

# COVID-19 Update

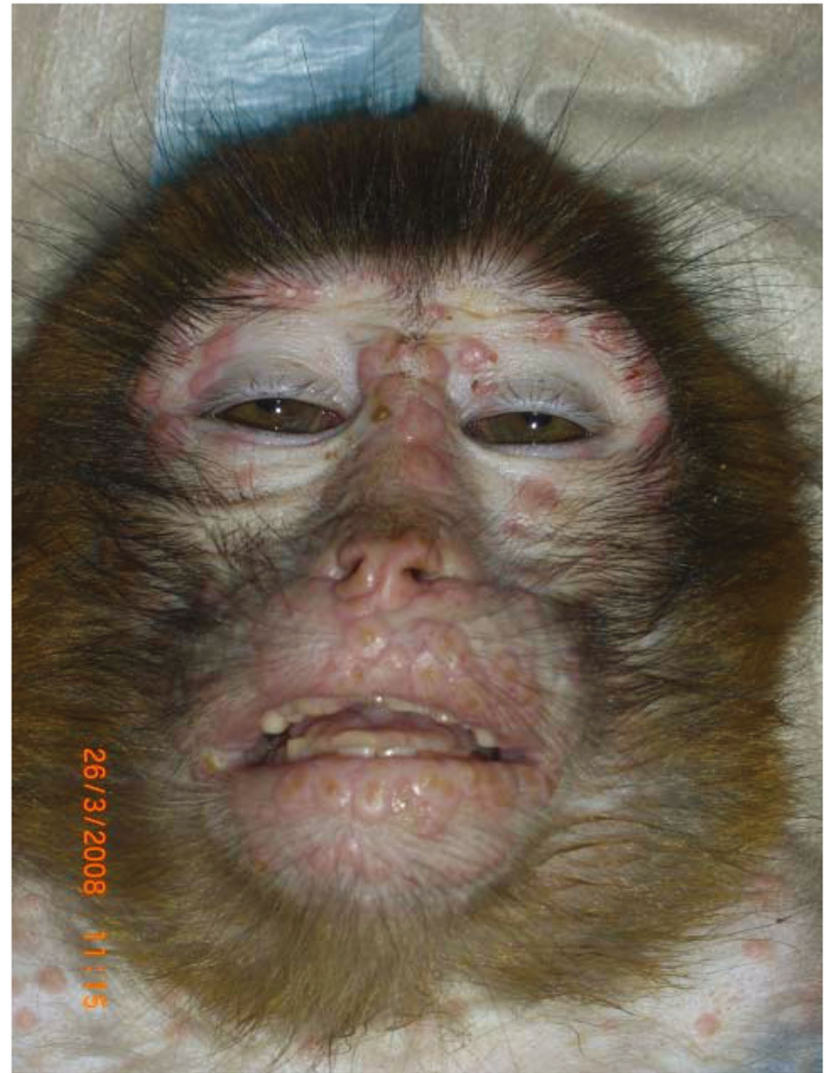
**Dr Mark Cunningham-Hill**

Medical Director NEBGH

Monday May 23<sup>rd</sup>, 2022

# Monkeypox

- Given its name because it was first identified in monkeys in a Danish laboratory in 1958
- The first reported human case of monkeypox was with a young boy in 1970 in the Congo



# Current outbreak

- 92 confirmed cases confirmed outside of Africa in Europe, UK, USA, Canada, Israel, and Australia
- 28 suspected cases
- Some cases linked to travel but many not
- Most, but not all linked to men who have sex with men
  - 3 cases linked to the Darklands 2022 Fetish Festival in Antwerp
  - Sexual transmission not typical of monkeypox outbreaks

Country	Confirmed	Suspected
Australia	1-5	-
Belgium	1-5	1-5
Canada	1-5	11-20
France	1-5	1-5
Germany	1-5	-
Italy	1-5	-
Netherlands	1-5	-
Portugal	21-30	-
Spain	21-30	6-10
Sweden	1-5	-
United Kingdom	21-30	-
United States of America	1-5	-
<b>Total</b>	<b>92</b>	<b>28</b>

Country	Time period	Cumulative cases	Cumulative deaths
Cameroon	15 December 2021 to 22 February 2022	25	<5
Central African Republic	4 March to 10 April 2022	6	<5
Democratic Republic of the Congo	1 January to 1 May 2022	1238	57
Nigeria	1 January 2022 to 30 April 2022	46	0

