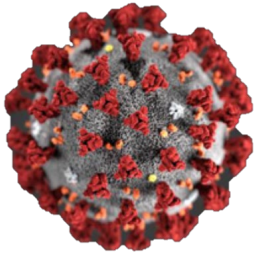
New Hampshire COVID-19 Healthcare Provider and Public Health Partner Call

March 10, 2022



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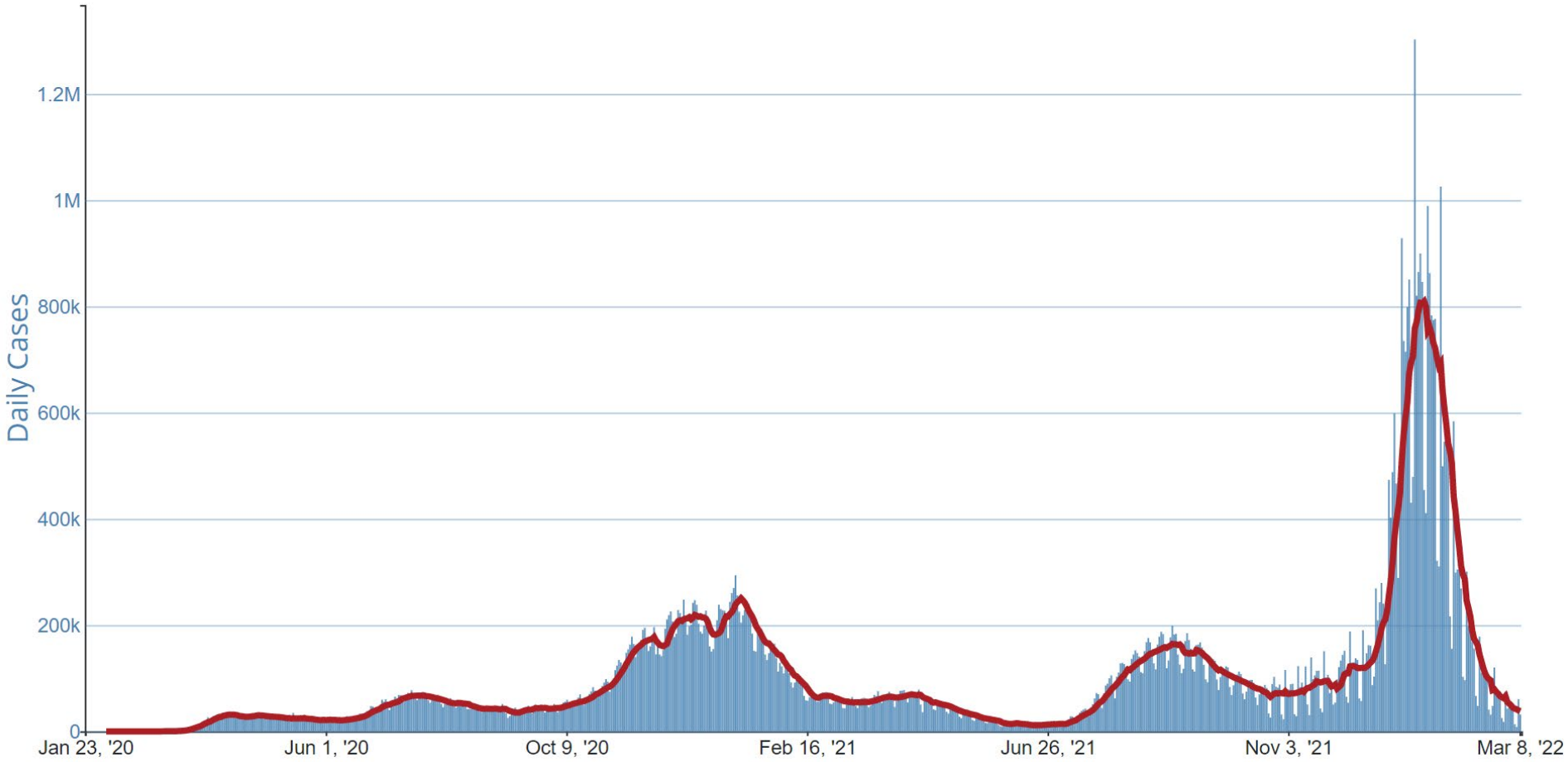
Department of Health and Human Services

Epidemiology Update

U.S. National Daily Incidence of COVID-19



https://covid.cdc.gov/covid-data-tracker/#trends_dailytrendscases

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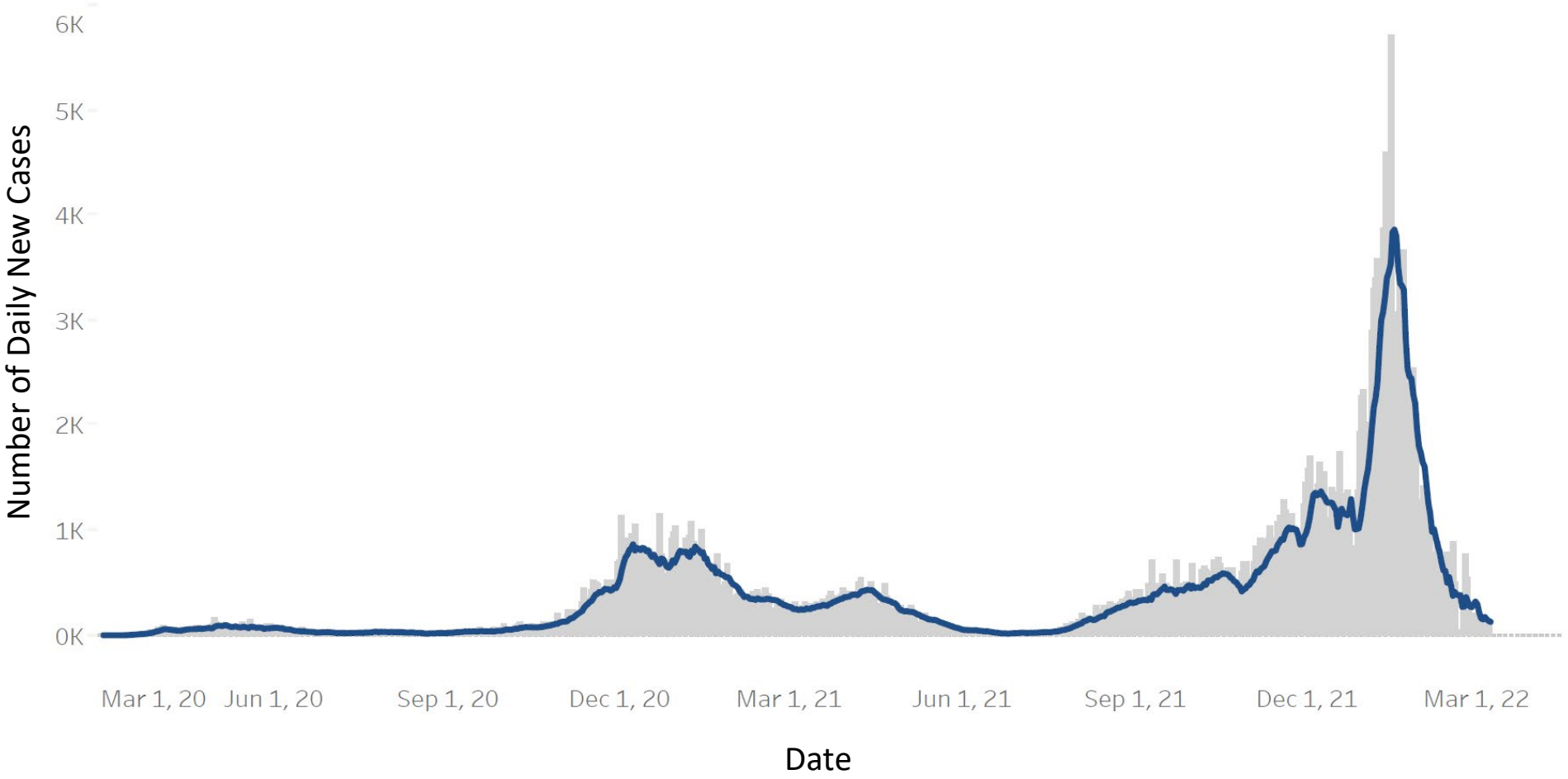
Number of New COVID-19 Cases per Day in NH



