



Cambridge
Public Health
Department

Agenda
Cambridge COVID-19 Expert Advisory Panel
1 pm, Thursday January 21, 2021

Join with Google Meet



Join by phone



Attendance

- 1) Clinical, case and wastewater data update
- 2) SARS-CoV-2 variants (recent detection in MA, long term impact)
- 3) Update on vaccine rollout to priority groups
- 4) New ASTM Mask Rating System

Adjourn

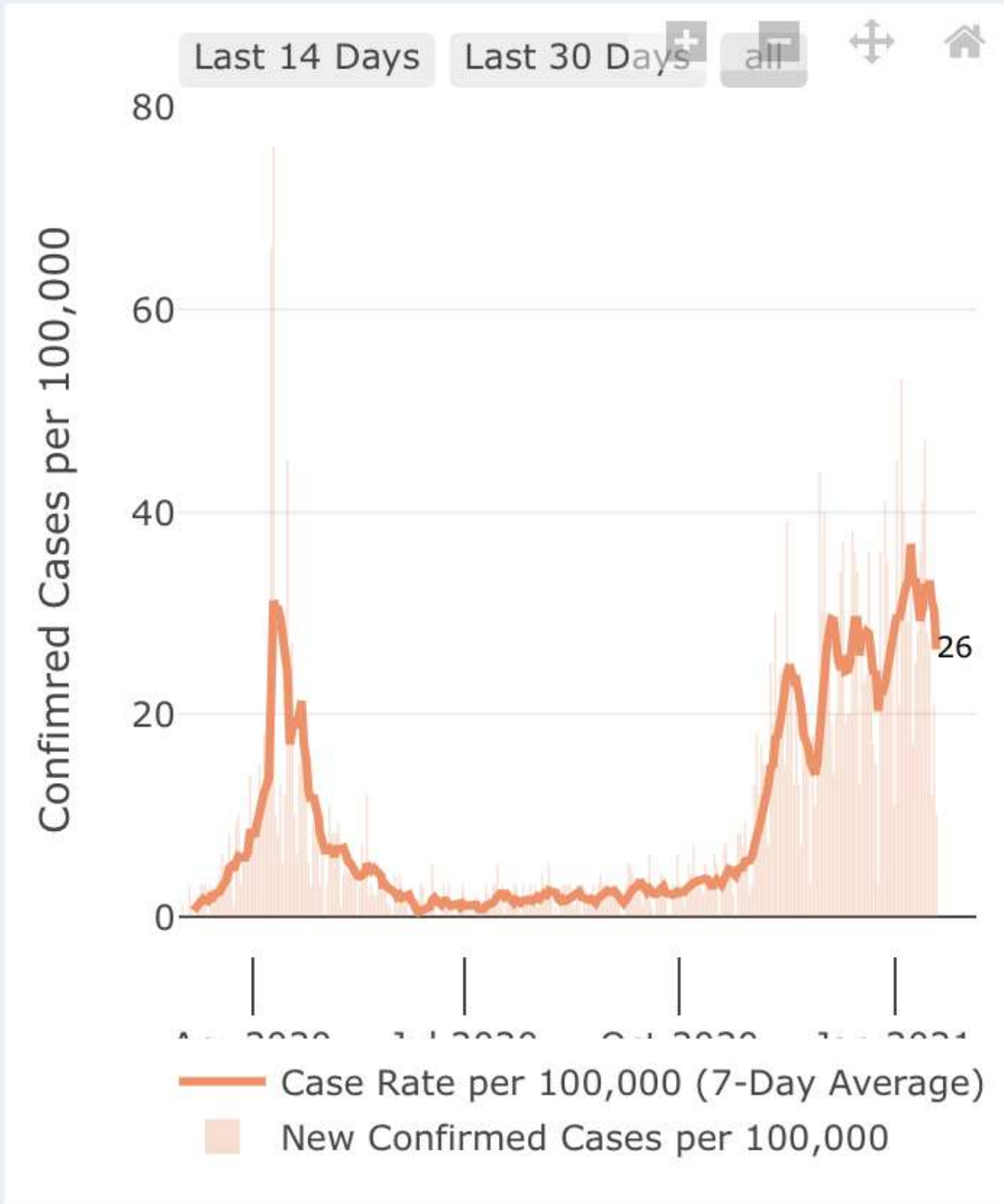
Attachments:

