid fabrics produced better filtration efficacy likely due to both mechanical as well as electrostatic properties
- Wool, cashmere – very poor filtration



TPI = threads per inch

	<300nm
Cotton Quilt	96 ± 2%
Cotton 80TPI 1 layer	9 ± 13%
Cotton 80TPI 2 layers	38 ± 11%
Cotton 600TPI 1 layer	79 ± 23%
Cotton 600TPI 2 layers	82 ± 19%
Flannel	57 ± 8%
Chiffon 1 layer	67 ± 16%
Chiffon 2 layers	83 ± 9%
Natural silk 1 layer	54 ± 8%
Natural silk 2 layers	65 ± 10%
Cotton + Chiffon	97 ± 2%
Cotton + Flannel	95 ± 2%
Cotton + Silk No gap	94 ± 2%
Cotton + Silk Gap	37 ± 7%

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THANK YOU

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Presentation 2

Javiera Corbalán, Chile

COVID-19 & the Importance of Public Education in Primary Care

or how to effectively help real people act safely

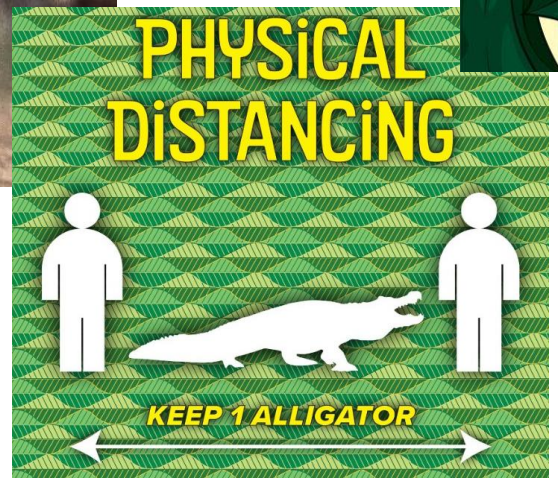
Javiera Corbalán Pössel
Family Physician
Universidad Austral de Chile

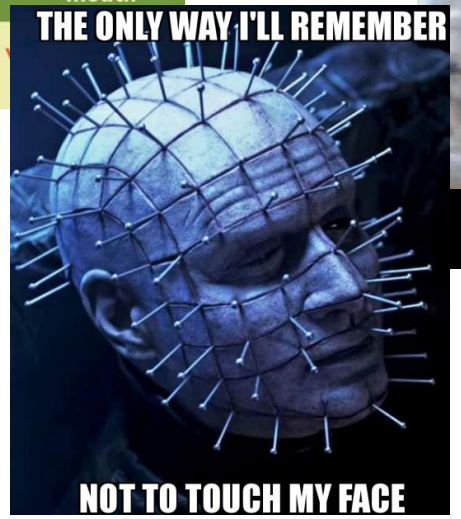
Breathing and feeling well through universal access to right care

HEALTH EDUCATION matters???

It's a critical step for people in the way of gaining greater control over the determinants of their health → EMPOWERMENT

Its the support for actions and conditions of living conducive to a greater quality of life.





International Primary Care
IPCRG
work locally
collaborate globally
Respiratory Group
What influences our behavior in a risk situation?

Receptor factors

- **HIGH STRESS**
  - Difficulty hearing, understanding and remembering information
  - Understanding at four grades below their educational level

Message factors

- **Information and knowledge** → positive attitude to preventive practices
- HIV/AIDS/STIs research showed that it is not enough to convince people to adopt a safe behavior that prevent infections from spreading.
- What is needed is the **motivation to act and skills**

Risk perception motivates to act, specially during a pandemic, where it correlates with adoption of preventive health behaviors like handwashing or social distancing.

