LEADING MEDICINE: A TOWN HALL CONVERSATION WITH DR. MARC BOOM

Town Hall Conversation XXII

We will begin at 10 a.m.
Houston Methodist Update

Marc L. Boom, MD
February 17, 2022
New Confirmed COVID-19 Cases

Daily new confirmed COVID-19 cases per million people
7-day rolling average. Due to limited testing, the number of confirmed cases is lower than the true number of infections.

Source: Johns Hopkins University CSSE COVID-19 Data

https://ourworldindata.org/explorers/coronavirus-data-explorer?zoomToSelection=true&facets=non_uniform&Axis=0&spikeSort=asc&spikeMetric=population&time=7-day+rolling+average&Relative+to+Population=true&Color+by=test+positive+rate&colorby=country&show=selected&country=USA,GBR
COVID-19 Viral Load Detected in City of Houston Wastewater

February 7, 2022

Viral Load: 126%
In comparison to July 6, 2020

Positivity Rate: 16%

COVID-19 Viral Load in Wastewater
(Compared to July 6, 2020)

https://covidwwtp.spatialstudieslab.org/
Data as of February 16, 2022
Comparison of Omicron Surge with Delta Surge

![Comparison of Surge 4 and Surge 5](chart.png)
COVID-19 Key Statistics: Deaths vs. Admissions Trend

7 Day Average Deaths (blue) versus 7 Day Average Admissions (orange)
Infection Rate Fatality in the UK Remains Two Times Higher than Influenza

Covid has grown gradually less lethal over the pandemic, mainly due to immunity, but it remains more dangerous than flu on average.

Evolution of Covid-19’s infection fatality ratio* in England, relative to seasonal flu

* Covid IFR calculated using ONS death cert. mentions and ONS infection survey. ** IFR for seasonal flu as calculated for New Zealand in BMJ.

Source: https://www.ft.com/content/037a3ac9-830b-4592-9ff3-feed2008bdb7
WE'VE BEEN ENROLLED IN THE VARIANT OF THE MONTH CLUB.
What We Know About the BA.2 Variant of Omicron

Is BA.2 more dangerous than omicron?
The World Health Organization said this week that BA.2 doesn’t seem more severe than the original omicron variant, based on evidence from Denmark, where its spread hasn’t led to unexpected spikes in hospitalizations.

How well do vaccines work against it?
Although the subvariant appears to be even more contagious, Covid shots -- in particular, booster doses -- are just as effective against BA.2, according to initial findings from U.K. health authorities.

How does BA.2 differ from the original?
The latest iteration of the coronavirus represents a small minority of infections but has rapidly spread in countries such as South Africa, Denmark, India and England.

What does it mean for the pandemic?
Virus hunters are trying to better understand the properties of BA.2 as they brace for future variants, and some believe BA.2 could prolong the omicron wave.
In Denmark, BA.2 Is Spreading Rapidly, Despite BA.1 Leveling Off
## Need a COVID-19 test?

### REASONS TO GET TESTED
- If you have COVID-19 symptoms
- At least 5 days after known or suspected exposure to COVID-19
- For screening (schools, workplaces, congregate settings, etc.)
- Before and after travel
- When asked by a healthcare professional or public health official

### TYPES OF VIRAL TESTS

#### Laboratory Test
- Sample can either be a nasal swab or saliva
- Results usually in 1–3 days
- Results are reliable for people with and without symptoms
- No follow-up test required
- Common Example: PCR test

#### Rapid Test
- Sample is usually a nasal swab
- Results usually in 15–30 minutes
- Results may be less reliable for people without symptoms
- Follow-up test may be required
- Common Example: Antigen test

### ACTIONS AFTER RESULT

#### If positive
1. Isolate (at least 5 days). Learn more about isolation timelines and precautions.
2. Seek a confirmatory, follow-up laboratory test if recommended by healthcare professional
3. Monitor your symptoms

#### If negative
1. If up to date on vaccines: return to normal activities. Wear a mask indoors in areas of high or substantial community transmission.
2. If not up to date on vaccines and have symptoms or exposure, continue to quarantine for at least 5 days.
3. If not up to date on vaccines and no symptoms or exposure: return to normal activities. Take steps to get up to date on vaccines to protect yourself and others.