- 1) Cambridge New Case Data (1/20/21)
- 2) Cambridge-MWRA wastewater (1/19/21)
- 3) MA Daily New Cases and Deaths (1/20/21)
- 4) ASTM Maskenomics 101



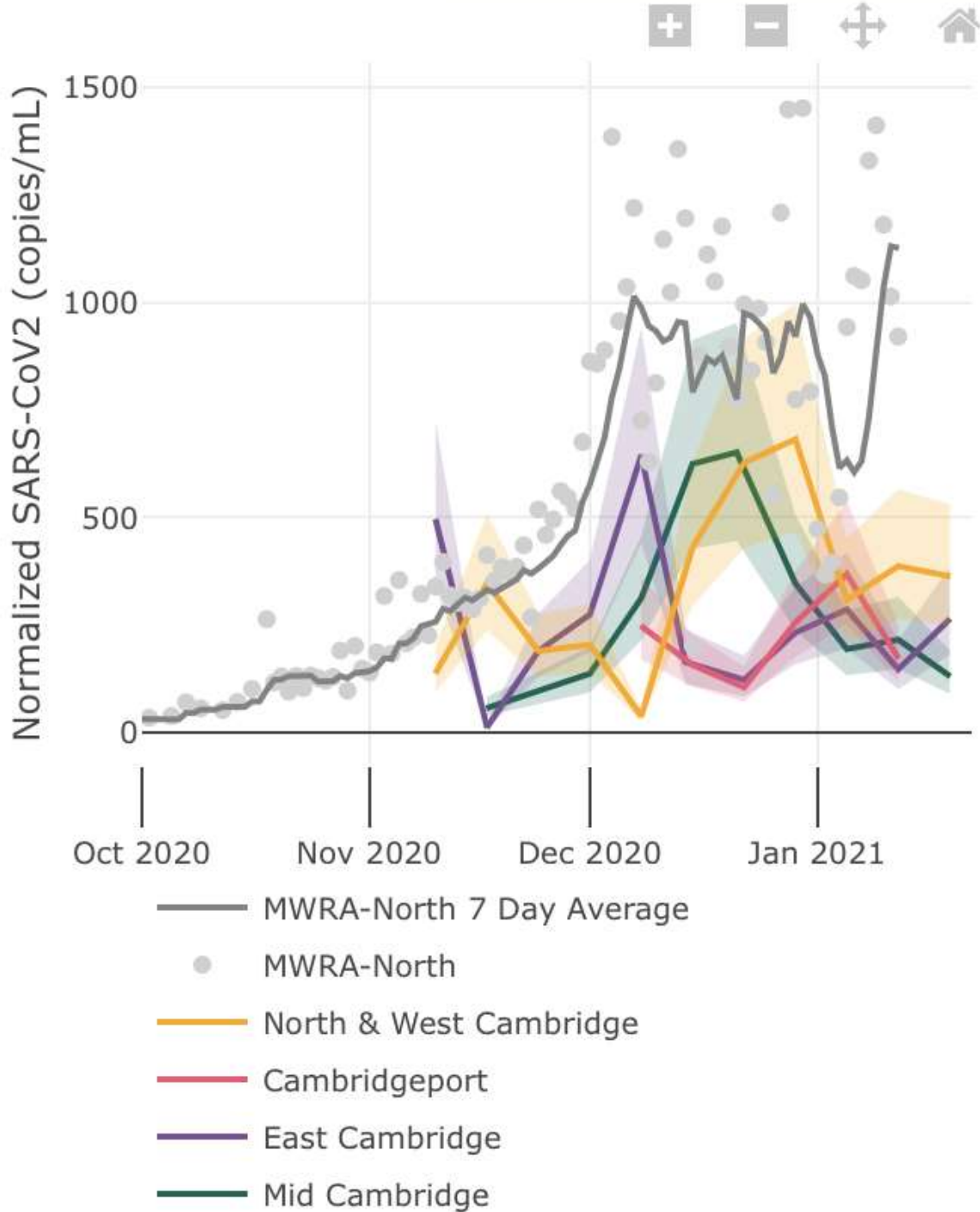
New Confirmed Cases

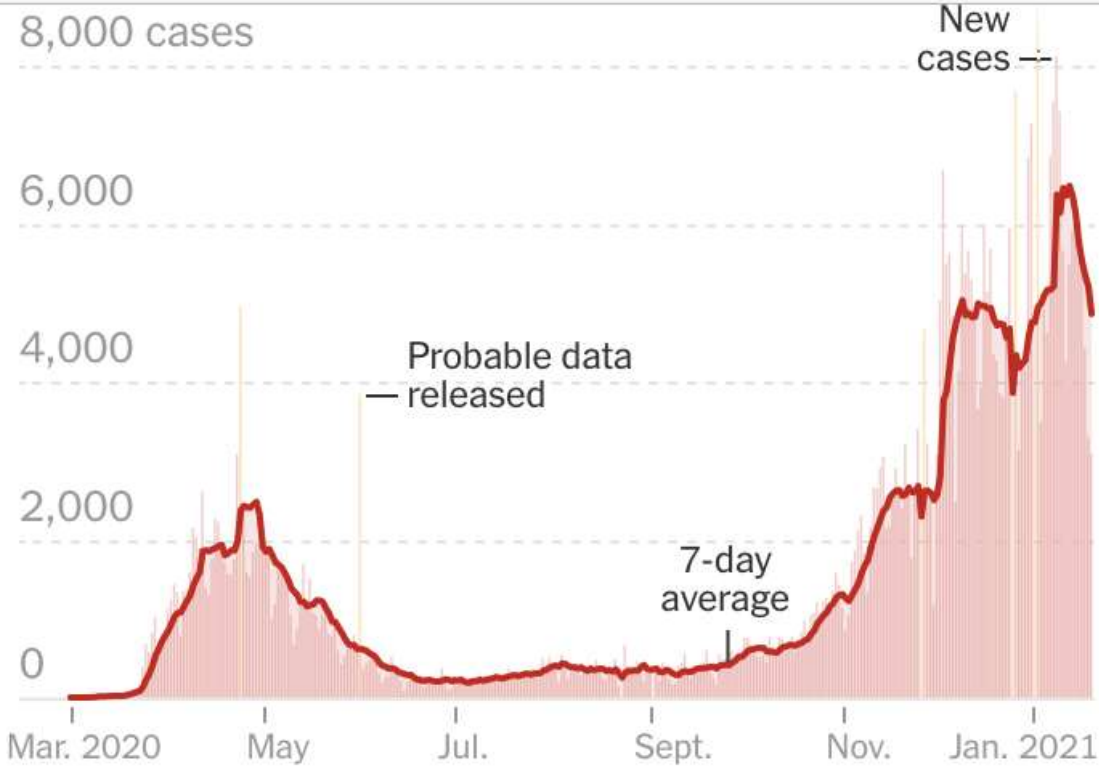
Case Rate <> Case Count*



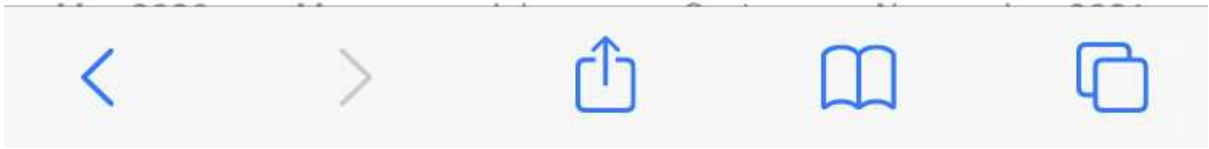
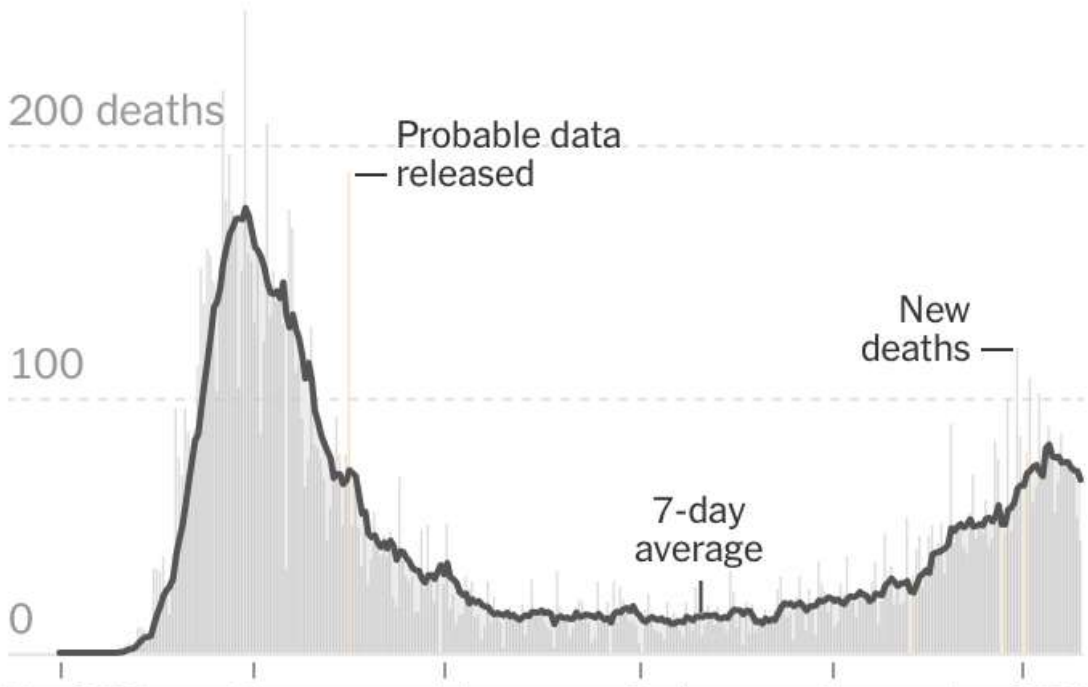
Weekly Municipal Wastewater Sampling Data

Select Sample Site ▾





Daily reported deaths



MASKENOMICS® 101

Understanding ASTM Face Mask Performance Levels

Selecting the appropriate mask for a particular procedure is a critical component of your Personal Protective Equipment (PPE) protocol. Although masks may look similar, each mask has notable differences affecting the performance and level of fluid resistance and particle filtration. Understanding the ASTM performance level of each face mask can help make the selection process easier and

ensure your mask will provide the appropriate protection to minimize the spread of potentially infectious diseases.