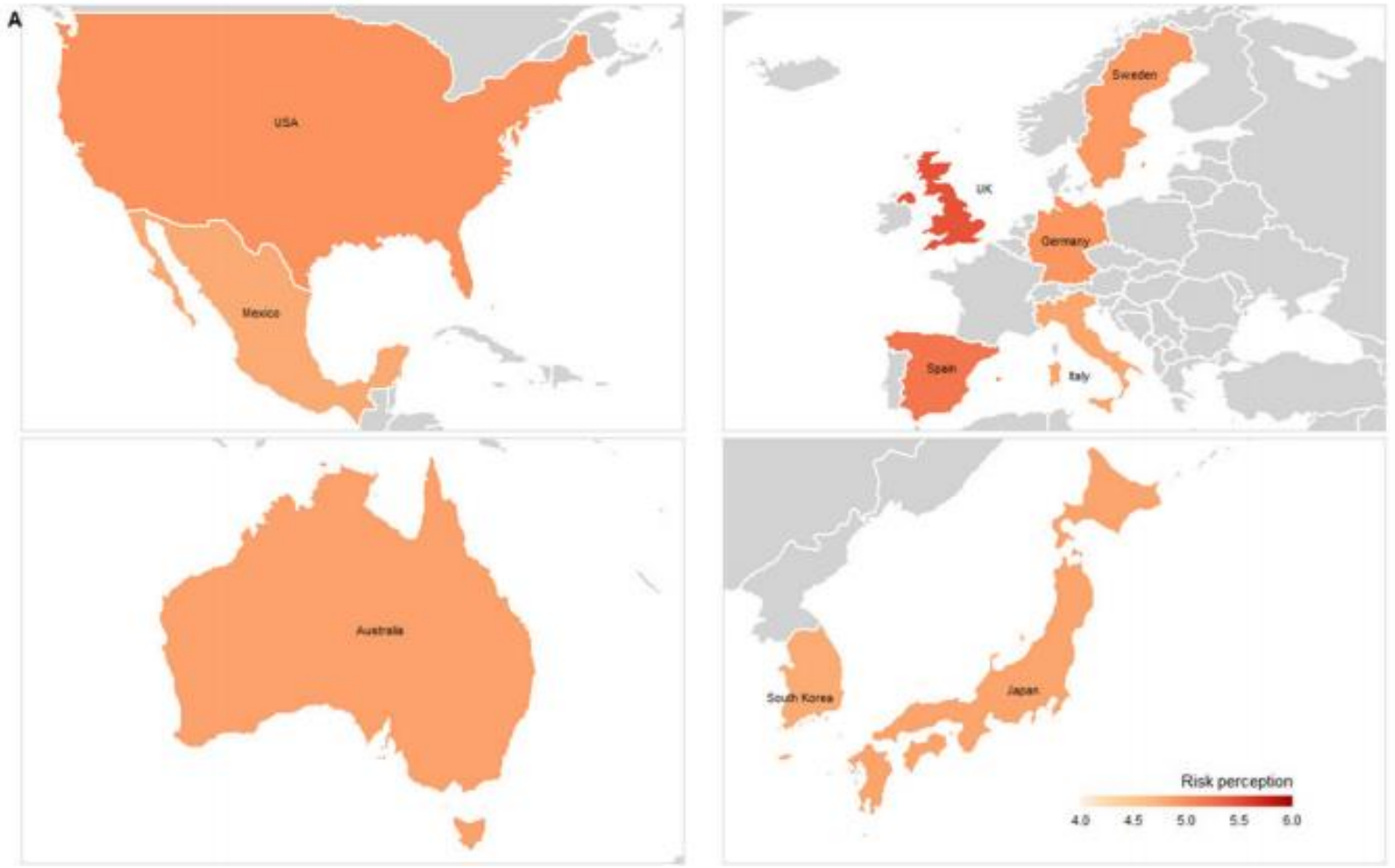


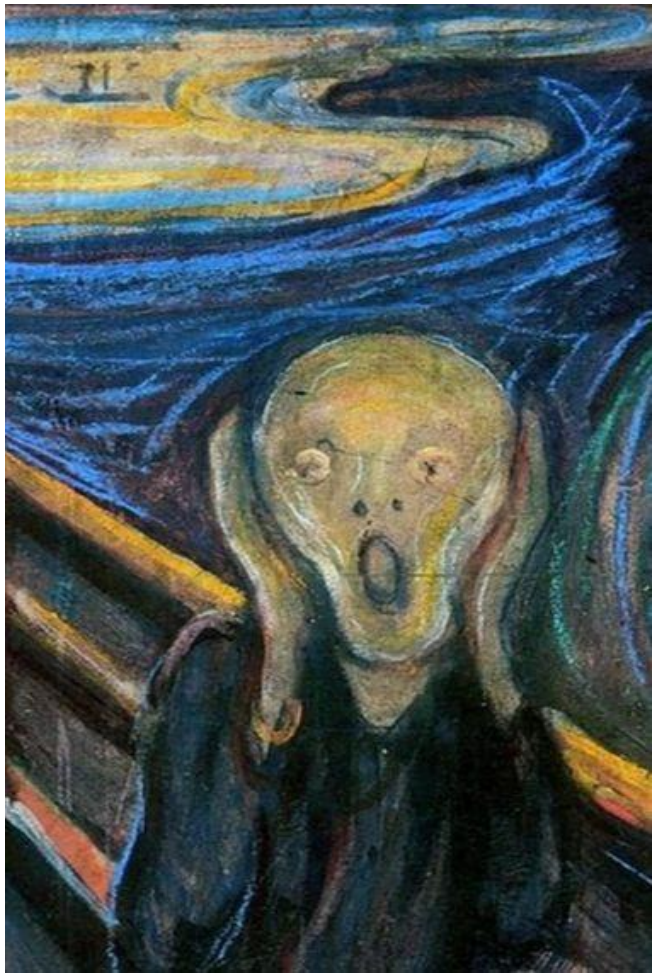
Figure 1. Map of COVID -19 risk perception around the world with density plots.

- Fear-based messaging alone doesn’t work to change behaviors
  - Fear >>> Efficacy:

    The individual will manage the fear by minimizing the risk or ignoring the messaging
  - Efficacy >>> Fear:

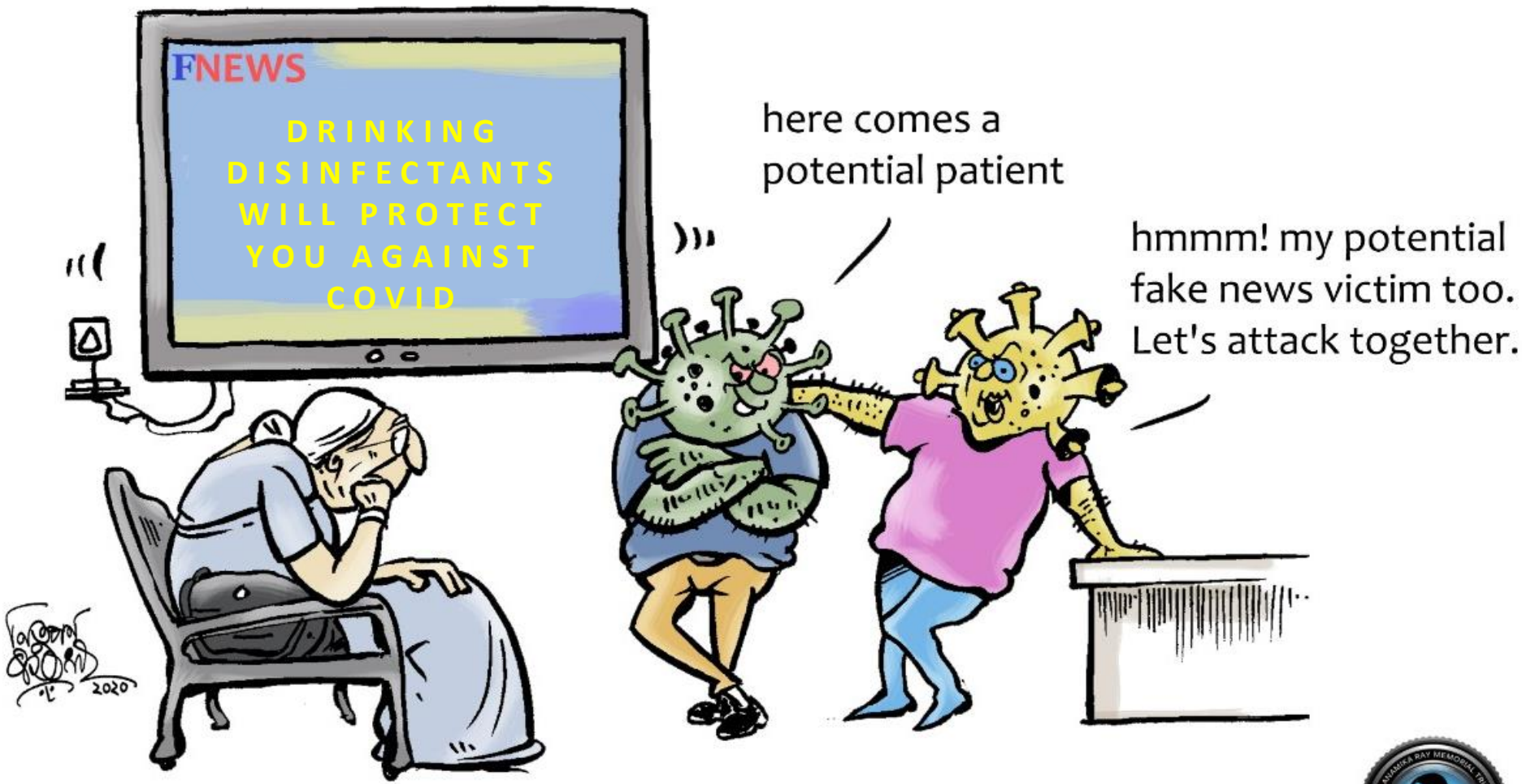
    The individual will take the desired preventive actions.