https://www.nh.gov/covid19/dashboard/overview.htm#dash

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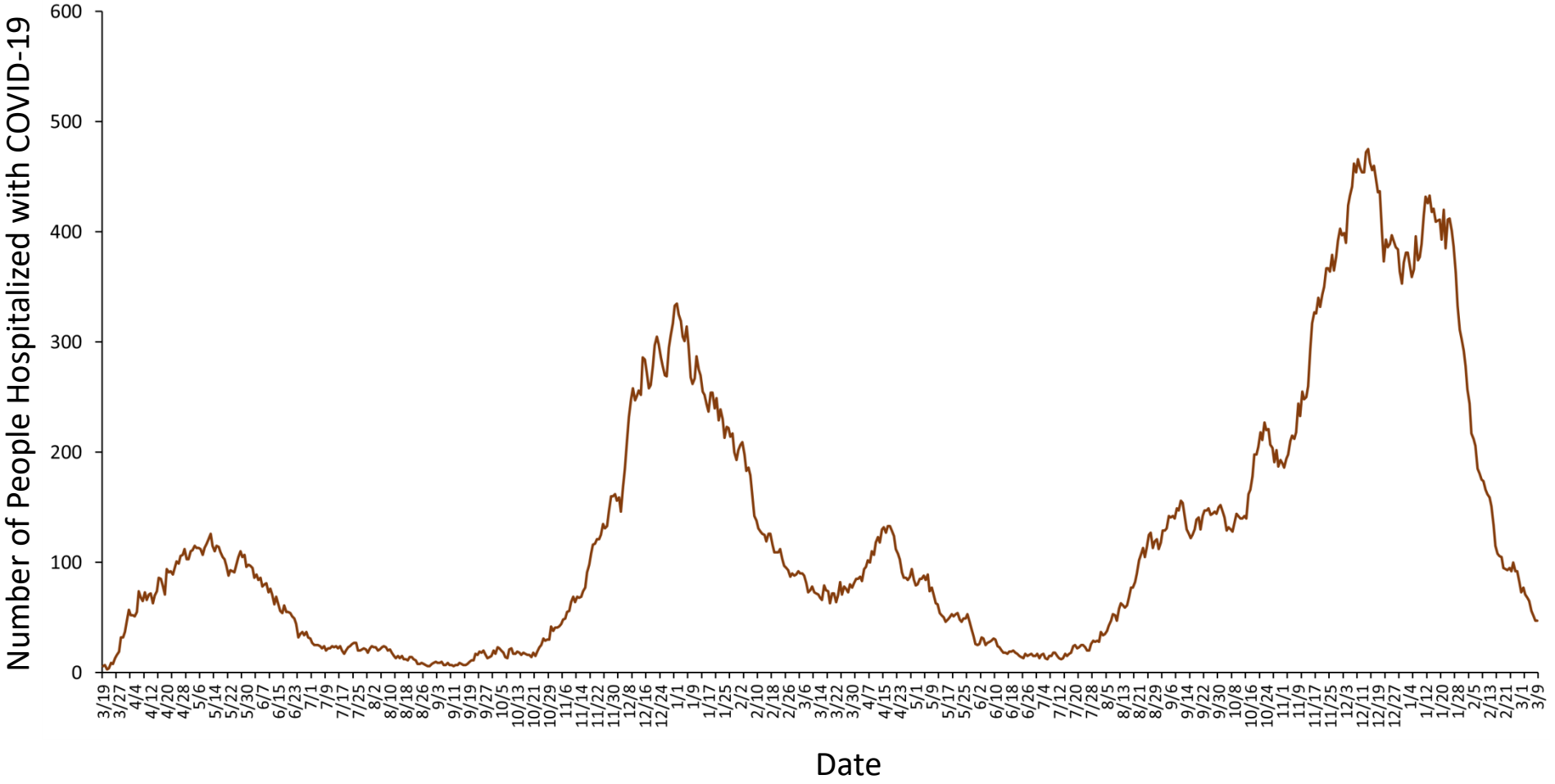
Number of People Hospitalized with COVID-19 Each Day in NH (Hospital Census)



https://www.nh.gov/covid19/dashboard/overview.htm#dash

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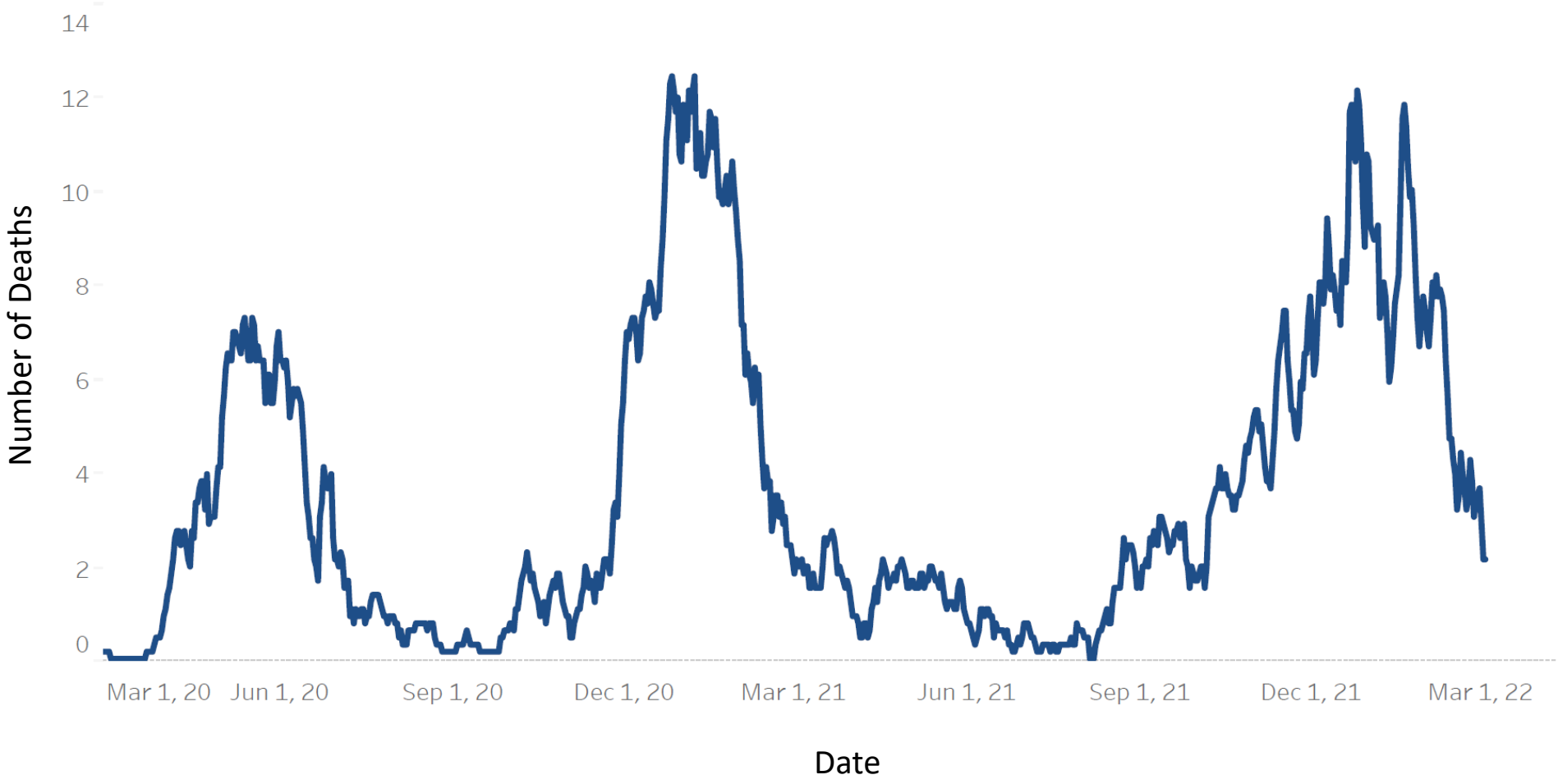
Average Number of COVID-19 Deaths per Day in NH (Based on Date of Death)



https://www.nh.gov/covid19/dashboard/overview.htm#dash

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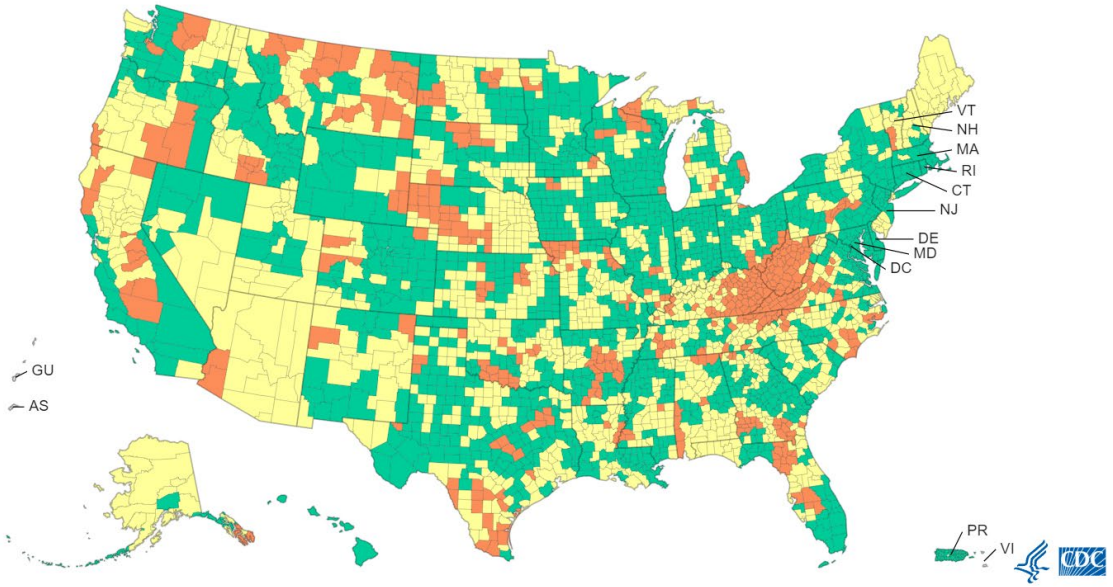
U.S. COVID-19 Community Levels by County Map

Updated Mar. 3, 2022 Languages Print

Data provided by CDC
Updated: March 3, 2022



Legend

- High
- Medium
- Low

Data Table (Scroll right for additional data) +

Download Data (CSV)

https://www.cdc.gov/coronavirus/2019-ncov/science/community-levels-county-map.html

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CDC's COVID-19 Community Level Metrics