# Monkeypox

- Rare viral disease similar to Smallpox but much milder
- Endemic in parts of Central and Western Africa
- Incubation period (for monkeypox is usually 7–14 days but can range from 5–21 days
- Monkeypox begins with fever, headache, muscle and back aches, exhaustion and swollen lymph nodes
- Within 1-3 days (sometimes longer) of fever a rash develops often beginning on the face and then spreading to other parts of the body.
- Lesions progress through the following stages: Macules → Papules → Vesicles → Pustules → Scabs
- The illness typically lasts for 2–4 weeks. I
- In Africa, monkeypox has been shown to cause death in as many as 1 in 10 persons who contract the disease

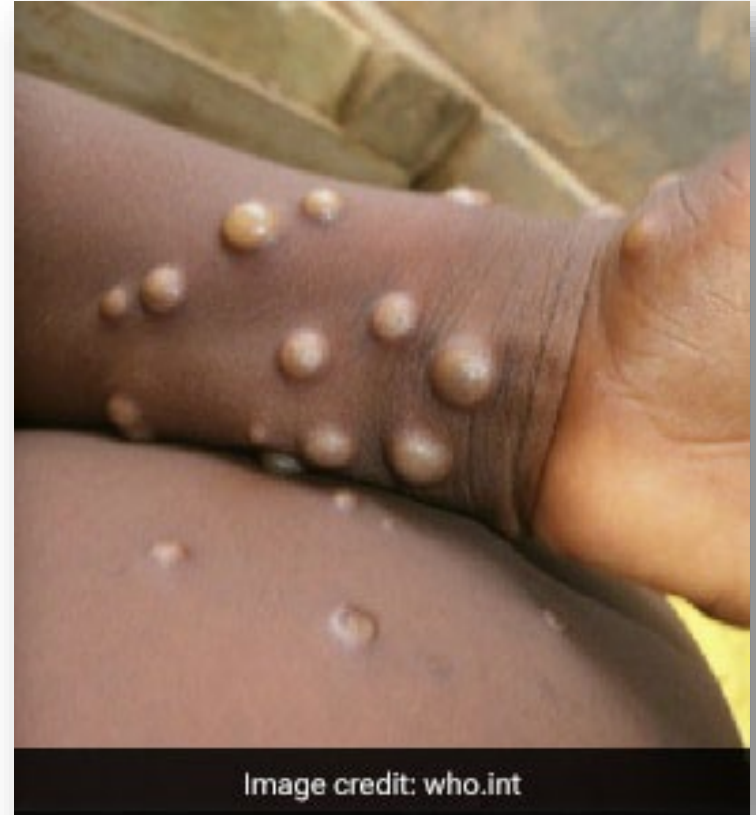


Image credit: who.int





# Transmission

- Transmission occurs when a person comes into contact with the virus from an animal, human, or materials contaminated with the virus
- The virus enters the body through broken skin (even if not visible), respiratory tract, or the mucous membranes (eyes, nose, or mouth)
- Animal-to-human transmission may occur by bite or scratch, bush meat preparation, direct contact with body fluids or lesion material, or indirect contact with lesion material, such as through contaminated bedding
- Human-to-human transmission:
  - Primarily through large respiratory droplets - prolonged face-to-face contact is required
  - Direct contact with body fluids or lesion material, and indirect contact with lesion material, such as through contaminated clothing or linens.

# Prevention

- Avoid contact with sick animals and their bedding in endemic countries
- Isolate infected patients from others who could be at risk for infection
  - Belgium has introduced a 21-day mandatory isolation of Monkeypox patients
  - UK recommending self-isolation of close contacts for 21-days
- Practice good hand hygiene after contact with infected animals or humans
- Use personal protective equipment (PPE) when caring for patients
- JYNNEOS (also known as Imvamune or Imvanex) is an attenuated live virus vaccine approved by the U.S. FDA for the prevention of monkeypox
  - The Advisory Committee on Immunization Practices (ACIP) is currently evaluating JYNNEOS for the protection of people at risk of occupational exposure to monkeypox

# Treatment

- No proven effective treatment however the following are being evaluated:
  - Smallpox vaccine
  - Cidofovir and Brincidofovir - both have proven activity against poxviruses in in vitro and animal studies
  - Tecovirimat (ST-246) – not tested against monkeypox – Although currently stockpiled by the Strategic National Stockpile, use of ST-246 is administered under an Investigational new Drug (IND)
  - Vaccinia immune globulin (VIG):
    - Data is not available on the effectiveness of VIG in treatment of monkeypox complications
    - Use of VIG is administered under an IND and has no proven benefit in the treatment of smallpox complications but could be considered for very sick patients
    - VIG can be considered for prophylactic use in an exposed person with severe immunodeficiency in T-cell function for which smallpox vaccination following exposure to monkeypox is contraindicated