Communication strategies must strike a balance between breaking through optimism bias without inducing excessive feelings of anxiety and dread.



Let's Fight #Infodemic

#CheckTheFake on #COVID19



The Assam Tribune

armt.in

World Health Organization
Dr Michael J. Ryan
EXECUTIVE DIRECTOR
WHO Health Emergencies Programme

CORONAVIRUS
Hydroxychloroquine
Sulphate Tablets
IP 200 mg

IMMUNE
Passport
COVID-19
IMMUNE

RECICLE

PRIMARY CARE

- Trustworthy
- Reassuring
- Health promoters
- Mythbusters
- Integrative

EFFECTIVE SCIENCE & RISK COMMUNICATION

Risk communication key points for primary care providers (1/3)

- Build and reinforce trust
- Access adequate risk information
- Open acknowledge uncertainty
- Engage community

Risk communication key points for primary care providers (2/3)

- Keep it short
- Explain risk in lay terms
- Use clear simple language
- Use 3 key messages, 7-12 words each, 3 supporting facts
- Promote specific actions people can realistically adopt
- Emphasize benefits, focus on protecting others, align with receptor´s moral values, appeal to social consensus or scientific norms and highlight the prospect of social group approval
- Epic narrative
- Avoid negative language and repeating, 3 + for 1 -

Risk communication key points for primary care providers (3/3)

- Integrate social and traditional media to achieve convergence of verified, accurate information
- Review and reshape messages periodically
- Evaluate interventions for improvement of ongoing and future responses
- Consider training yourself in risk communication

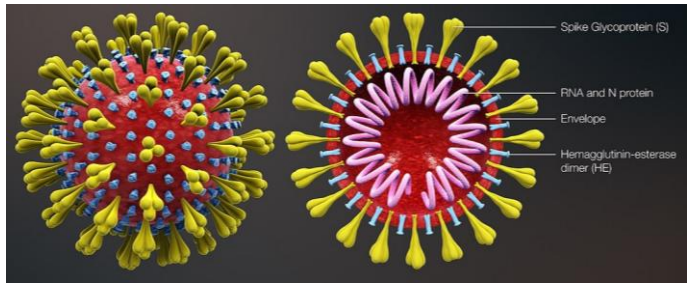
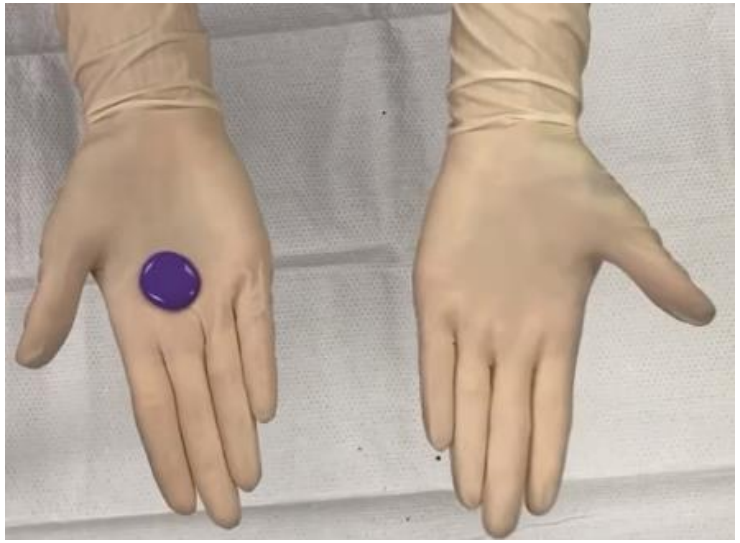


Chart 1 - Persistence of coronaviruses on inanimate surfaces. Belo Horizonte, Minas Gerais, Brazil, 2020.

Type of surface	Persistence
Steel	48 hours
Metal	5 days
Paper	4-5 days
Glass	4 days
Plastic	< 5 days
Silicone rubber	5 days
Latex Glove	< 8 hours

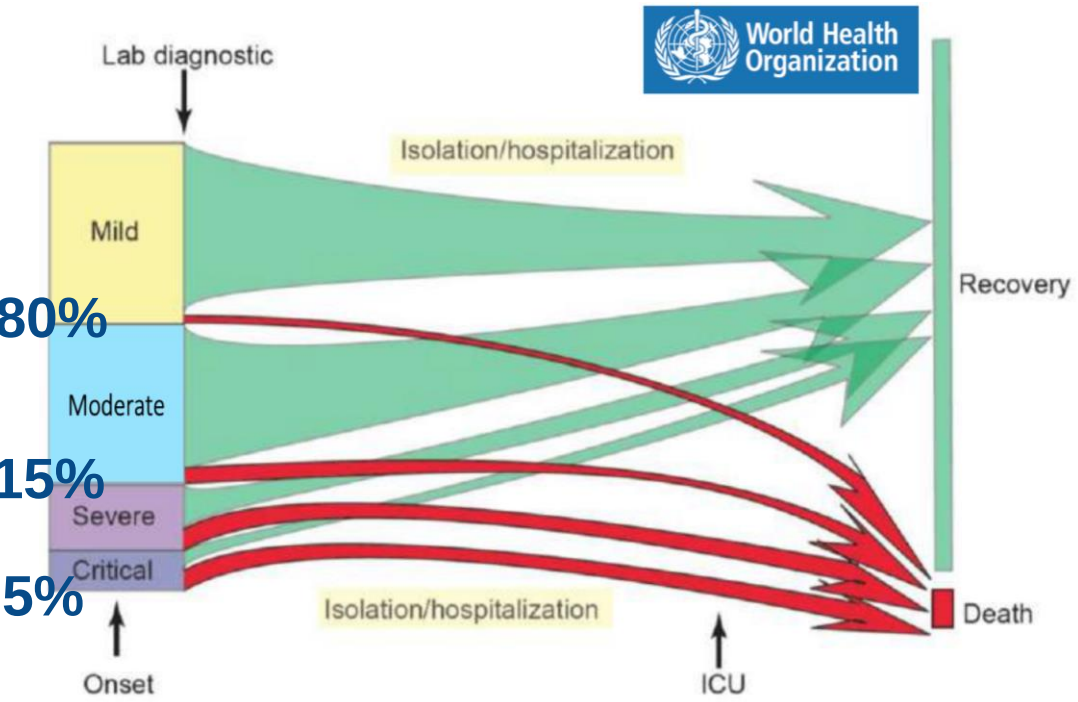
Source: Adapted from Kampf, et al. [5]