COVID-19 Community Levels – Use the Highest Level that Applies to Your Community				
New COVID-19 Cases Per 100,000 people in the past 7 days	**Indicators**	**Low**	**Medium**	**High**
Fewer than 200	New COVID-19 admissions per 100,000 population (7-day total)	<10.0	10.0-19.9	≥20.0
	Percent of staffed inpatient beds occupied by COVID-19 patients (7-day average)	<10.0%	10.0-14.9%	≥15.0%
200 or more	New COVID-19 admissions per 100,000 population (7-day total)	NA	<10.0	≥10.0
	Percent of staffed inpatient beds occupied by COVID-19 patients (7-day average)	NA	<10.0%	≥10.0%

https://www.cdc.gov/coronavirus/2019-ncov/science/community-levels.html

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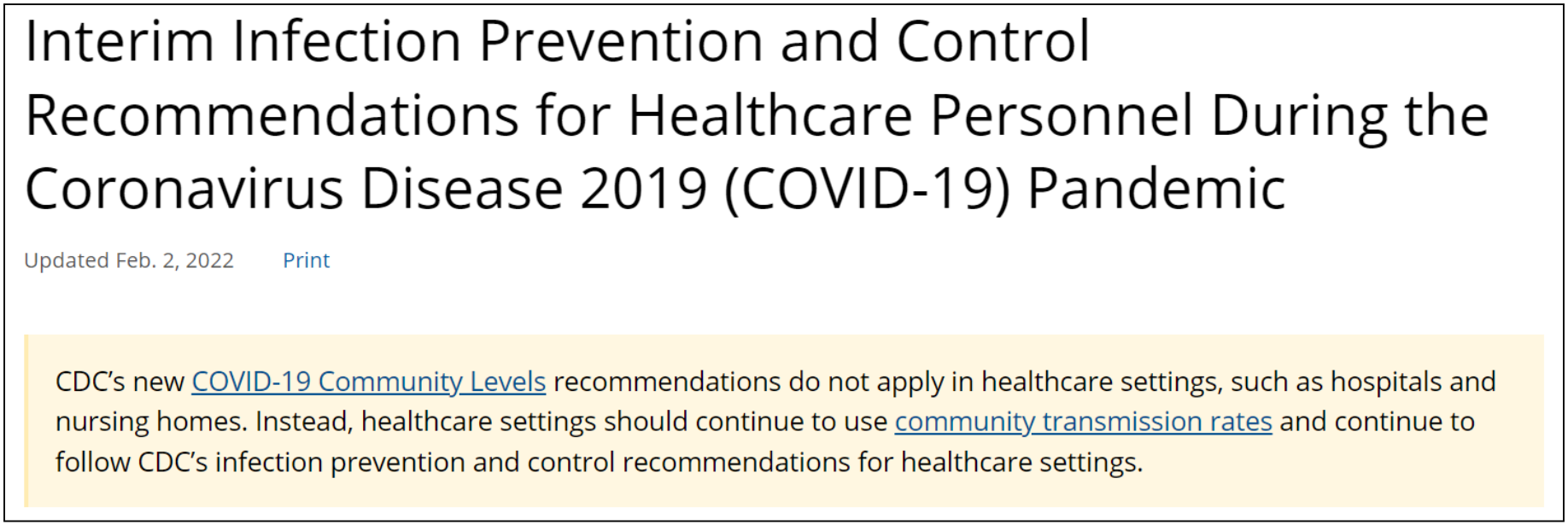
https://www.cdc.gov/coronavirus/2019-ncov/science/community-levels.html

COVID-19 Community Level Metrics by NH County (3/3/22)

County Name	Inpatient Bed Utilization	Hospital Admissions per 100k	Cases per 100k	COVID-19 Community Level
Belknap County, NH	3.70%	7.4	190.86	Low
Carroll County, NH	3.70%	7.4	255.57	Medium
Cheshire County, NH	7.90%	3.4	218.18	Medium
Coos County, NH	0.00%	0	361.18	Medium
Grafton County, NH	3.40%	9.8	325.97	Medium
Hillsborough County, NH	3.70%	7.4	197.11	Low
Merrimack County, NH	3.70%	7.4	201.47	Medium
Rockingham County, NH	2.60%	4.1	194.66	Low
Strafford County, NH	7.60%	3	414.14	Medium
Sullivan County, NH	3.40%	9.8	250.31	Medium

CDC's Healthcare Infection Prevention and Control Guidance

- Still based on the older "Level of Community Transmission" metrics



Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic

Updated Feb. 2, 2022 Print

CDC's new COVID-19 Community Levels recommendations do not apply in healthcare settings, such as hospitals and nursing homes. Instead, healthcare settings should continue to use community transmission rates and continue to follow CDC's infection prevention and control recommendations for healthcare settings.

https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html

NH COVID-19 HAN, Update #58: Paxlovid & Molnupiravir Distribution

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Prescribing Requirements

- Providers must be familiar with prescribing indications and requirements:
  - Paxlovid:
    - FDA's Fact Sheet for Healthcare Providers
    - FDA's Fact Sheet for Patients, Parents and Caregivers (must be provided to patients and caregivers prior to prescribing Paxlovid)
  - Molnupiravir:
    - FDA's Fact Sheet for Healthcare Providers
    - FDA's Fact Sheet for Patients and Caregivers (must be provided to patients and caregivers prior to prescribing molnupiravir)

Accessing Paxlovid and Molnupiravir

- These two oral antiviral medications are now being allocated to certain commercial pharmacies in New Hampshire, and are available through routine prescribing
  - Molnupiravir can currently be prescribed through certain Walgreens, CVS, and Rite Aid pharmacies
  - Paxlovid will be available at Walgreens pharmacy locations over the next two weeks (see Table 1 in HAN)
  - The federal COVID-19 Test to Treat program is also allocating Paxlovid and molnupiravir to certain CVS Minute Clinic locations starting this week (see Table 2 in HAN)
  - As allocations increase, distribution will expand to other pharmacy locations. Providers should check the federal HHS COVID-19 Therapeutics Locator for availability of therapeutics by location

Table 1: Paxlovid Distribution to NH Walgreens Pharmacies

Pharmacy	Address	City	State	Zip
Distributed 3/9/2022				
Walgreens	288 SANDOWN RD	EAST HAMPSTEAD	NH	03860
Walgreens	48 PORTSMOUTH AVE	EXETER	NH	03833
Walgreens	440 WEST ST	KEENE	NH	03431
Walgreens	620 LAFAYETTE RD	HAMPTON	NH	03842
Walgreens	104 S MAIN ST	ROCHESTER	NH	03867
Walgreens	606 VALLEY ST	MANCHESTER	NH	03102
Walgreens	3 AIRPORT RD	WEST LEBANON	NH	03784
Walgreens	12 MAIN ST	EPPING	NH	03042
Walgreens	283 MAIN STREET	NASHUA	NH	03063
Walgreens	45 COURT ST	LACONIA	NH	03246
Walgreens	274 DELLS RD	LITTLETON	NH	03561
Walgreens	571 NASHUA ST	MILFORD	NH	03055
Walgreens	1498 WHITE MOUNTAIN hwy	NORTH CONWAY	NH	03860
Walgreens	1 GLENWOOD AVE	DOVER	NH	03820
Walgreens	142 LOUDON RD	CONCORD	NH	03301
Walgreens	14 PINNACLE LN	WALPOLE	NH	03608
Walgreens	177 MAIN STREET	LANCASTER	NH	03584
Walgreens	50 SOUTH MAIN STREET	WOLFEBORO	NH	03894
Walgreens	200 PLEASANT STREET	BERLIN	NH	03570
Walgreens	91 MAIN STREET	COLEBROOK	NH	03576
Walgreens	910 ROUTE 16	OSSIPEE	NH	03814
To Be Distributed 3/16/2022				
Walgreens	167 S BROADWAY	SALEM	NH	03079
Walgreens	227 S MAIN ST	MANCHESTER	NH	03102
Walgreens	131 NASHUA RD	LONDONDERRY	NH	03053
Walgreens	258 WALLACE RD	BEDFORD	NH	03110
Walgreens	550 AMHERST ST	NASHUA	NH	03063
Walgreens	615 DANIEL WEBSTER HWY	MERRIMACK	NH	03054
Walgreens	1298 HOOKSETT RD	HOOKSETT	NH	03106
Walgreens	91 CALEF HWY	LEE	NH	03861
Walgreens	4 SANBORN RD	TILTON	NH	03276
Walgreens	53 ROUTE 27	RAYMOND	NH	03077
Walgreens	217 DANIEL WEBSTER HIGHWAY	NASHUA	NH	03063
Walgreens	90 DERRY STREET	HUDSON	NH	03051
Walgreens	151 BRIDGE STREET	PELHAM	NH	03076
Walgreens	3 PLAISTOW RD	PLAISTOW	NH	03865

Table 2: Current Federal COVID-19 Test to Treat CVS Minute Clinic Locations

Pharmacy	Address	City	State	Zip
CVS Minute Clinic	4 Hall St	Concord	NH	03301
CVS Minute Clinic	214 Daniel Webster Highway	Nashua	NH	03060
CVS Minute Clinic	512 South Broadway	Salem	NH	03079
CVS Minute Clinic	250 Mammoth Rd	Manchester	NH	03109
CVS Minute Clinic	321A Lafayette Rd	Hampton	NH	03842
CVS Minute Clinic	50 STERLING WAY	DOVER	NH	03820

ASPR Office of the Assistant Secretary for Preparedness & Response

COVID-19 Therapeutics Locator

The national map below displays public locations that have received shipments of U.S. Government-procured COVID-19 therapeutics under U.S. Food and Drug Administration (FDA) Emergency Use Authorization (EUA) authority. The long-acting antibody combination, Evusheld; monoclonal antibody treatments, bebtelovimab and sotrovimab; as well as the oral antiviral therapies, Paxlovid and molnupiravir are products authorized by the FDA for either prevention (Evusheld) or treatment (Paxlovid, sotrovimab, bebtelovimab, and molnupiravir) of COVID-19. The locations displayed in the locator have reported available courses within the last 7 days.