# Level of concern

- The risk to the general public remains very low
- Generally a relatively mild and self-limiting disease
- Risk to healthcare workers treating monkeypox patients
- Business risks:
  - Supply chain received goods – very low
  - Hotel hospitality – low but emerging risk



# Future Pandemics

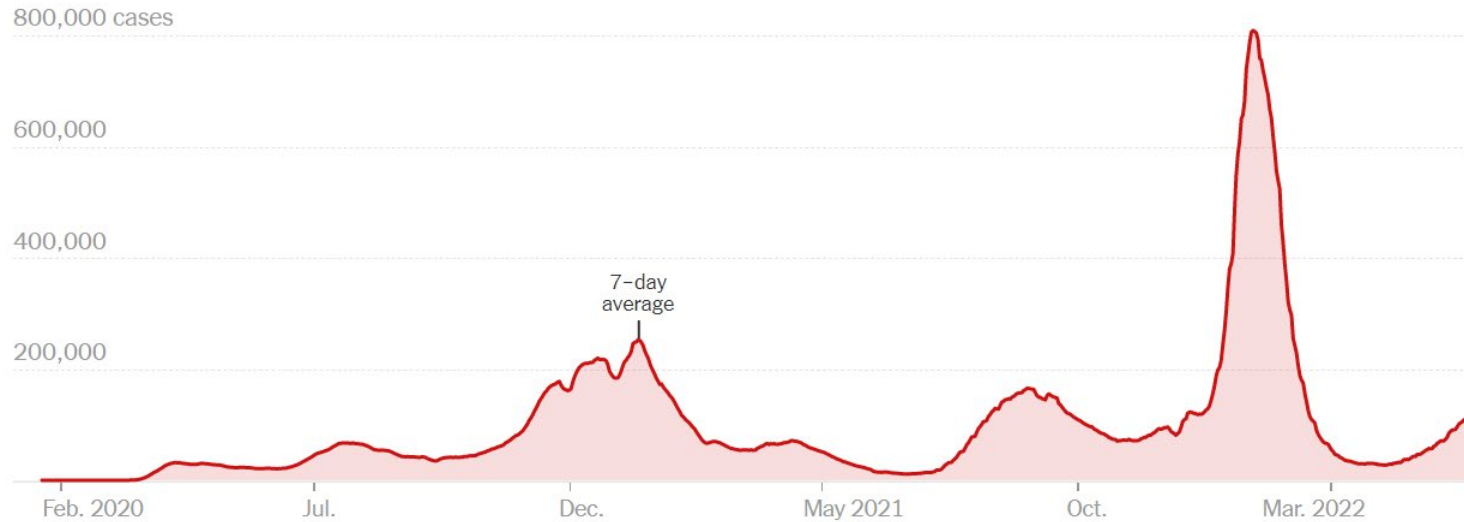
- Current health risks

- COVID
- Monkeypox
- Avian influenza - A(H1N1)
- Ebola outbreak in the Democratic Republic of the Congo
- Unknown hepatitis outbreak affecting children around the world
- MERS – Oman and Qatar
- Measles – Somalia
- Yellow Fever – Uganda
- .....

- Future Pandemics

- The world needs a new agreement that sets the rules of the game for responding to epidemics and pandemics
- Science driven
- Built on trust
- Requires:
  - Resilient healthcare system
  - Equitable resource allocation

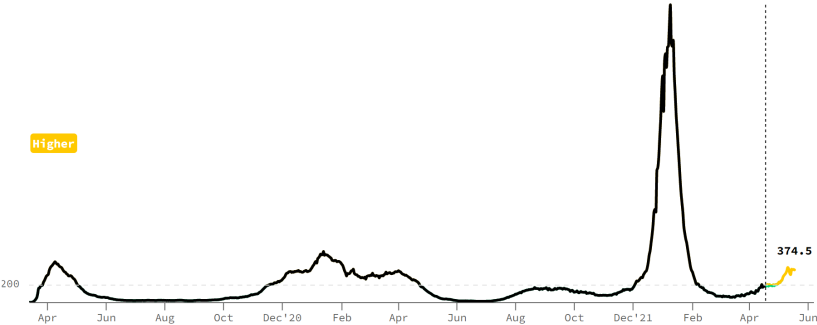
# So where are we with COVID?