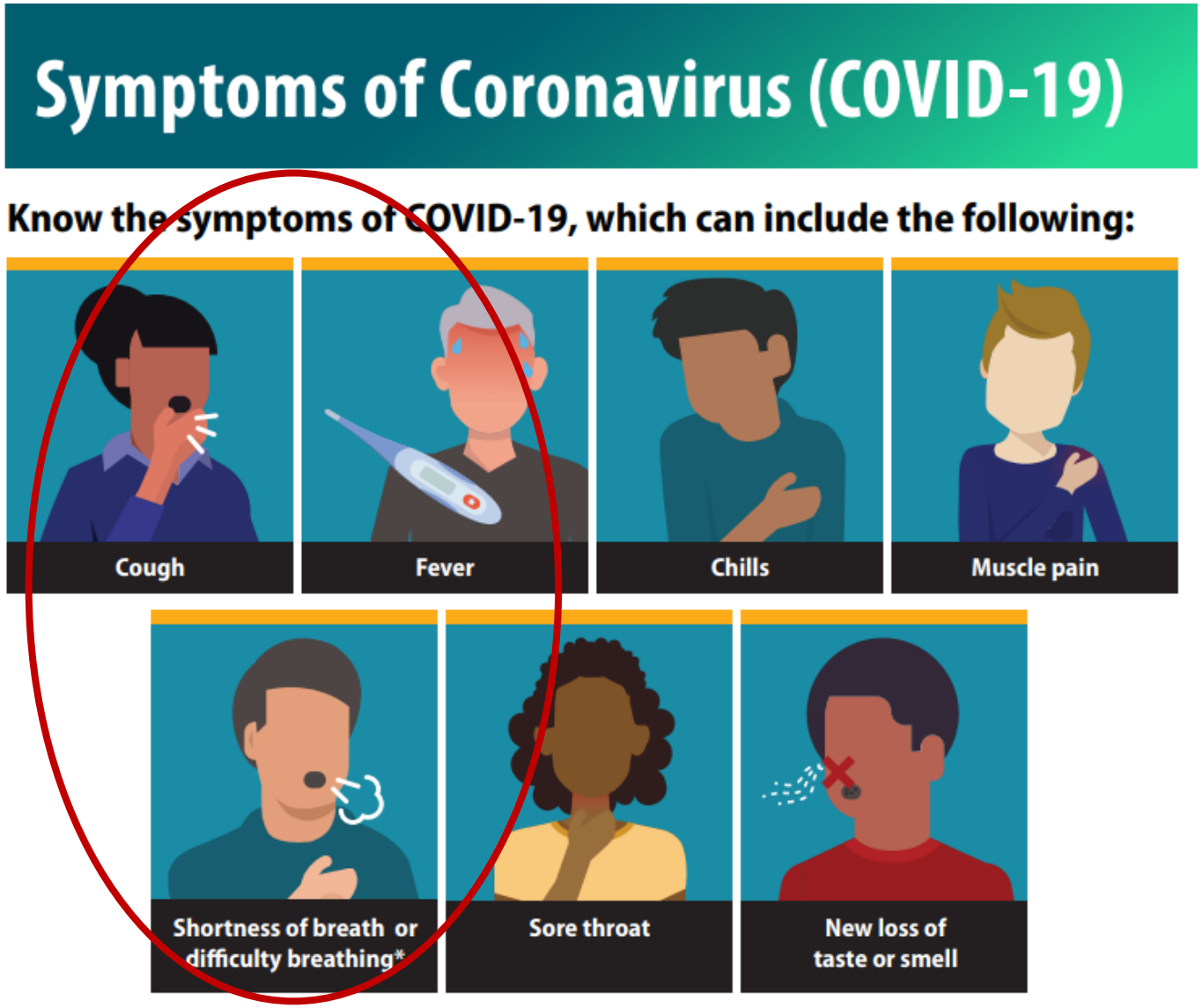
https://www.youtube.com/watch?v=nEzJ_QKjT14



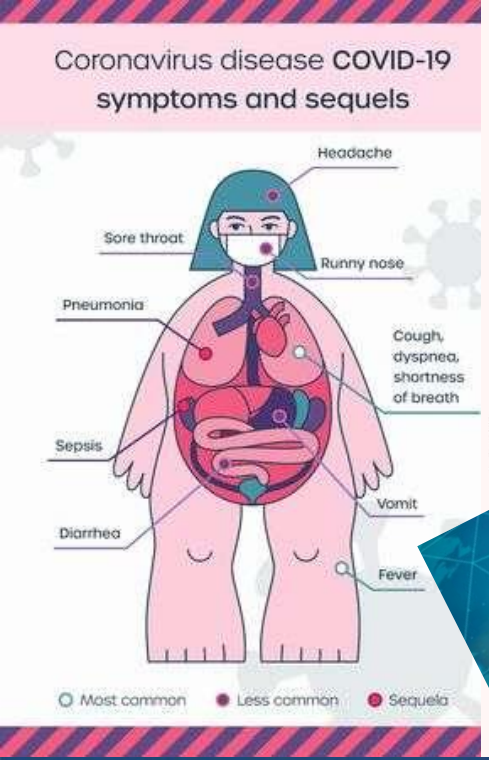
Dreibelbis et al., 2016; https://doi.org/10.3390/ijerph13010129

