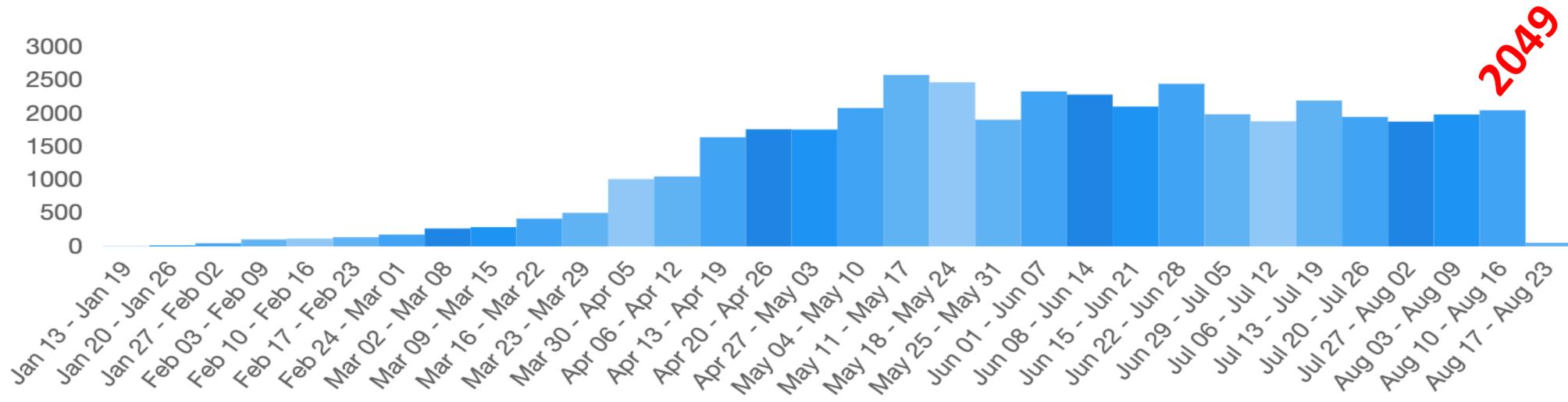# Updates and Controversies in COVID-19

W. Cameron McGuire, MD, MPH

PCCSM Fellow

UC San Diego Health