- Cases increasing in most states
- Hospitalizations and ICU use increasing
- Deaths not increasing

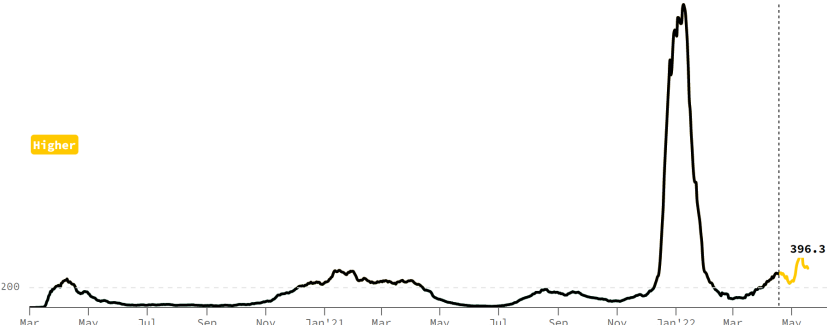
# New York City and Metro

WEEKLY NEW REPORTED CASES   WEEKLY COVID ADMISSIONS   PATIENTS W/ COVID  
● **374.5** PER 100K   ● **11.3** PER 100K   ● **4.0%** OF ALL BEDS



New York Metro

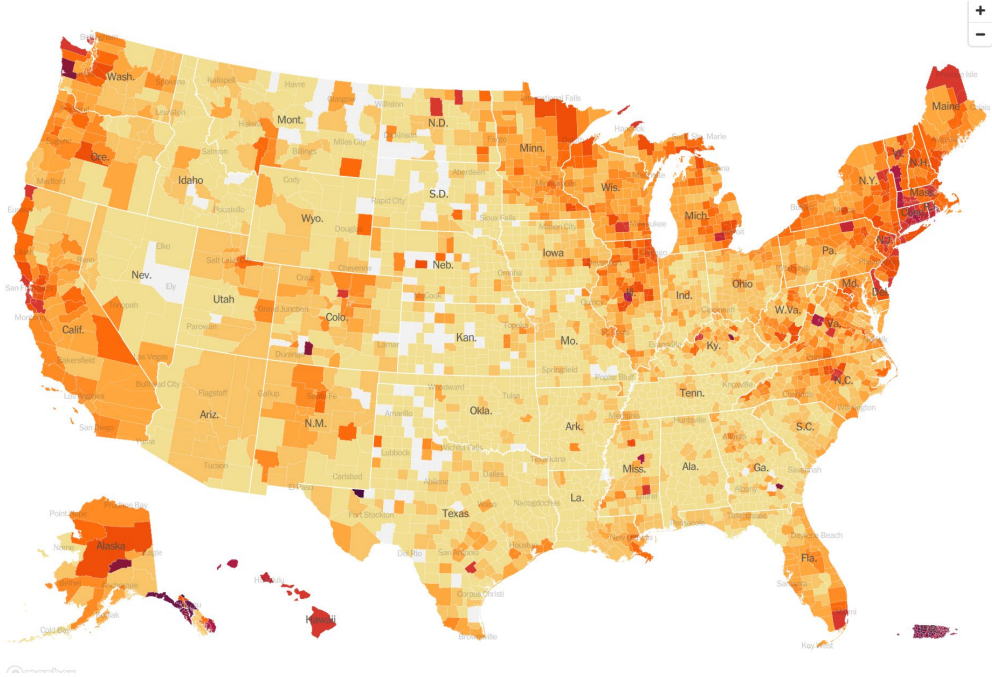
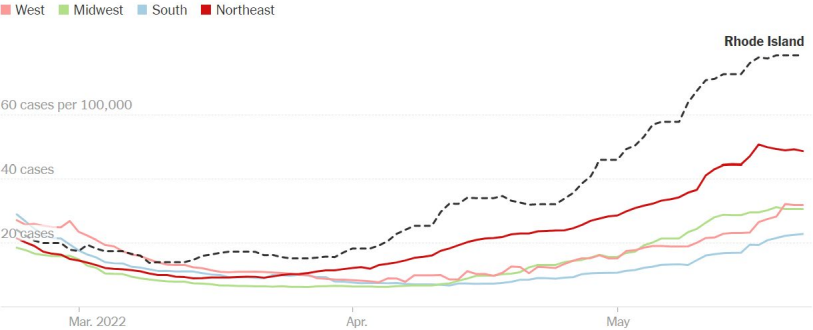
WEEKLY NEW REPORTED CASES   WEEKLY COVID ADMISSIONS   PATIENTS W/ COVID  
● **396.3** PER 100K   ● **10.4** PER 100K   ● **3.7%** OF ALL BEDS



New York City



# By Region



# Questions

## Upcoming NEBGH virtual events:

- **May 30** – **No Monday COVID-19 Update** (Memorial Day)
- **June 6** – Monday COVID-19 Update w/ Dr. Mark
- **June 16** – Benefits Leadership for a Changing World: Accept the Challenge!