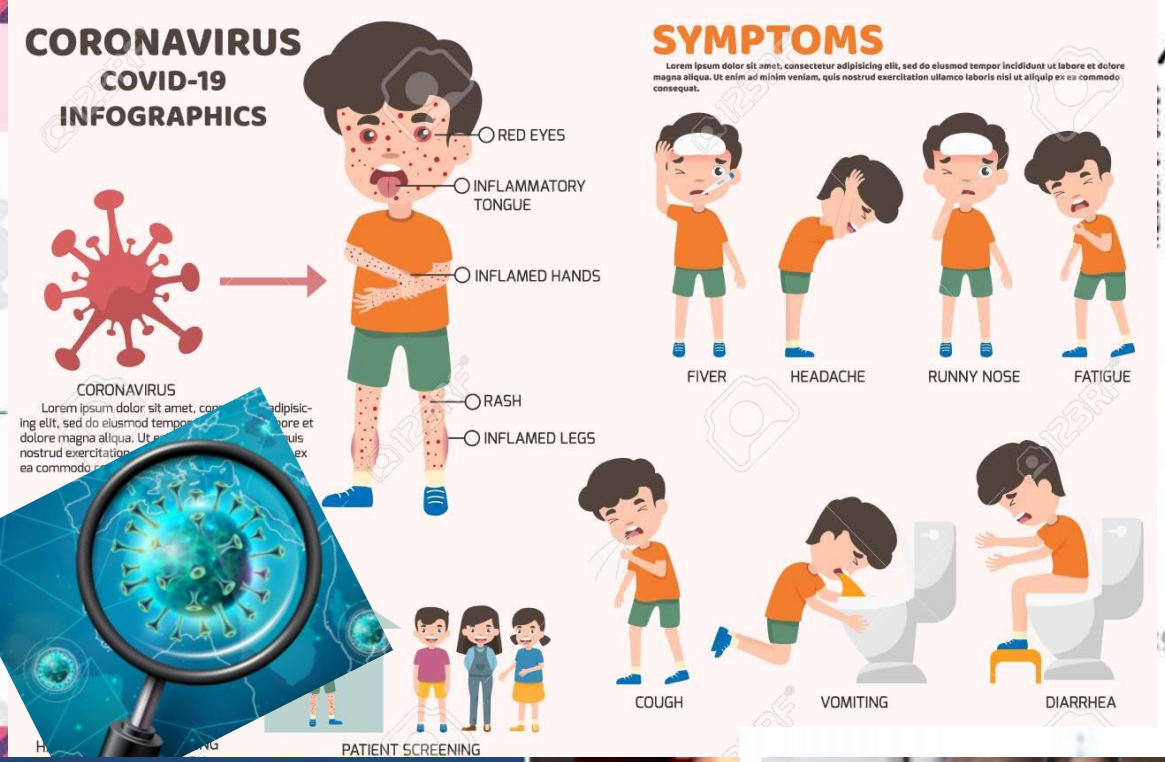
Symptoms can range from mild to severe illness, and appear 2-14 days after you are exposed to the virus that causes COVID-19.