As of January 24, 2022, allocations of bamlanivimab/etesevimab and REGEN-COV have been paused following FDA's revised EUA's for both products limiting their use due to the omicron variant.

These therapies require a prescription by a licensed and authorized provider. The therapeutics locator is intended for provider use. Patients should not contact locations directly unless instructed to do so by their healthcare provider.

Additional resources and information related to COVID-19 Therapeutics currently distributed by the federal government can be found on the ASPR COVID-19 Therapeutics page. For questions regarding this site, contact HPOP-Therapeutics@hhs.gov.

Find Locations

Search by therapy and by zip code to find potential locations.

Therapeutic Distribution Locator for Provider Use

State, Territory, or Jurisdiction: All

Therapeutic Selector: All

Locations
21,429

*LAPINCARE
1339 EAST 21 ST, BROOKLYN, NY 11210
Sotrovimab, Product #00173-0901-86
6 Available

1237 - PIEDMONT HEALTHCARE
375 Hospital Street, Mocksville, NC 27028
Paxlovid, Product #00069-1085-30
12 Available

1237 - PIEDMONT HEALTHCARE
375 Hospital Street, Mocksville, NC 27028
Molnupiravir, Product #00006-5055-06
29 Available

13th Ave Pharmacy
5211 13th Ave, Brooklyn, NY 11219
Sotrovimab, Product #00173-0901-86
12 Available

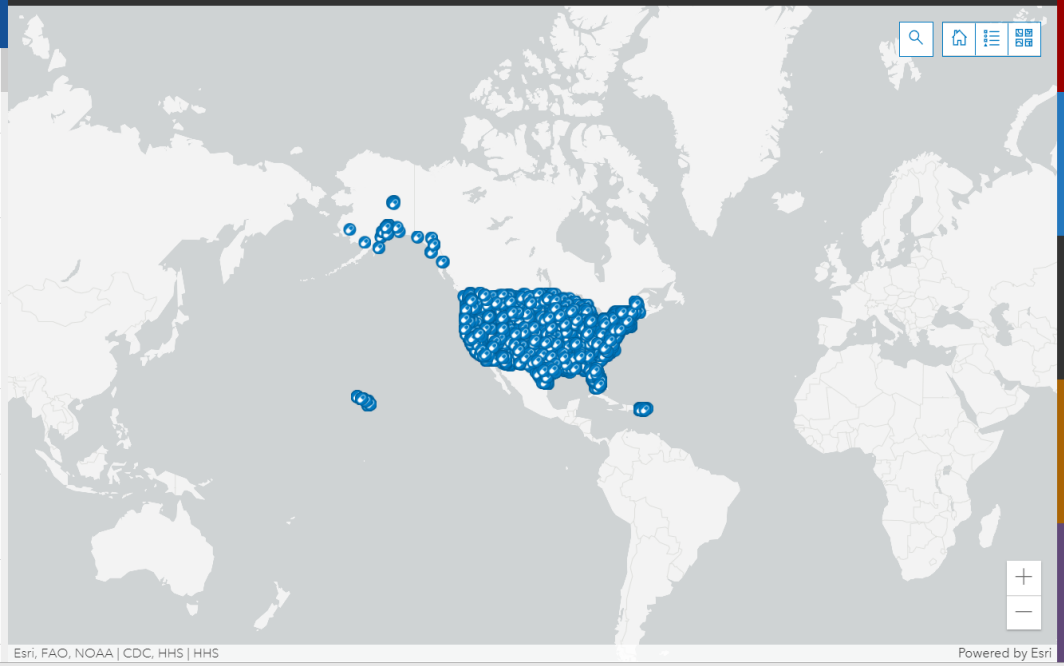
17225-FARMACIA HEIDI
CALLE COLON # 260, AGUADA, PR 00602
Molnupiravir, Product #00006-5055-06
56 Available

17225-FARMACIA HEIDI
CALLE COLON # 260, AGUADA, PR 00602
Paxlovid, Product #00069-1085-30
20 Available

307 Infusion Pharmacy, LLC
1030 N. Poplar St, Casper, WY 82601
Sotrovimab, Product #00173-0901-86
6 Available

38TH STREET PHARMACY

Use search glass below to find locations near an address.