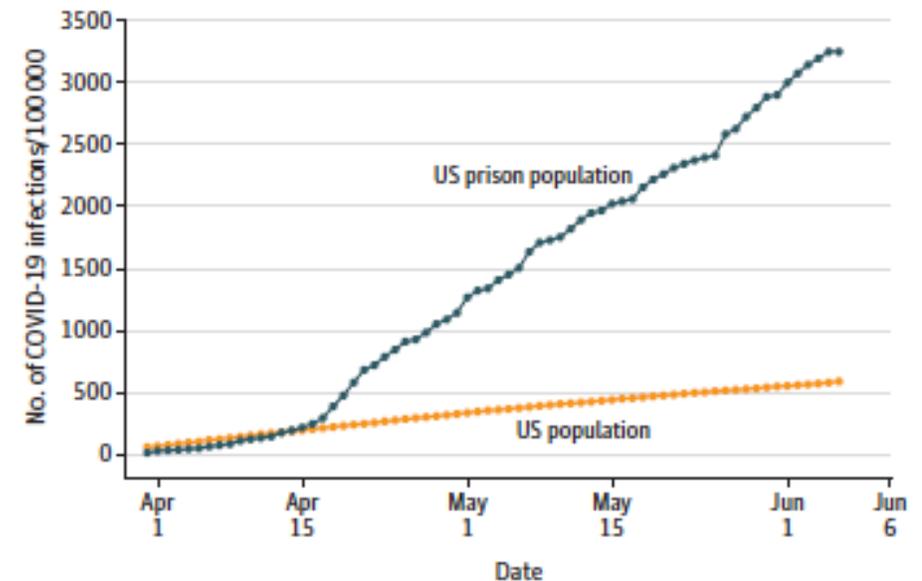

Weekly Publications

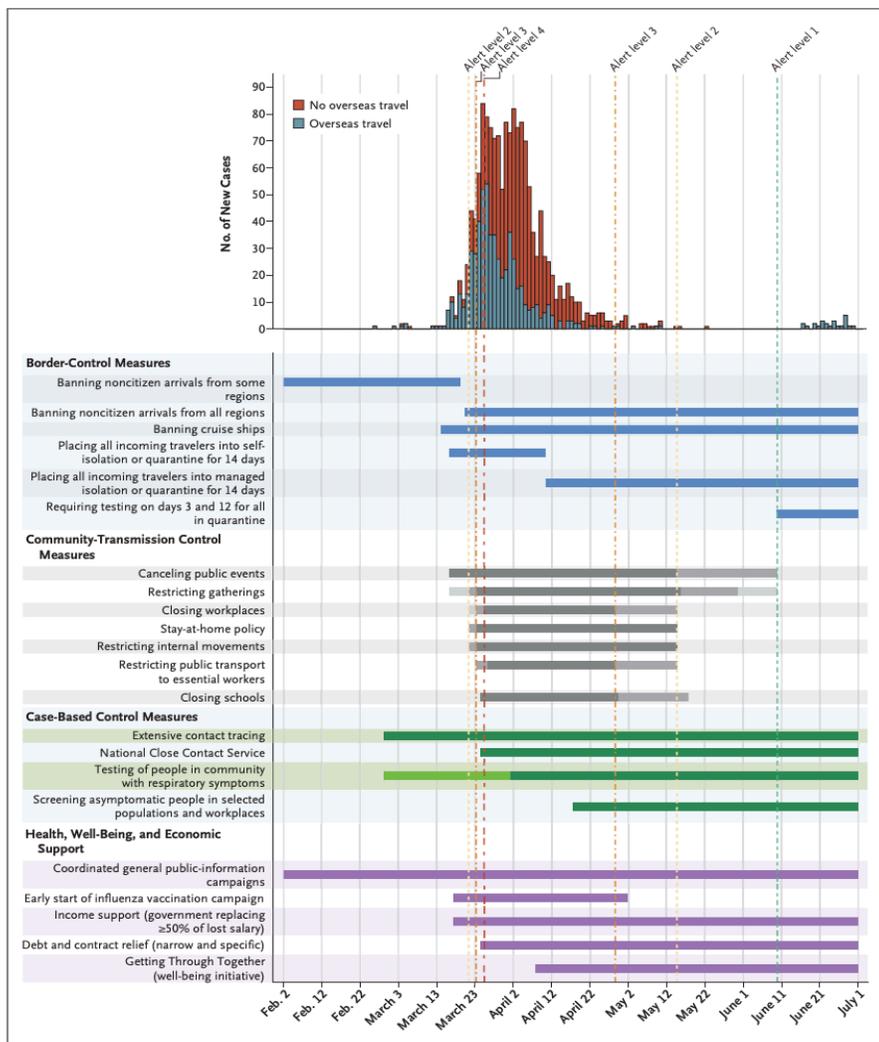# COVID Disproportionately Affects At Risk Populations…