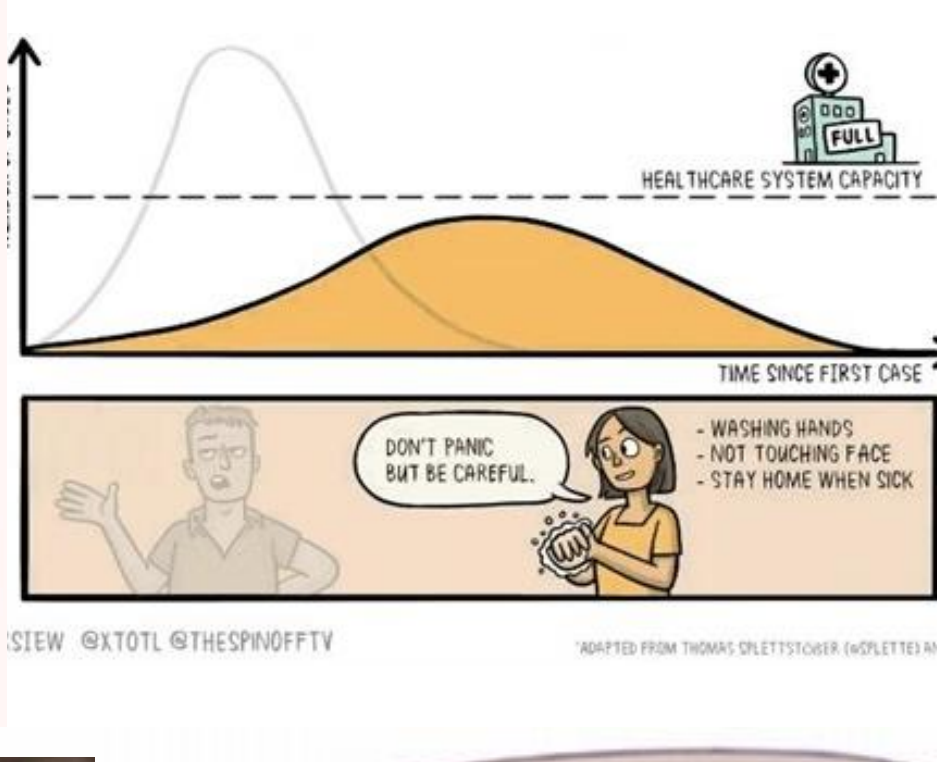


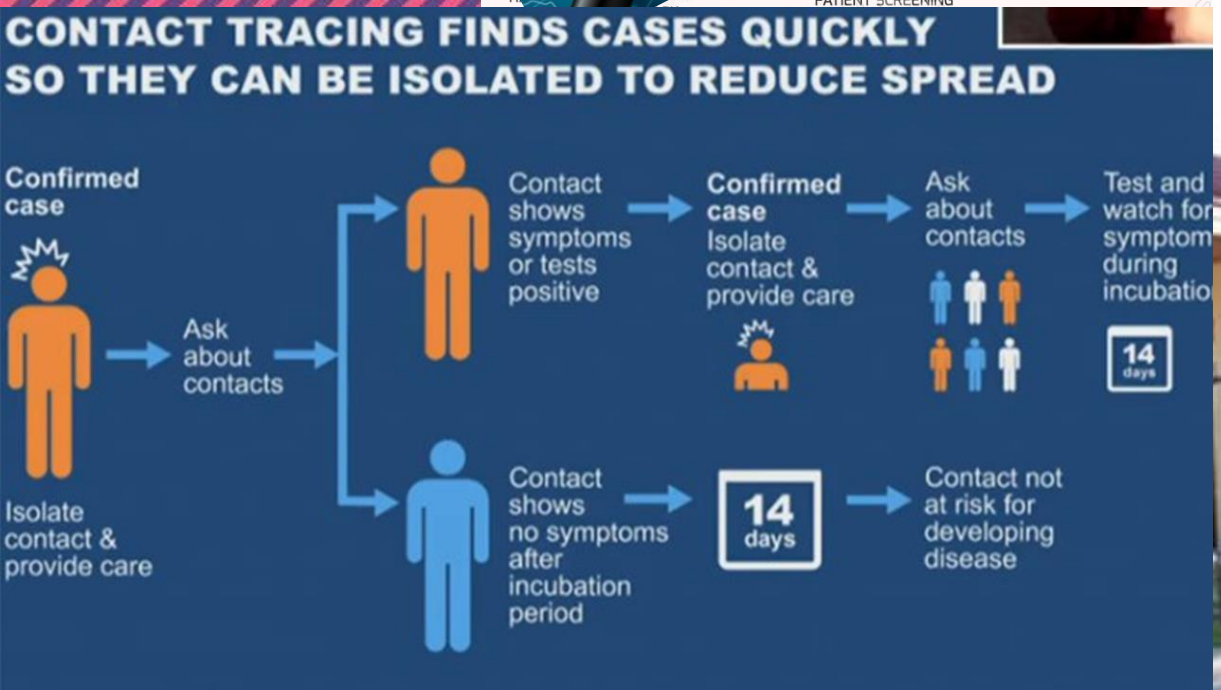
And headache, diarrea, fatigue, skin lesions, etc…


Coronavirus disease COVID-19
symptoms and sequels
Headache
Sore throat
Runny nose
Pneumonia
Cough, dyspnea, shortness of breath
Sepsis
Vomit
Diarrhea
Fever
Most common
Less common
Sequela


CORONAVIRUS
COVID-19
INFOGRAPHICS
RED EYES
INFLAMMATORY TONGUE
INFLAMED HANDS
RASH
INFLAMED LEGS
CORONAVIRUS
PATIENT SCREENING

SYMPTOMS
FIVER
HEADACHE
RUNNY NOSE
FATIGUE
COUGH
VOMITING
DIARRHEA


FULL
HEALTHCARE SYSTEM CAPACITY
TIME SINCE FIRST CASE
DON'T PANIC
BUT BE CAREFUL.
- WASHING HANDS
- NOT TOUCHING FACE
- STAY HOME WHEN SICK
@XTOTL @THESPINOFFTV


CONTACT TRACING FINDS CASES QUICKLY
SO THEY CAN BE ISOLATED TO REDUCE SPREAD
Confirmed case
Ask about contacts
Isolate contact & provide care
Contact shows symptoms or tests positive
Confirmed case
Isolate contact & provide care
Ask about contacts
Test and watch for symptom during incubatio
14 days
Contact shows no symptoms after incubation period
14 days
Contact not at risk for developing disease