Medical face mask materials covered under ASTM specifications are designated as one or more of the following performance levels based on the barrier performance properties of the materials used:

ASTM F2100-11 STANDARDS

	ASTM Level 1	ASTM Level 2	ASTM Level 3
FLUID RESISTANCE, mmHg	80	120	160
BFE	≥ 95%	≥ 98%	≥ 98%
PFE, @ 0.1 micron	≥ 95%	≥ 98%	≥ 98%
DELTA P, mm H₂O/cm²	< 4.0	< 5.0	< 5.0
FLAME SPREAD	Class 1	Class 1	Class 1

What the terms mean:

FLUID RESISTANCE represents the mask's resistance to penetration by synthetic blood under pressure (mmHg). It measures the ability of a mask's material construction to minimize fluids from traveling through the material and potentially coming into contact with the wearer. The higher the fluid resistance (filtration), the better the protection.

BFE (Bacterial Filtration Efficiency) represents the percentage of aerosol particulates filtered at a size of 3 microns. It is the measure of the efficiency of the mask in filtering bacteria passing through it.

PFE (sub-micron Particulate Filtration Efficiency) represents the percentage of submicron particulates filtered at 0.1 microns. PFE is the measure of the efficiency of the mask in filtering particles passing through it. The size of the particles filtered is critical.

DELTA P (Differential Pressure) represents the pressure drop across the mask or resistance to air flow in mmH₂O/cm². This determines breathing resistance – the higher the Delta P, the less the breathability, but the better the filtration.

FLAME SPREAD is a ranking derived by laboratory standard test methodology of a material's propensity to burn rapidly and spread flames.

SOURCE: ASTM Standard specification for performance of materials used in medical face masks – F2100-11 Standard.



Crosstex makes the selection process easy with the MaskEnomics® rating system, designed to assist you in the decision making process by categorizing all Crosstex face masks by the level of filtration they provide... from minimum to maximum performance. Just look to the symbols displayed to find the appropriate level of filtration for the procedure to be performed.