Evusheld
Available: 169,090

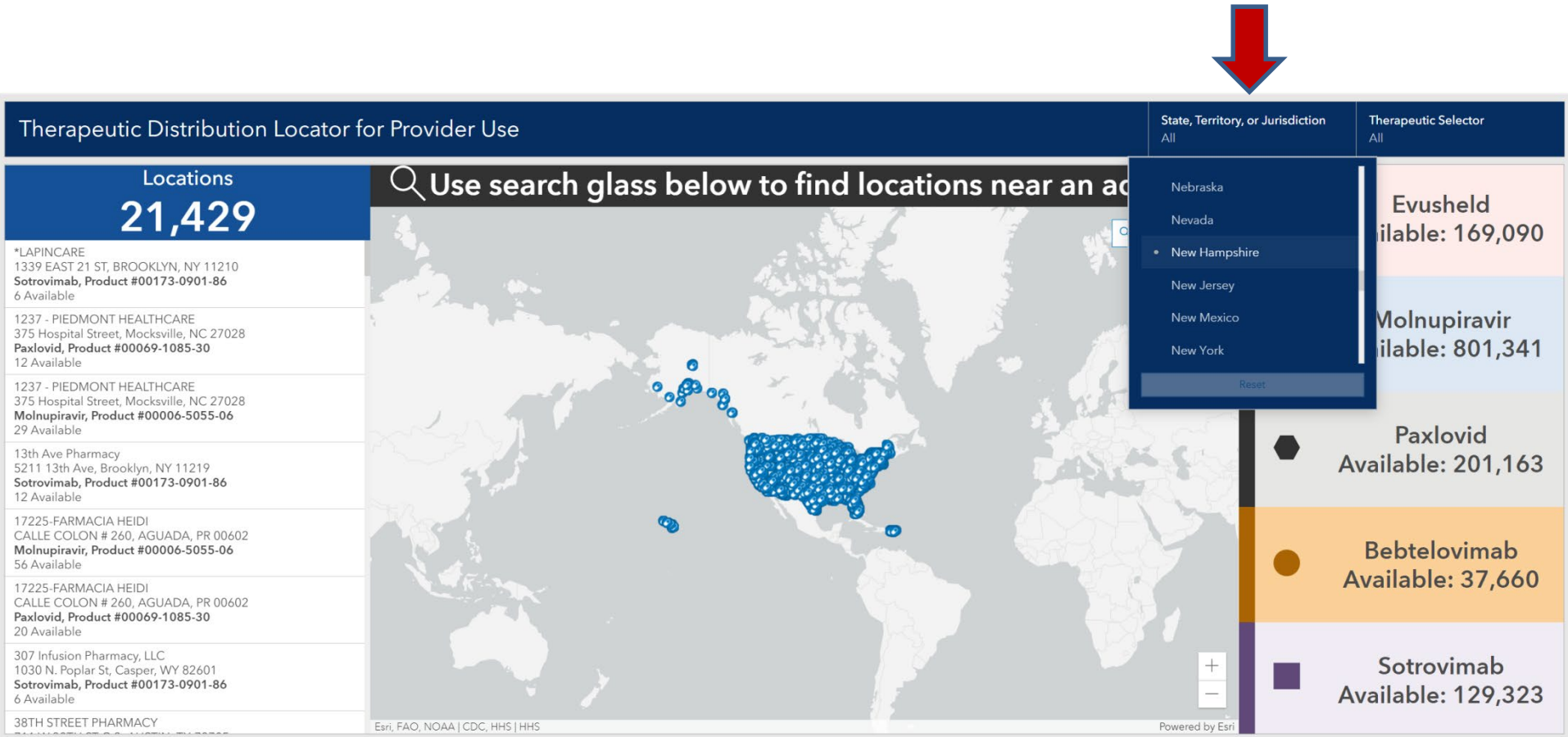
Molnupiravir
Available: 801,341

Paxlovid
Available: 201,163

Bebtelovimab
Available: 37,660

Sotrovimab
Available: 129,323

COVID-19 Therapeutics Locator



https://covid-19-therapeutics-locator-dhhs.hub.arcgis.com/

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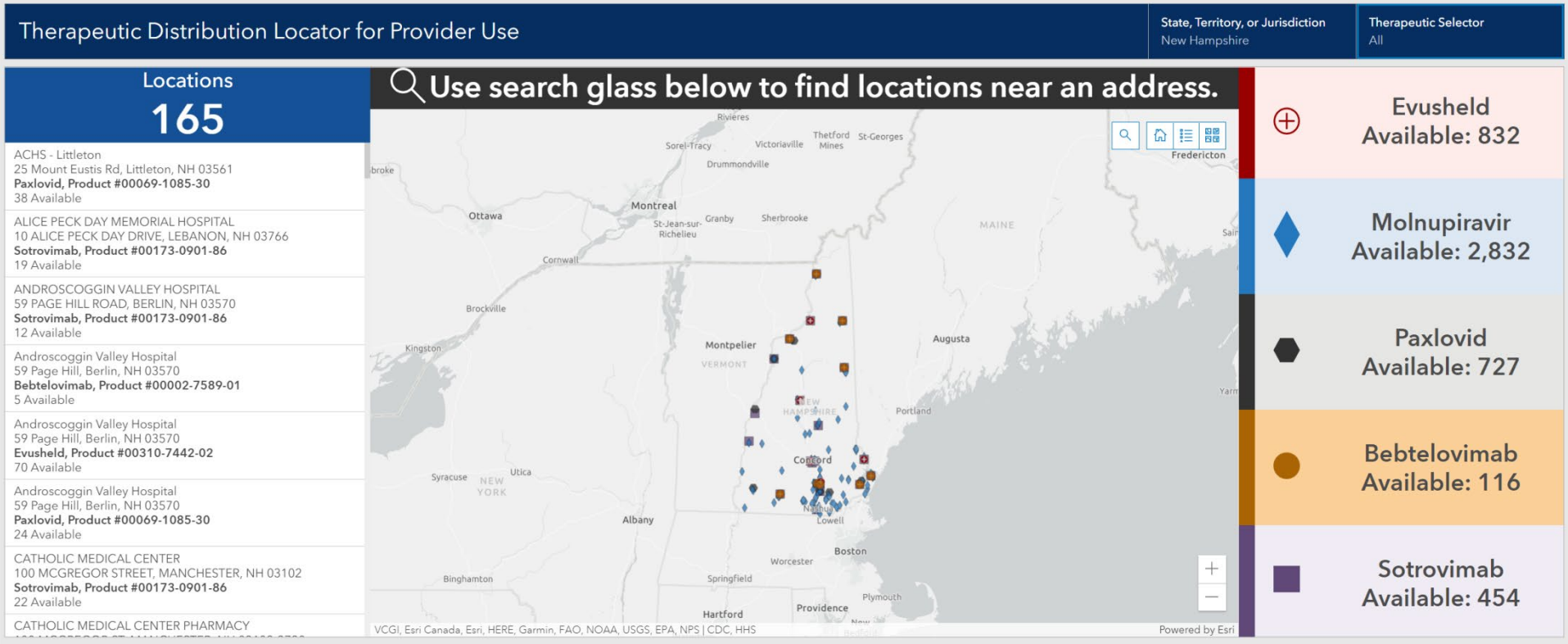
COVID-19 Therapeutics Locator



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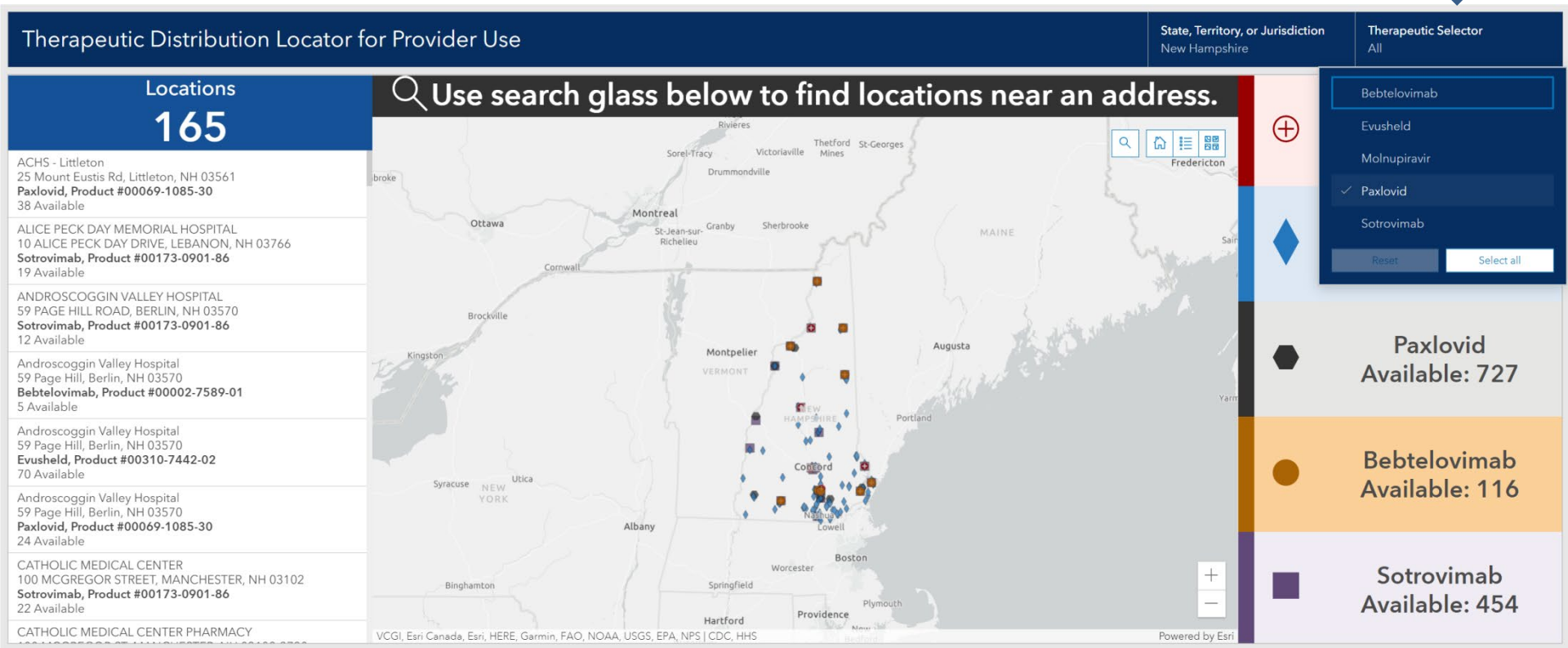
COVID-19 Therapeutics Locator



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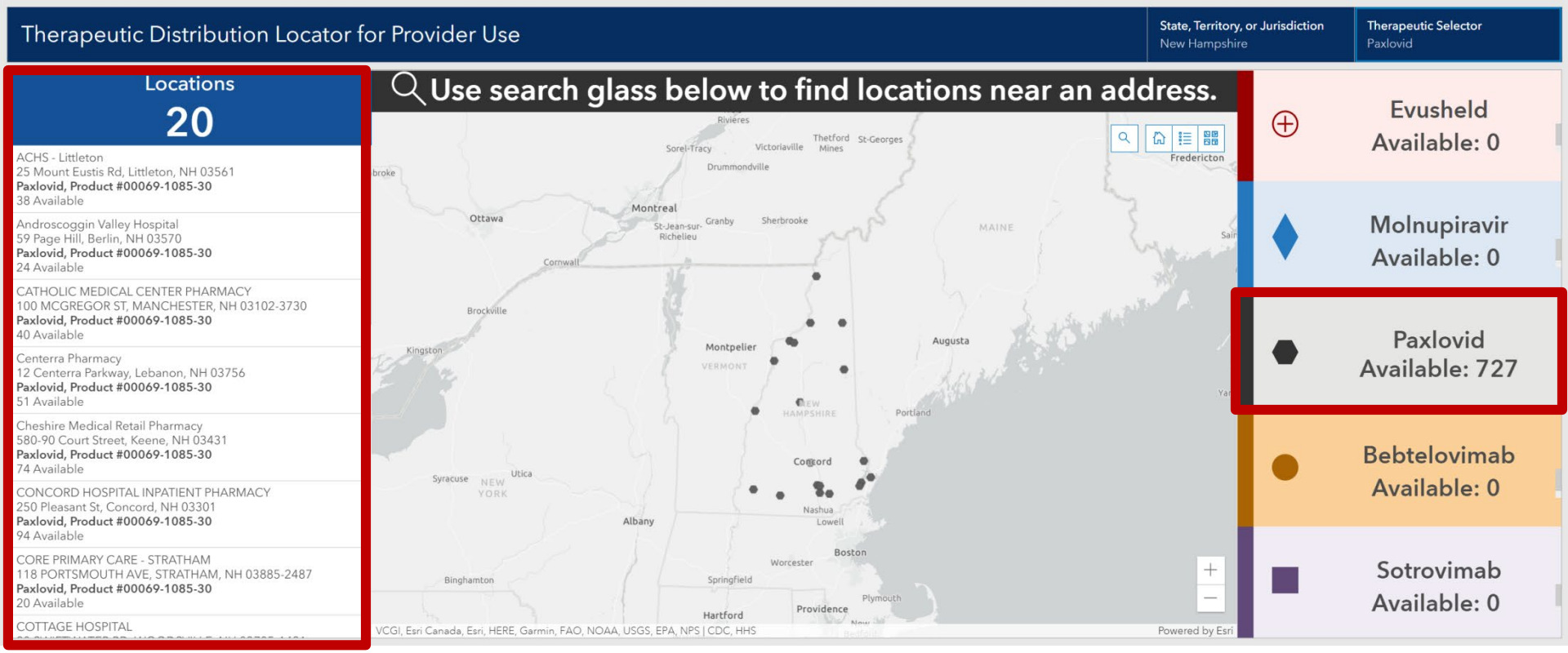