Figure. Trends in Cumulative Coronavirus Disease 2019 (COVID-19) Confirmed Case Rate per 100 000 People for Prison and US Populations
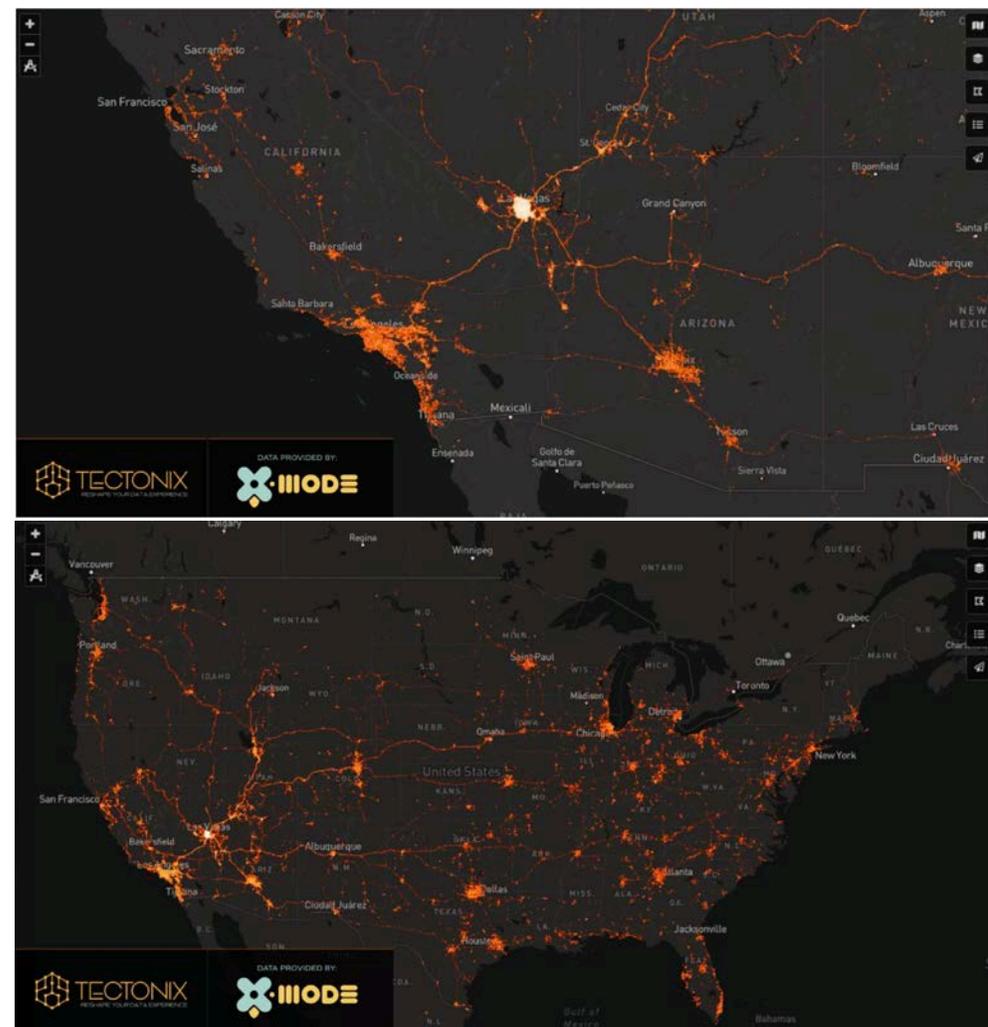
The Spread of COVID-19 *Can* Be Slowed/Stopped...

Successful Elimination of Covid-19 Transmission in New Zealand

New Zealand suspects 'some failure at the border' after COVID-19 returns

By **Dennis Normile** | Aug. 12, 2020 , 1:45 PM

Hydroxychloroquine is _still_ not a miracle drug...

HCQ Shows Benefit

STUDY	Location	Study Type	N
Chen	In Hospital	Case-Cohort	568
Gautret 1	In Hospital	Retrospective	42
Gautret 2	In Hospital	Retrospective	80
Henry Ford	In Hospital	Retrospective	2541

N = 3151

Annals of Internal Medicine   REVIEW

Hydroxychloroquine or Chloroquine for Treatment or Prophylaxis of COVID-19

A Living Systematic Review

Adrian V. Hernandez, MD, PhD; Yuani M. Roman, MD, MPH; Vinay Pasupuleti, MD, MS, PhD; Joshuan J. Barboza, MSc; and C. Michael White, PharmD

HCQ Doesn't Show Benefit

STUDY	Location	Study Type	N
Rosenberg	In Hospital	Retrospective	1438
VA Study	In Hospital	Retrospective	368
Boulware	PrEP	RCT	821
Spanish	PrEP	RCT	2300
Recovery	In Hospital	RCT	4674
Orchid*	In Hospital	RCT	470
Solidarity*	In Hospital	RCT	x
Cavalcanti	In Hospital	RCT	667
Discovery	In Hospital	RCT	Ongoing

N = 10738

Vaccines are coming…
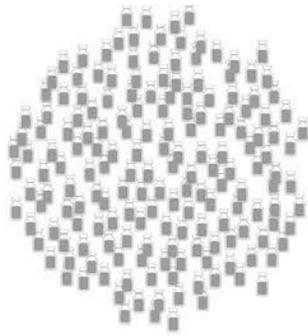
Pre-clinical	Phase 1	Phase 2	Phase 3	Approved
170+ vaccines are being tested in animals and lab experiments	**7 vaccines** are being tested in a small number of healthy, young people to assess safety and correct dose	**11 vaccines** are broadened to a larger group of people, including people at higher risk of illness	**7 vaccines** are being tested in thousands of people to check their effectiveness and safety	**0 vaccines** have been determined to provide benefits that outweigh known and potential risks