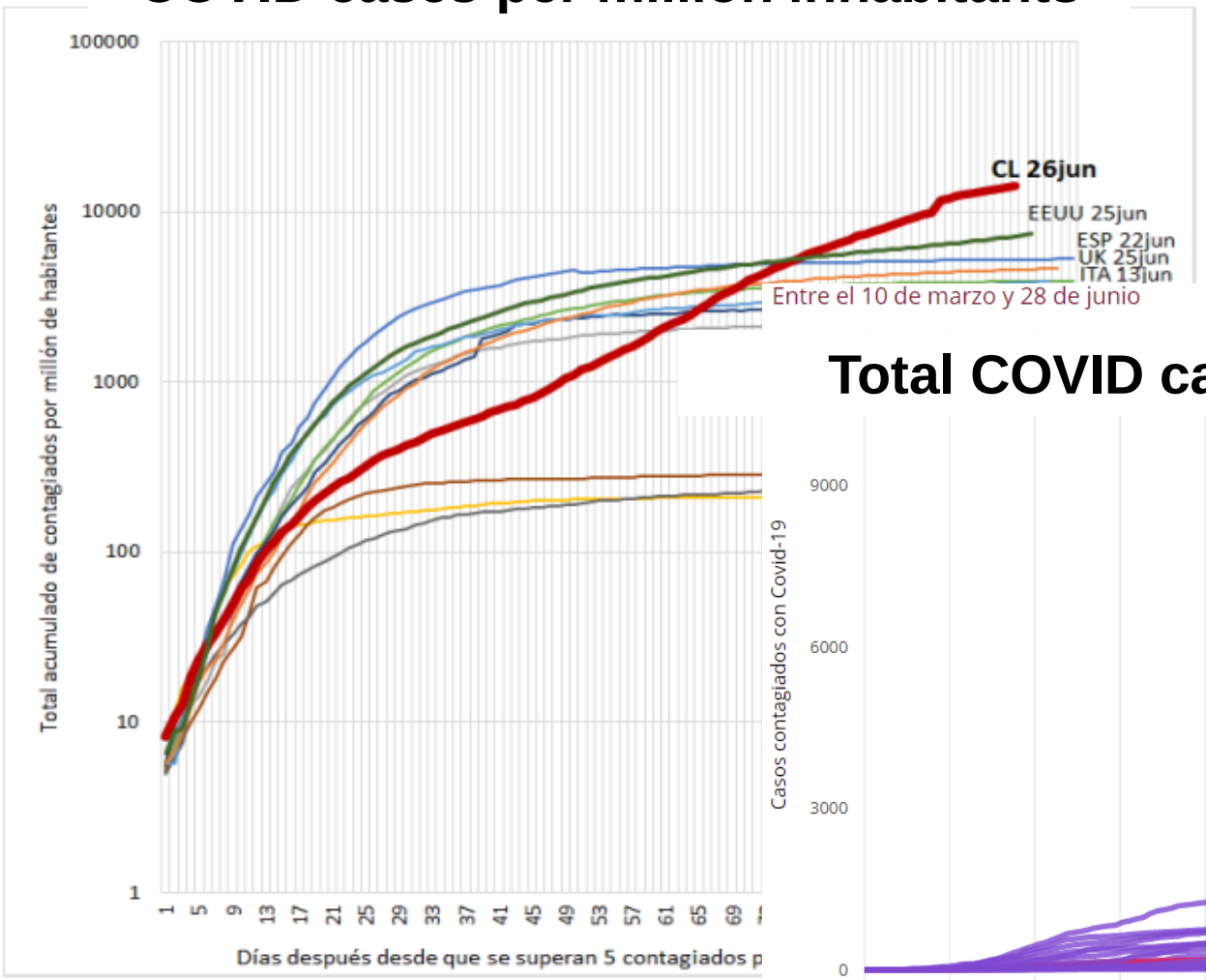
PRIMARY CARE

Chile: pandemic highlights health crisis as lockdown halts inequality protests

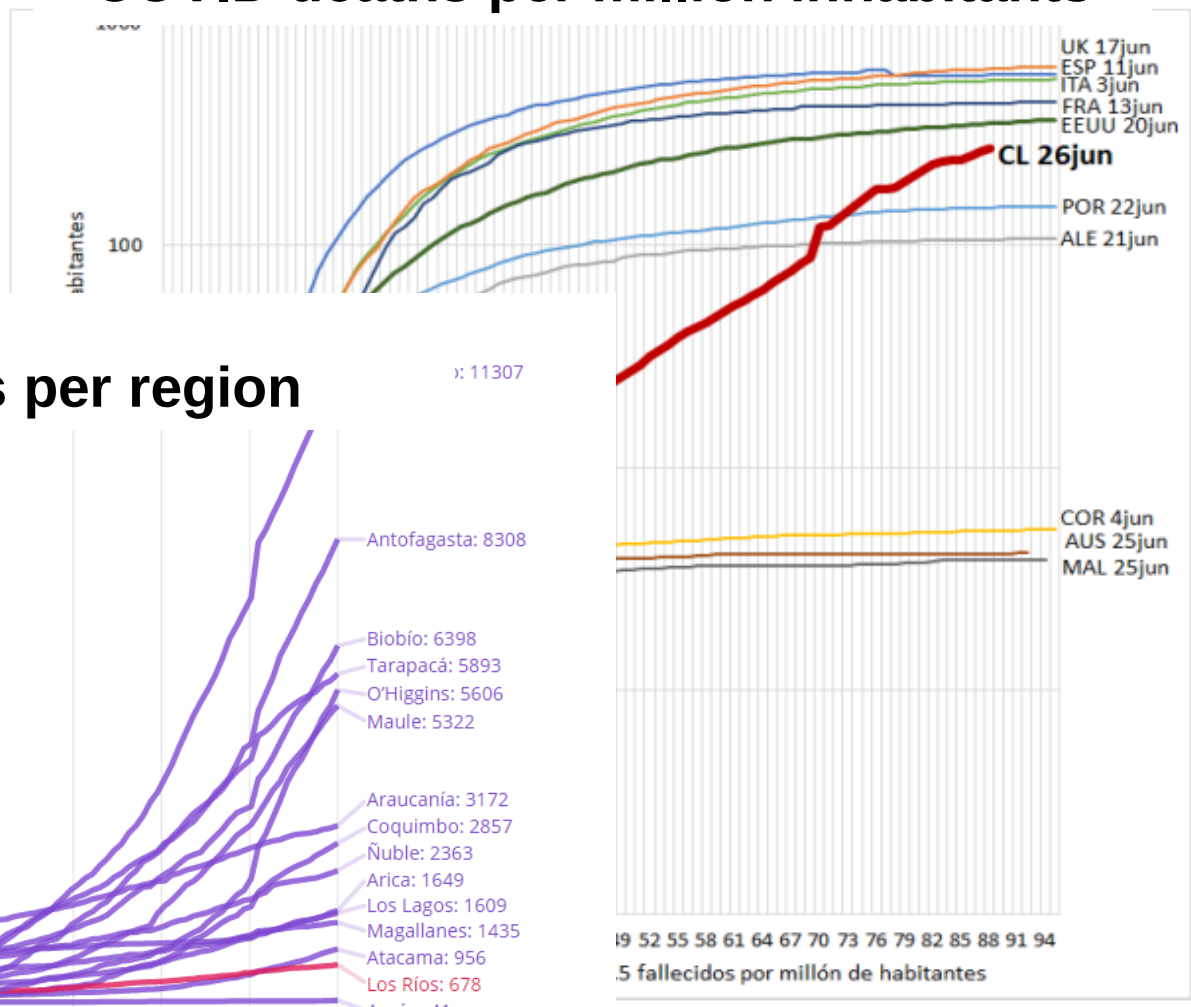
Coronavirus arrives against backdrop of unresolved social tensions that fueled last year's explosion of protests

▲ A demonstrator clashes with security forces in Santiago on 27 April. Photograph: Anadolu Agency/Anadolu Agency via Getty Images