WHY CROSSTEX®?

Enhanced Safety and Performance!

Crosstex offers a wide variety of mask designs, fit and filtration to match the protection needs for each procedure or risk level. The Crosstex MaskEnomics® filtration guide makes it easy to select the level of filtration required, including ASTM Level 1, 2 and 3 and N95 particulate respiration. From minimum performance masks for dry, short procedures, to our maximum filtration mask, Isolator Plus, Crosstex has the right mask for the task!



<p>MAXIMUM FILTRATION</p> <p>Indicated for use when treating patients with airborne diseases such as TB or influenza.</p> <p>Meets EN 149: 2001 FFP2 NR</p>	<p>N95</p>		<p>Isolator Plus N95 Particulate Respirator</p> <ul style="list-style-type: none"> • NIOSH approved N95 Respirator. • Meets guidelines for TB exposure control • Resistance to penetration by synthetic blood: 160mmHg. • PFE = 99.9% @ 0.1 micron. • Malleable nose and chin pieces. • Inner/outer fluid resistant layers. • Chin pocket construction. <p>USA CE</p>
<p>ASTM LEVEL 3</p> <p>Ideal for procedures where heavy to moderate amounts of fluid, spray and/or aerosols are produced.</p> <p>Meets EN14683 Rating – Type IIR Standard.</p>	<p>ASTM 3</p>		<p>Ultra® Sensitive Earloop w/ Secure Fit® Technology</p> <ul style="list-style-type: none"> • BFE = 99.9% @ 3 microns. • PFE = 99.8% @ 0.1 micron. • Patent pending design with aluminum strip under chin for custom fit. • Fluid resistant outer layer. • White hypoallergenic inner cellulose layer. • Extra soft – will not lint, tear or shred. • Free of chemicals, inks and dyes. • Extra-long aluminum nose piece. <p>USA CE</p>
<p>ASTM LEVEL 2</p> <p>Ideal for procedures where moderate to light amounts of fluid, spray and/or aerosols are produced.</p> <p>Meets EN14683 Rating – Type IIR Standard.</p>	<p>ASTM 2</p>		<p>Procedural Earloop w/ Secure Fit® Technology</p> <ul style="list-style-type: none"> • BFE = 99.9% @ 3 microns. • PFE = 99.7% @ 0.1 micron. • Patent pending design with aluminum strip under chin for custom fit. • Fluid resistant outer layer. • Fluid resistant white inner layer. • Extra-long aluminum nose piece. <p>USA CE</p>
<p>ASTM LEVEL 1</p> <p>Ideal for procedures where low amounts of fluid, spray and/or aerosols are produced.</p> <p>Meets EN14683 Rating – Type II Standard.</p>	<p>ASTM 1</p>		<p>Isofluid® Earloop w/ Secure Fit® Technology</p> <ul style="list-style-type: none"> • BFE = 98.4% @ 3 microns. • PFE ≥ 95% @ 0.1 micron. • Patent pending design with aluminum strip under chin for custom fit. • Fluid resistant outer layer. • White tissue inner layer. • Extra-long aluminum nose piece. <p>USA CE</p>
<p>LOW PERFORMANCE</p> <p>Ideal as a comfortable substitute for earloop face masks, this mask is a simple physical barrier ideal for exams and visitations or for dry, short procedures that do not produce fluid, spray or aerosols.</p>	<p>LOW PERFORMANCE</p>		<p>Surgical Molded</p> <ul style="list-style-type: none"> • BFE = 98.7% @ 4.2 microns. • Splash resistant barrier. • Flared edge prevents irritation. • Soft, flexible nose piece. <p>CE</p>
<p>MINIMUM PERFORMANCE</p> <p>Ideal as a simple physical barrier for exams, isolation and visitations or for dry, short procedures that do not produce fluid, spray or aerosols.</p>	<p>MINIMUM PERFORMANCE</p>		<p>Isolite® Earloop</p> <ul style="list-style-type: none"> • BFE = 99.6% @ 3 microns. • Outer facial tissue layer. • White facial tissue inner layer. • Extra-long aluminum nose piece. <p>USA CE</p>