But probably not from Russia…

COVID-19 Vaccine developer/manufacturer	Vaccine platform	Type of candidate vaccine	Number of doses	Timing of doses	Route of Administration	Clinical Stage				
						Phase 1	Phase 1/2	Phase 2	Phase 3	
University of Oxford/AstraZeneca	Non-Replicating Viral Vector	ChAdOx1-S	1		IM		PACTR202006922165132 2020-001072-15 Interim Report	2020-001228-32	SRCTN89951424	**UK**
Sinovac	Inactivated	Inactivated	2	0, 14 days	IM		NCT04383574 NCT04352608		NCT04456595 669/UN6.KEP/EC/2020	**China**
Wuhan Institute of Biological Products/Sinopharm	Inactivated	Inactivated	2	0,14 or 0,21 days	IM		ChiCTR2000031809		ChiCTR2000034780	**China**
Beijing Institute of Biological Products/Sinopharm	Inactivated	Inactivated	2	0,14 or 0,21 days	IM		ChiCTR2000032459		ChiCTR2000034780	**China**
Moderna/NIAID	RNA	LNP-encapsulated mRNA	2	0, 28 days	IM	NCT04283461 Interim Report		NCT04405076	NCT04470427	**US**
BioNTech/Fosun Pharma/Pfizer	RNA	3 LNP-mRNAs	2	0, 28 days	IM		2020-001038-36 ChiCTR2000034825 Study Report		NCT04368728	**US**
CanSino Biological Inc./Beijing Institute of Biotechnology	Non-Replicating Viral Vector	Adenovirus Type 5 Vector	1		IM	ChiCTR2000030906 Study Report		ChiCTR2000031781 Study Report		**China**

We Don't Know What We Don't Know...

From 'brain fog' to heart damage, COVID-19's lingering problems alarm scientists

By Jennifer Couzin-Frankel | Jul. 31, 2020 , 1:30 PM

ACCEPTED MANUSCRIPT

The emerging spectrum of COVID-19 neurology: clinical, radiological and laboratory findings 🔓

Ross W Paterson, Rachel L Brown, Laura Benjamin, Ross Nortley, Sarah Wiethoff, Tehmina Bharucha, Dipa L Jayaseelan, Guru Kumar, Rhian E Raftopoulos, Laura Zambreanu ... Show more

Author Notes

WEB EXCLUSIVE CONTENT: COMMENTARY

Long-term Pulmonary Consequences of Coronavirus Disease 2019 (COVID-19)

What We Know and What to Expect

Salehi, Sana MD; Reddy, Sravanthi MD; Gholamrezanezhad, Ali MD   Author Information ⊘

Original Investigation   ONLINE FIRST 🔓

July 27, 2020

Outcomes of Cardiovascular Magnetic Resonance Imaging in Patients Recently Recovered From Coronavirus Disease 2019 (COVID-19)

Valentina O. Puntmann, MD, PhD[1]; M. Ludovica Carerj, MD[1,2]; Imke Wieters, MD[3]; et al

More on Clinical Characteristics of Pregnant Women with Covid-19 in Wuhan, China

A Legacy? Or Cautionary Tale? of COVID-19...

Medical preprint server debuts

By **Jocelyn Kaiser** | Jun. 5, 2019 , 7:00 PM

About medRxiv [FAQ]

medRxiv (pronounced "med-archive") is a free online archive and distribution server for complete but unpublished manuscripts (preprints) in the medical, clinical, and related health sciences. **Preprints are preliminary reports of work that have not been certified by peer review. They should not be relied on to guide clinical practice or health-related behavior and should not be reported in news media as established information.**

medRxiv
THE PREPRINT SERVER FOR HEALTH SCIENCES

Search   Advanced Search

Caution: Preprints are preliminary reports of work that have not been certified by peer review. They should not be relied on to guide clinical practice or health-related behavior and should not be reported in news media as established information.

medRxiv
THE PREPRINT SERVER FOR HEALTH SCIENCES

medRxiv is receiving many new papers on coronavirus SARS-CoV-2. A reminder: these are preliminary reports that have not been peer-reviewed. They should not be regarded as conclusive, guide clinical practice/health-related behavior, or be reported in news media as established information.

COVID-19 SARS-CoV-2 preprints from medRxiv and bioRxiv

7802 Articles (6173 medRxiv, 1629 bioRxiv)

Subject Areas