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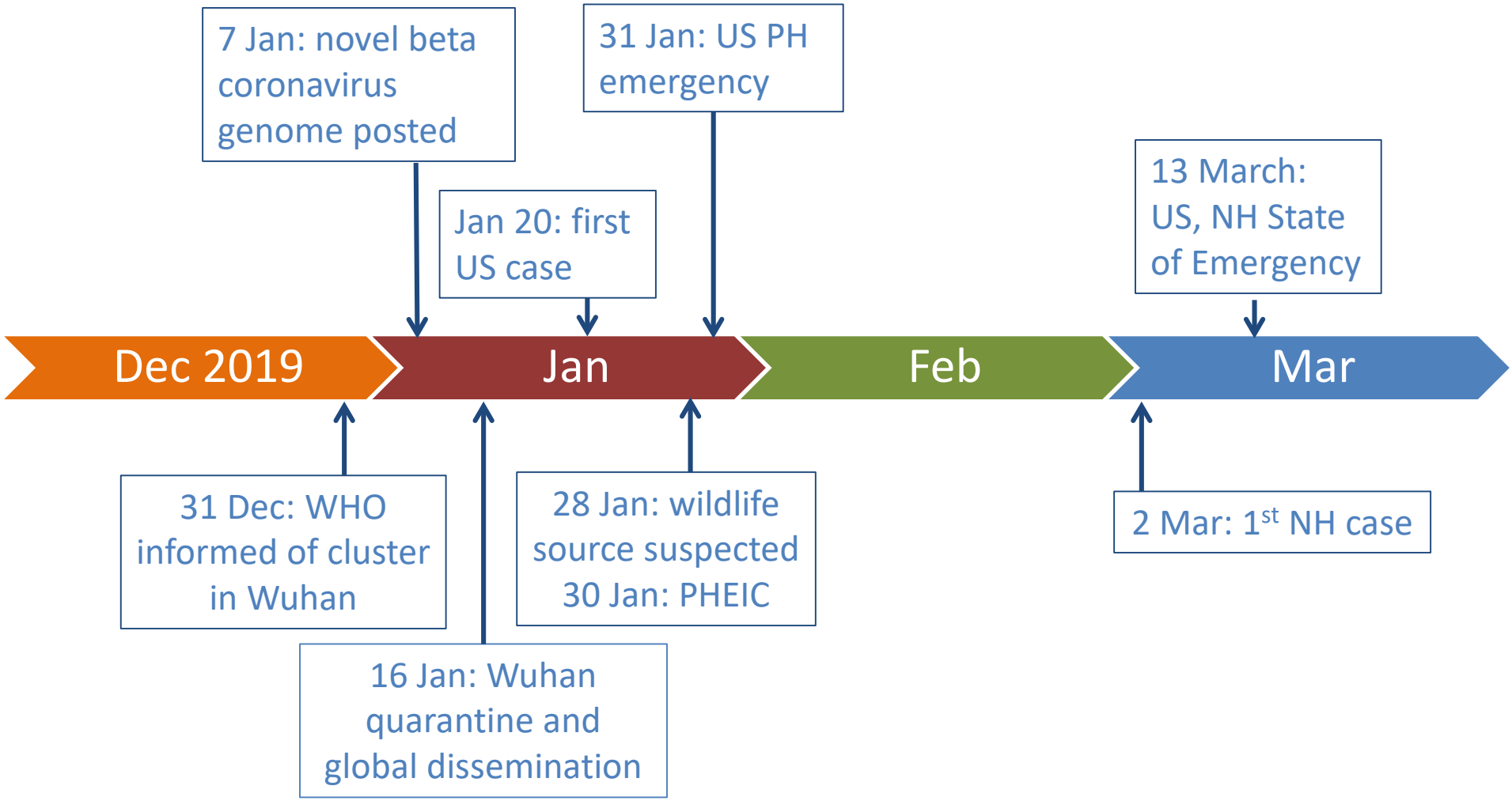
SARS-CoV-2 Origins


7 Jan: novel beta coronavirus genome posted
31 Jan: US PH emergency
Jan 20: first US case
13 March: US, NH State of Emergency
Dec 2019
Jan
Feb
Mar
31 Dec: WHO informed of cluster in Wuhan
28 Jan: wildlife source suspected
30 Jan: PHEIC
2 Mar: 1st NH case
16 Jan: Wuhan quarantine and global dissemination

From a slide deck Feb 17 2020!

Genetic analysis

- Based on 24 genomes, lack of diversity points to single spillover from animals to humans
- Nov 2019 jump from reservoir or bridge reservoir to humans
- Animal reservoirs not confirmed
  - Most closely related to viruses in rhinolophid bats in Asia, Europe
  - Bridge reservoir?

Imai N, Cori, A, Dorigatti I, et al at WHO Collaborating Centre for Infectious Disease Modelling, MRC Centre for Global Infectious Disease Analysis, J-IDEA, Imperial College London, UK

https://commons.wikimedia.org/wiki/File:Bat(20070605).jpg

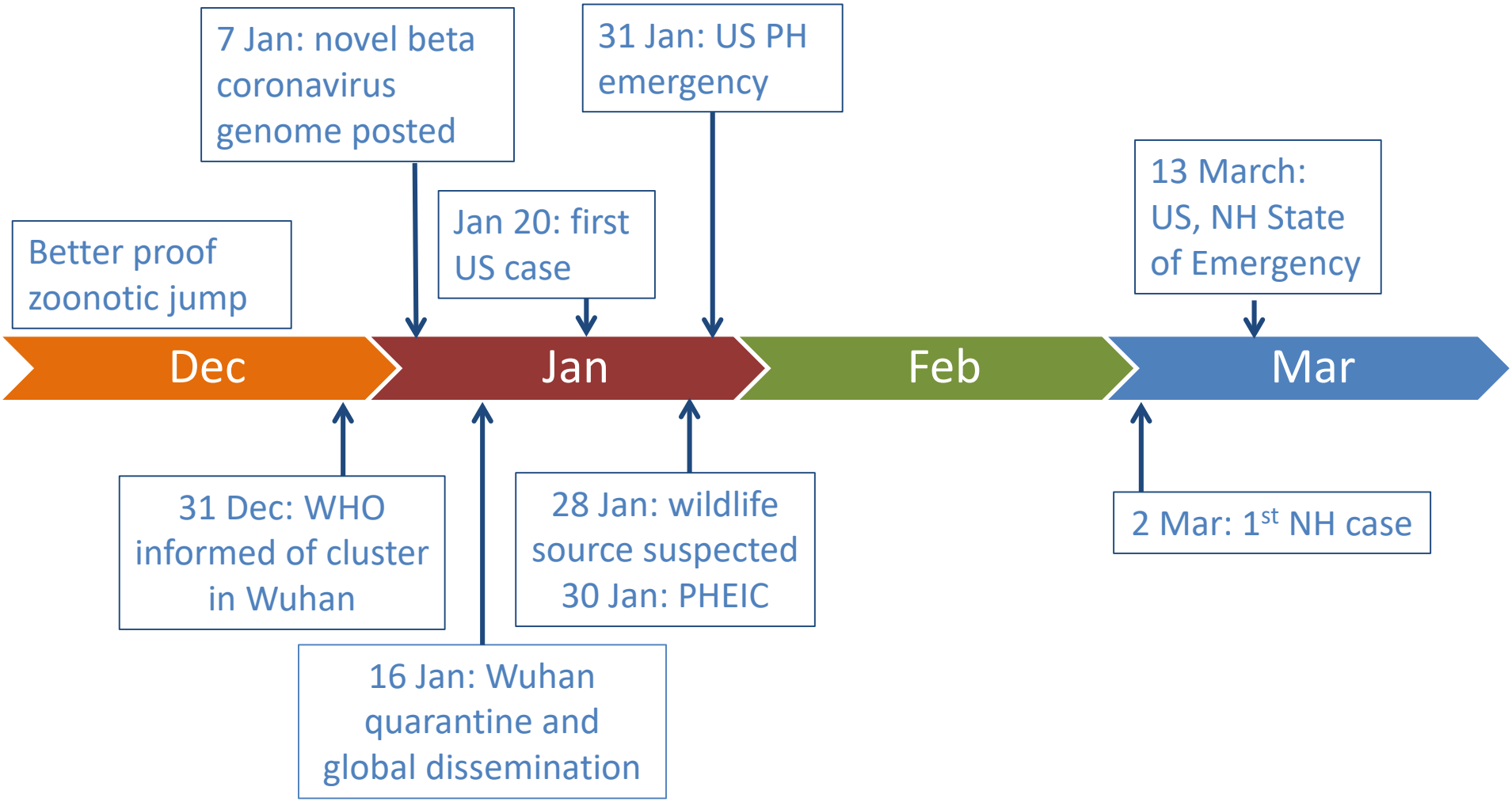
GEISELMED.DARTMOUTH.EDU

Origin of SARS-CoV-2

- Yet question of whether pandemic began with a spillover from wildlife sold at Market or a leak from a Wuhan virology lab has given rise to pitched geopolitical battles and debates over how best to stop the next pandemic
- Lines of evidence have consistently pointed to animal spillover at Wuhan Huanan Seafood Market:
  - First human case was a vendor in Market
  - Additional human clusters at Market
  - Virus found in wildlife areas of Market, but animals removed/culled before testing
  - Strains found in species that had been present