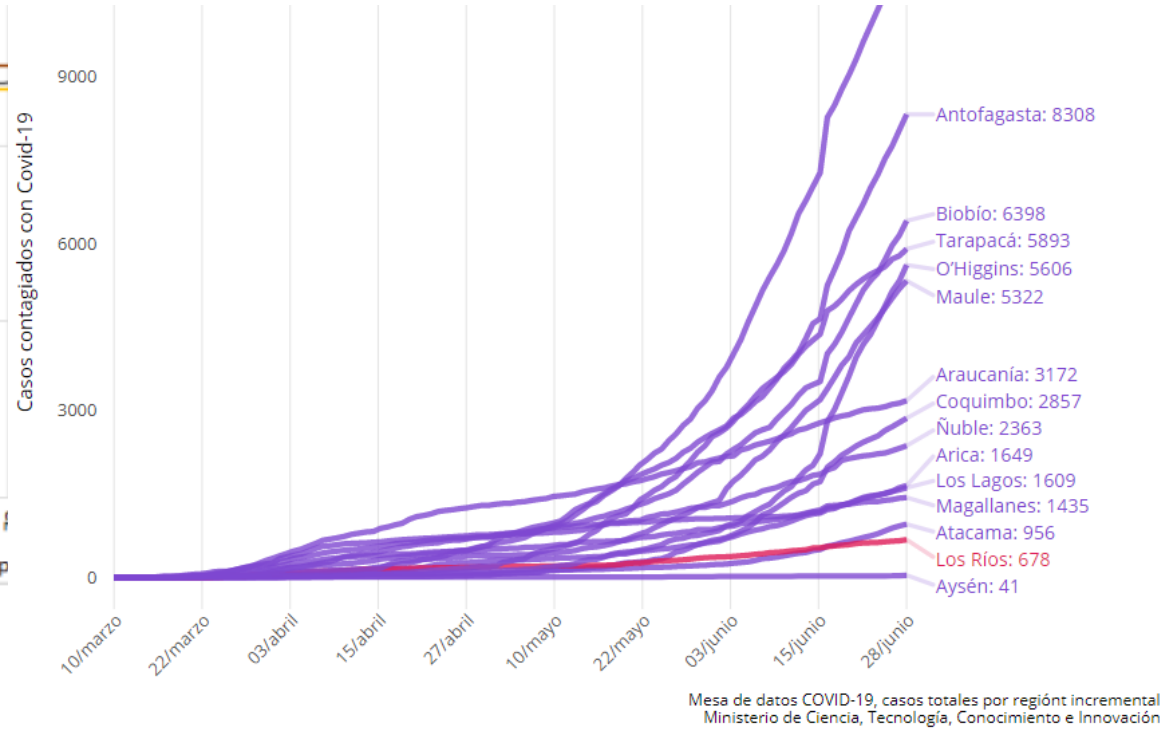
COVID cases per million inhabitants



COVID deaths per million inhabitants

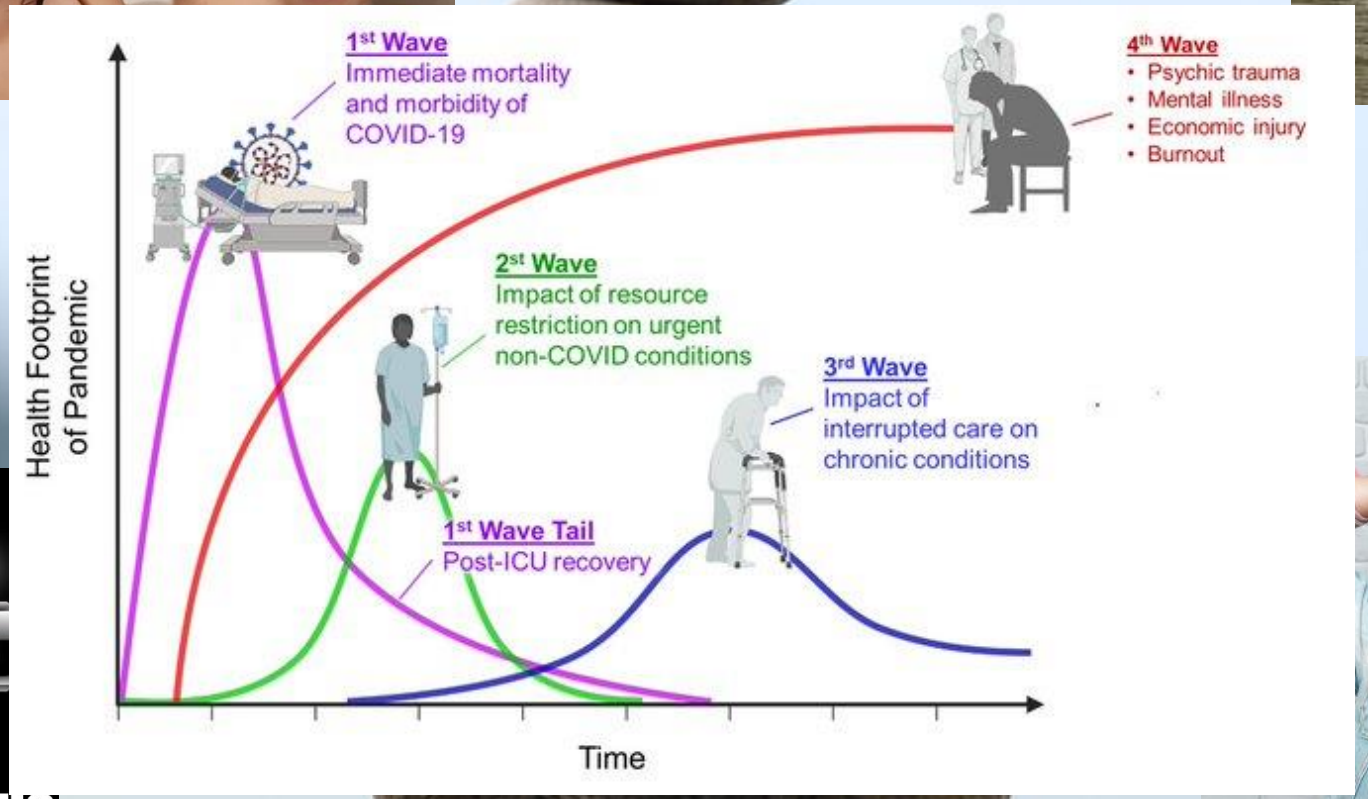


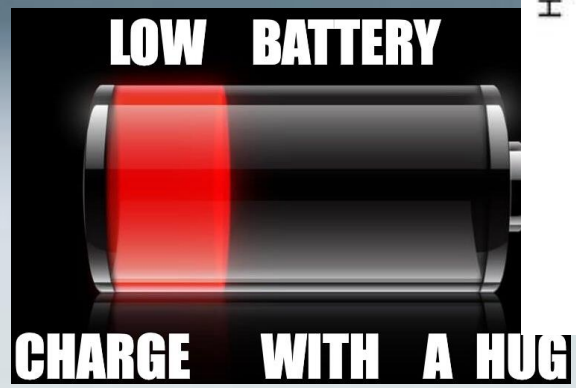
Total COVID cases per region



Mesa de datos COVID-19, casos totales por regiónt incremental
Ministerio de Ciencia, Tecnología, Conocimiento e Innovación

What worked for us





Challenges for Health Education in COVID times

Final recommendations for effectively helping real people to act safe

- Know the drill
- Have a plan
- Know the context
- Remember marginalized communities
- Review and reshape messages ongoing
- Counteract fake news and misinformation
- Engage the community with an epic narrative
- Stay positive and healthy yourself

International Primary Care Respiratory Group
IPCRG work locally collaborate globally

COVID-19 & the Importance of Public Education in Primary Care

or how to effectively help real people act safely

THANK YOU ☺

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