Need additional help! CDC’s Viral Testing Tool is an online, mobile-friendly tool that asks a series of questions, and provides recommended actions and resources based on the user’s responses. [cdc.gov/coronavirus](https://www.cdc.gov/coronavirus)
FDA Grants Full Approval to Moderna Vaccine

US Gives Full Approval to Moderna's COVID-19 Vaccine

U.S. health regulators have given full approval to Moderna's COVID-19 vaccine after reviewing additional data on its safety and effectiveness.

By Associated Press
Jan. 31, 2022

Moderna's COVID-19 vaccine wins full FDA approval

Mackenzie Bean - Monday, January 31st, 2022

The FDA granted full approval to Moderna's COVID-19 vaccine Jan. 31 for all adults 18 and up.

Coronavirus (COVID-19) Update: FDA Takes Key Action by Approving Second COVID-19 Vaccine

For Immediate Release: January 31, 2022

Today, the U.S. Food and Drug Administration approved a second COVID-19 vaccine. The vaccine has been known as the Moderna COVID-19 Vaccine; the approved vaccine will be marketed as Spikevax for the prevention of COVID-19 in individuals 18 years of age and older.
"We believe additional information regarding the ongoing evaluation of a third dose should be considered as part of our decision-making for potential authorization," FDA officials said in a statement.

https://www.npr.org/sections/health-shots/2022/02/11/1080157485/fda-meeting-vaccine-pfizer-young-children
Monoclonal Antibody Treatment

Tier 1
- Immunosuppressive disease or immunosuppressive treatment
- >65 YO with at least one coexisting condition that confers a higher risk of progression to severe COVID-19
  - BMI >35 kg/m²

Tier 2 Individuals with one or more medical conditions or factors placing them at higher risk for progression to severe COVID-19:
- ≥65 YO
- 18 – 64 years of age with a medical condition predisposing to high risk of severe COVID-19
  - BMI >30 kg/m²
  - Pregnancy
  - Chronic kidney disease
  - Diabetes
  - CVD (e.g. congenital heart disease) or HTN
  - Chronic lung diseases (e.g. COPD, moderate-to-severe asthma, interstitial lung disease, cystic fibrosis, or pulmonary HTN)
  - History of Cancer
  - Sickle cell disease
  - Neurodevelopmental disorders (e.g. cerebral palsy) or other conditions that confer medical complexity (e.g. genetic or metabolic syndromes and severe congenital anomalies)
  - Having a medical-related technological dependence (e.g. tracheostomy, gastrostomy, or positive pressure ventilation [not related to COVID-19])

Tier 3 – Full EUA Criteria (including BMI > 25)

Approved by HM Covid-19 Scientific Committee, HM System Antimicrobial Stewardship Committee and HM System P&T
New Monoclonal Drug: Bebtelovimab

Bebtelovimab, an investigational monoclonal antibody treatment for COVID-19 that Retains Activity Against Omicron Variant has received an Emergency Use Authorization (EUA) from the FDA. The new drug is expected to be available next week at the HMH infusion center.
CDC Study: Vaccine Booster Effectiveness

Rates of COVID-19 Cases by Vaccination Status and Booster Dose**
September 19 – December 25, 2021 (25 U.S. jurisdictions)

Rates of COVID-19 Deaths by Vaccination Status and Booster Dose**
September 19 – December 4, 2021 (25 U.S. jurisdictions)

Unvaccinated

- Fully vaccinated without booster dose*
- Fully vaccinated with booster dose*

Unvaccinated adults aged 18 years and older had:

13X
Risk of Testing Positive for COVID-19

AND

68X
Risk of Dying from COVID-19

5X
Risk of Testing Positive for COVID-19

in November, and

in December,* compared to fully vaccinated adults with booster doses.**
GET YOUR FREE COVID-19 BOOSTER TODAY

NOW ACCEPTING WALK-INS
Visit any of our 7 vaccination locations:
Monday – Thursday: 8 a.m. – 5 p.m.
Friday: 8 a.m. – Noon

PREFER AN APPOINTMENT?
Visit houstonmethodist.org/vaccine to schedule online.
Due to their large file size, the slides of Drs. William A. Zoghbi and Khurram Nasir cannot be posted. Please email foundation@houstonmethodist.org to receive a copy of the slides.
THANK YOU FOR ATTENDING OUR TOWN HALL CONVERSATION

If you would like more information about the Houston Methodist DeBakey Heart & Vascular Center Council, please contact Emily Schott at ekschott@houstonmethodist.org

Take care and be well