MOST EMERGING INFECTIOUS DISEASES ARE ZOONOTIC

~75% of EIDs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Better proof zoonotic jump
Dec
Jan
Feb
Mar
31 Dec: WHO informed of cluster in Wuhan
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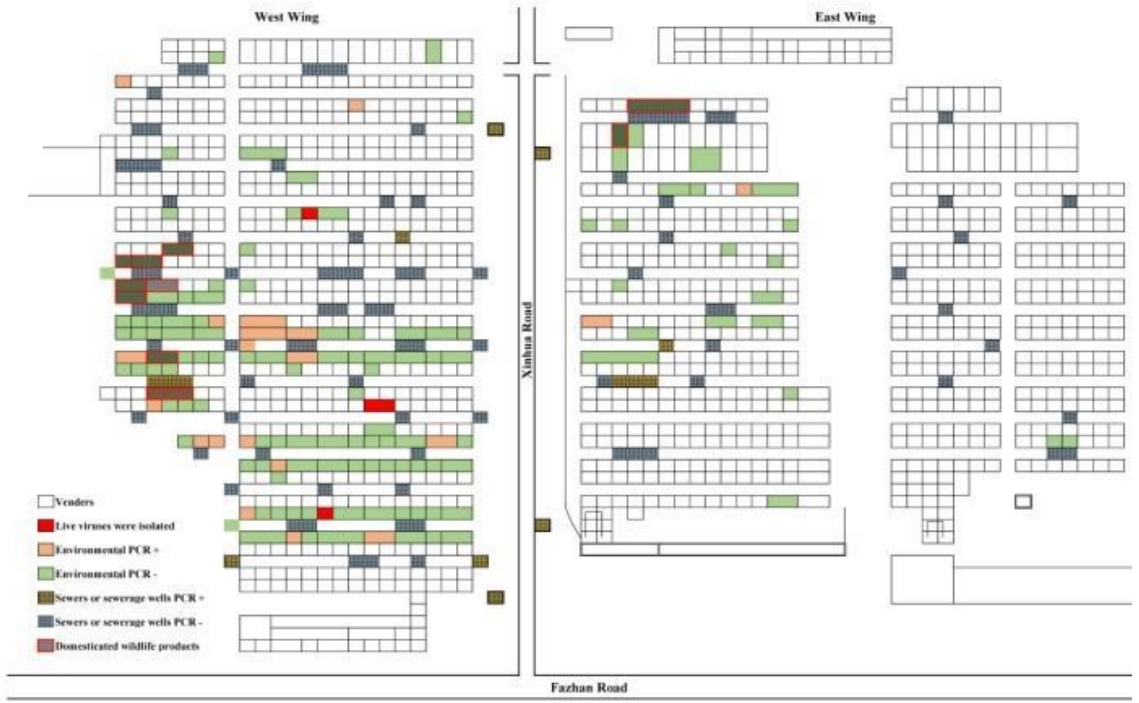
16 Jan: Wuhan quarantine and global dissemination

3 Recent Reports

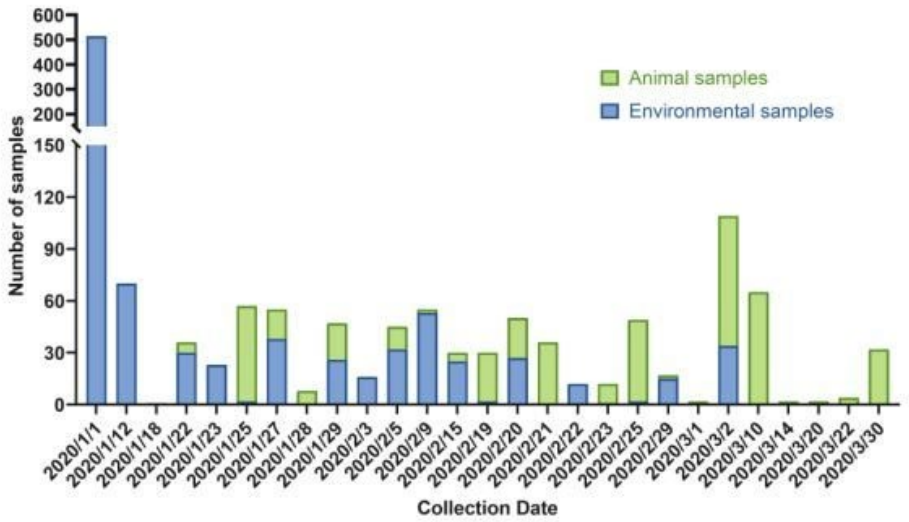
- Gao et al analysis of genetic traces of coronaviruses collected at Market Jan 2020
- Worobey et al spatial and genomic analyses
- Pekar et al study of early genomic diversity

Gao et al

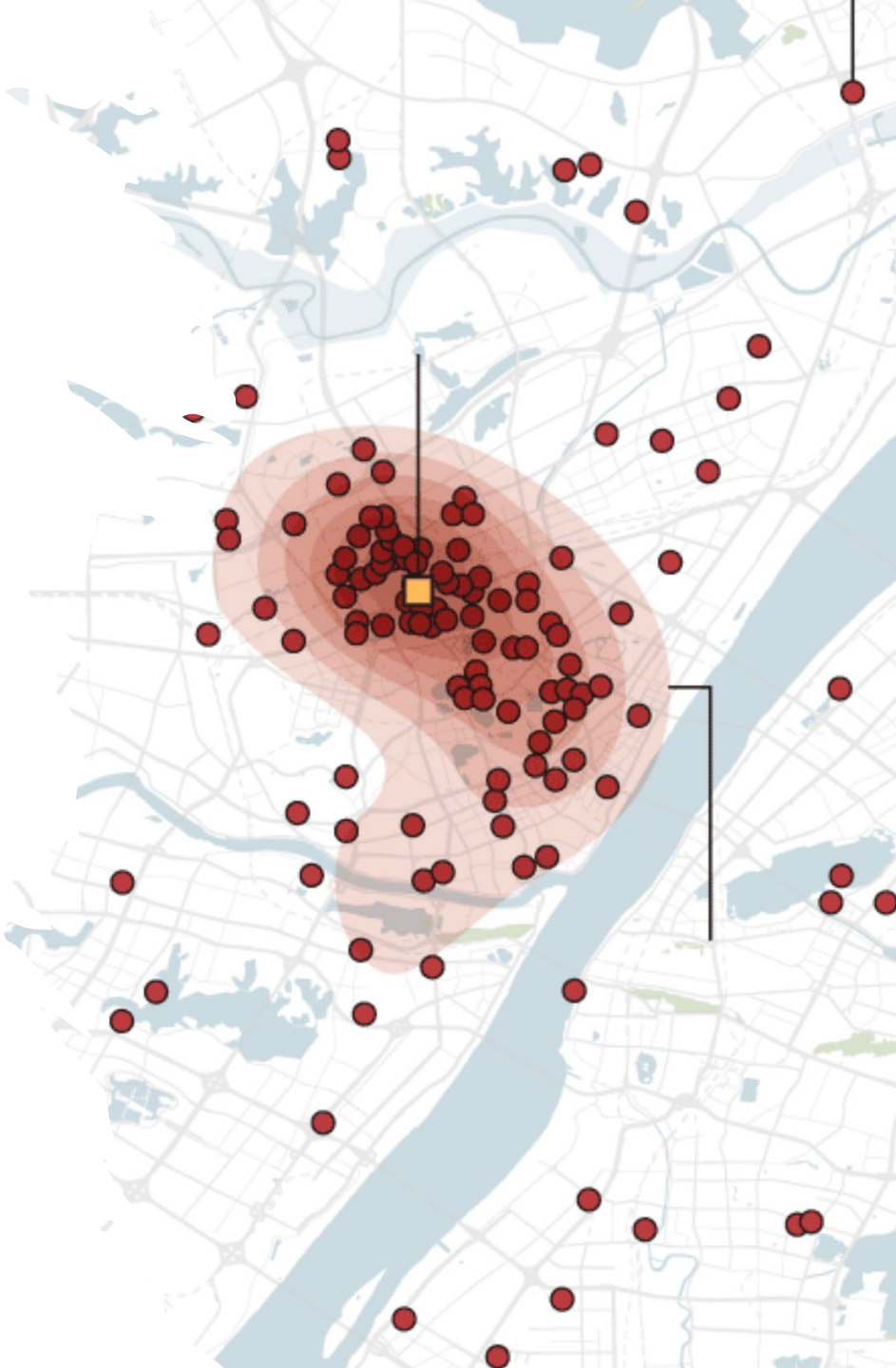
- 1380 samples collected from environment and animals
- Of 73 positive from environment, 99.980% - 99.993% identical to human ancestral lineages A and B
- Suggests ancestral lineages concentrated in Market – at least an amplifying setting if not origin

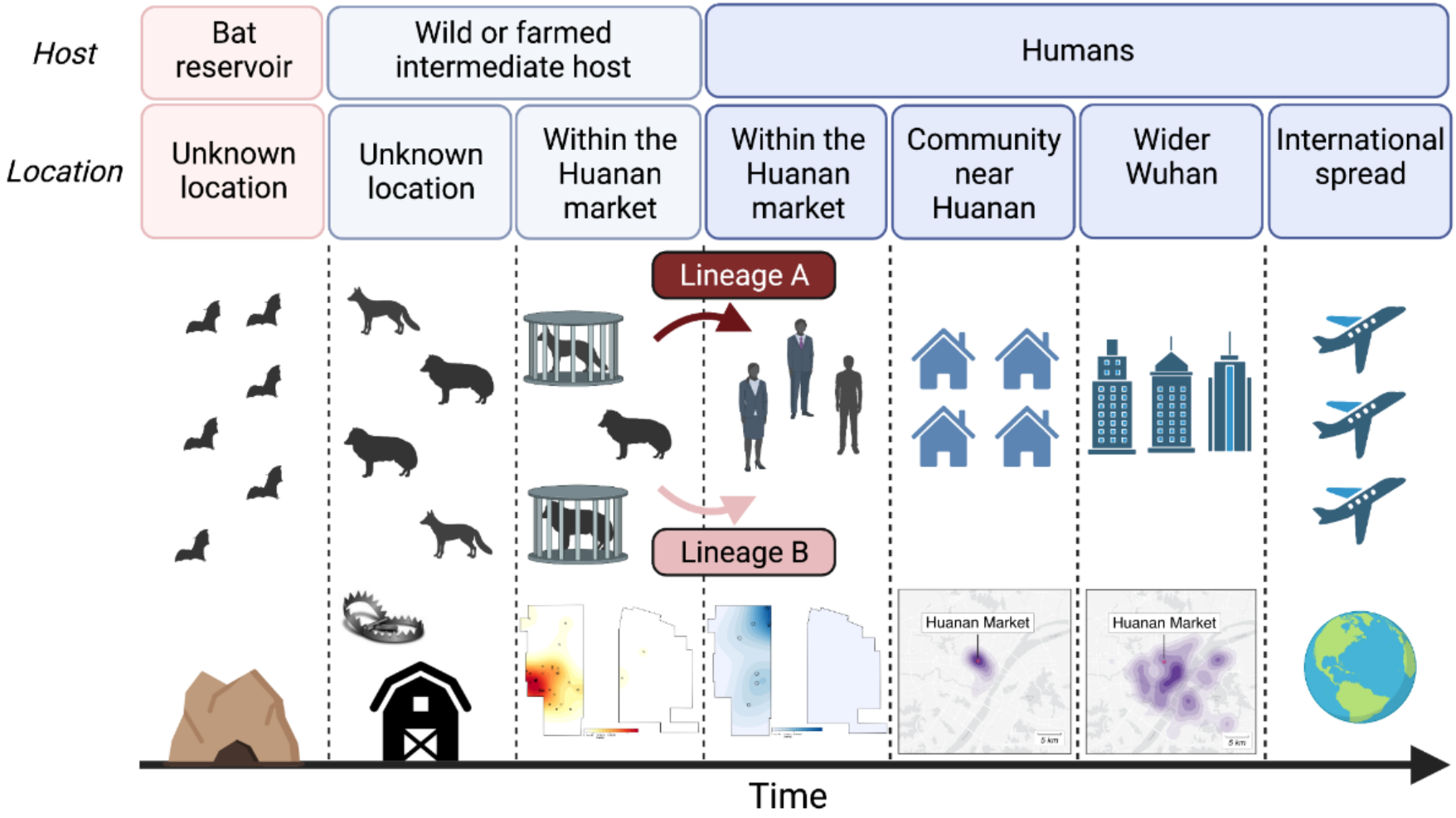


B



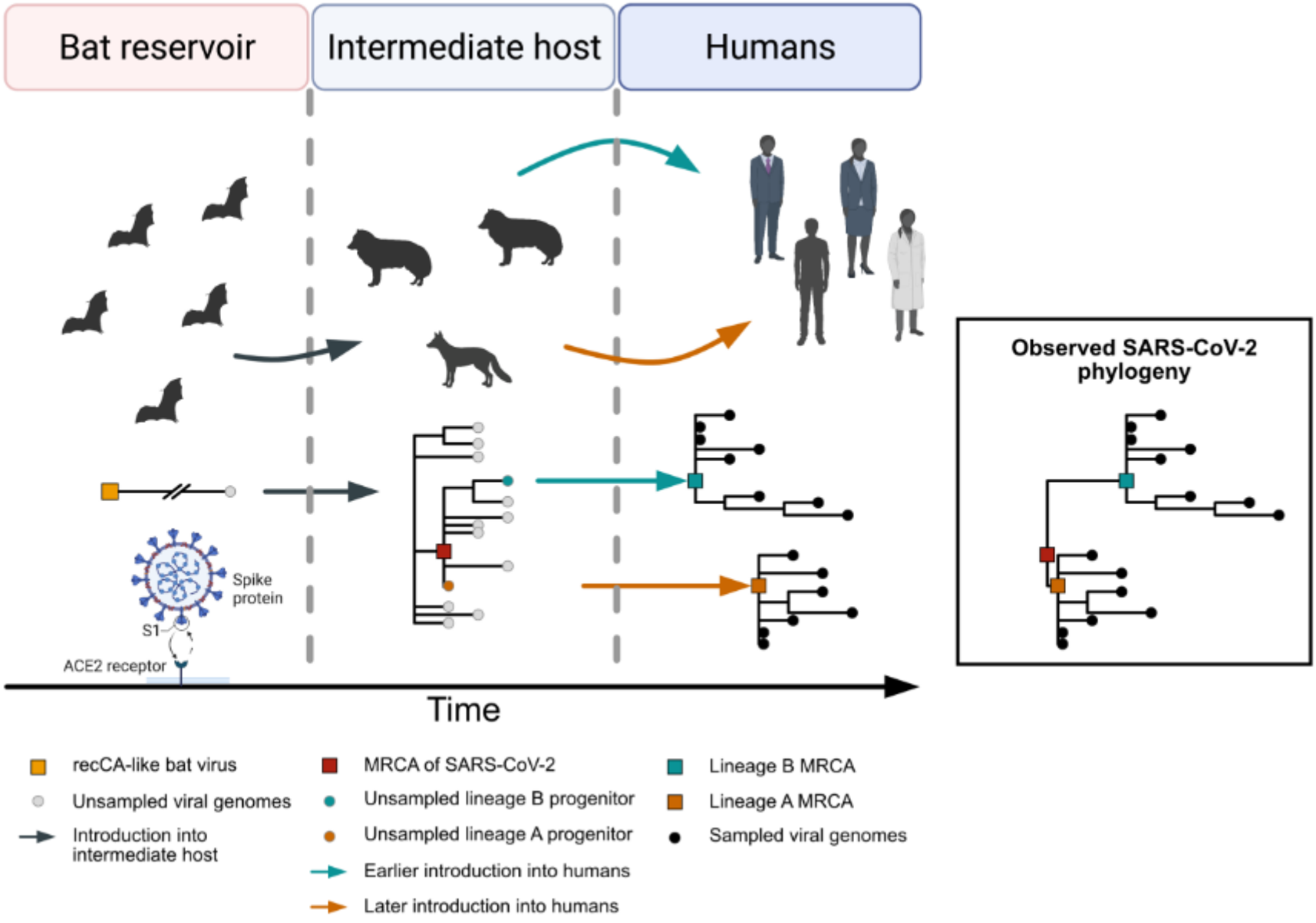
- Worobey et al spatial analysis of 156 human cases in Wuhan Dec 2019
- 5 environmental samples linked to single stall that sold live animals: to a metal cage, to carts used to move animals, and to a machine used to remove birds' feathers
- Used Weibo to identify 737 cases seeking help for COVID in Jan and Feb 2020, which suggested community spread from the Market as epicenter




Host
Bat reservoir
Wild or farmed intermediate host
Humans
Location
Unknown location
Unknown location
Within the Huanan market
Within the Huanan market
Community near Huanan
Wider Wuhan
International spread
Lineage A
Lineage B
Huanan Market
Huanan Market
Time

SARS-CoV-2 emergence very likely resulted from at least two zoonotic events

- Pekar et al epi/genetic analysis of 1,16 strains proposes bat ancestral haplotype (progenitor) gained ability to bind ACE2 receptor, jumped to and evolved in intermediate host animals
- Two jumps from animals to humans in Market, then each adapted to humans independently
  - Lineage B late-Nov/early-Dec 2019 and no earlier than early Nov
  - Lineage A occurred weeks later
- Analogous to SARS-CoV-1, MERS-CoV
- Highly unlikely 2 lineages introduced accidentally from lab


Bat reservoir
Intermediate host
Humans
Spike protein
S1
ACE2 receptor
Time
Observed SARS-CoV-2 phylogeny
recCA-like bat virus
Unsampled viral genomes
Introduction into intermediate host
MRCA of SARS-CoV-2
Unsampled lineage B progenitor
Unsampled lineage A progenitor
Earlier introduction into humans
Later introduction into humans
Lineage B MRCA
Lineage A MRCA
Sampled viral genomes

- RATG13 from horseshoe bat is (only) 96% identical to SARS-CoV-2
- Genome of SARS-CoV-2 strain from pangolins was 99% identical to infected people, acc China's official Xinhua news agency
- 26 March 2020: Lam *et al* found SARS-CoV-2 related coronaviruses in Malayan pangolins

Raccoon Dogs

- Used for food and fur in China
- Noted positive samples clustered near this species' vendors and shown to harbor SARS CoV-2 and other coronaviruses
- Akin to SARS-CoV-1 animal reservoir

In Search of Direct Progenitor

- Study of 696 specimens archived 2017-8 from
  - Sunda pangolins (*Manis javanica*)
  - Chinese pangolins (*Manis pentadactyla*) confiscated from illegal wildlife trade
  - Common palm civets (*Paradoxurus hermaphroditus*) raised on wildlife farms in Viet Nam
- 12 pangolins positive for Sarbecovirus

No. individuals and specimens positive for Flavivirus, Paramyxovirus, Filovirus, Orthomyxovirus and Coronavirus	% Individuals and specimens positive for Sarbecoviruses - E-gene assay	% Individuals and specimens positive for Sarbecoviruses RdRp-gene assay
0/299	0/299 (0%)	0/299 (0%)
0/3 and 0/5	0/3 and 0/5 (0%)	0/3 and 0/5 (0%)
and 0/392	7/243 (2.88%) and 12/392 (3.06%)	0/243 and 0/392 (0%

Q&A