

Freeman⁷ Inside LIVE

The data you need to
navigate Delta



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Where we are today

In the news

WSJ | OPINION

Home World U.S. Politics Economy Business Tech Markets Opinion Life & Art

The Reassuring Data on the Delta Variant

There's no sign of a surge in hospitalization or severe illness, and the vaccines remain effective.

By Leslie Bienen and Monica Gandhi
July 25, 2021 6:05 pm ET

PRINT AA TEXT

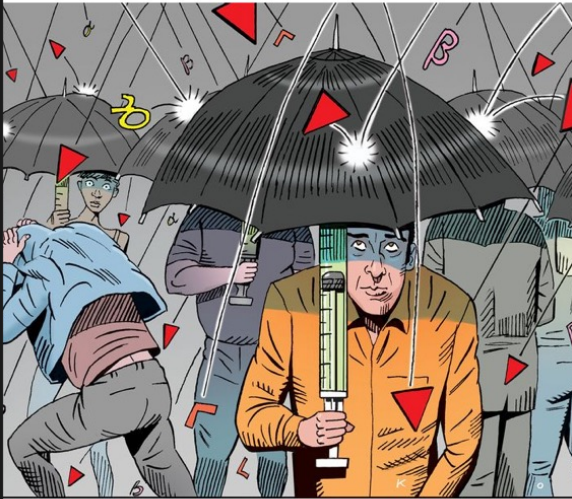


ILLUSTRATION: MARTIN KOZLOWSKI


The Washington Post

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Sections

National

St. Louis and L.A. now require masks indoors. With cases rising, will other cities follow suit?



A shopper enters a grocery store July 23 in Los Angeles, which is requiring people to wear masks indoors. (Chris Delmas/AFP/Getty Images)

By Derek Hawkins
July 24, 2021 at 4:13 p.m. EDT

Facing a resurgence in [coronavirus](#) cases and hospitalizations, St. Louis on Friday became the latest major U.S. city to revive its mask mandate, [joining Los Angeles](#) in requiring face coverings indoors.

The mandate takes effect Monday and will apply to everyone, even vaccinated people, in indoor public places and on public transportation. It comes a little more than two months after the city lifted the rules, which had been in place since last summer.

IAEE

Exhibitions and Events Mean Business

International Association of Exhibitions and Events®

Mask Mandate in Clark County, NV

Ken,

Effective today, Clark County, NV has issued new mask mandate, which went into effect at midnight PDT. The only specific employee exemptions are for athletes, musicians, and other similar performers.

In addition, venue mitigation plans are due to Clark County by Monday at 8 AM PDT, and signage recommending all individuals wear masks indoors must be displayed by venues no later than tomorrow morning at 8 AM PDT.

Through the work of the ECA, IAEE will continue to monitor and follow-up with any additional details, developments, etc.



AMENDMENT TO JUNE 1, 2021 CLARK COUNTY LOCAL MITIGATION AND ENFORCEMENT PLAN
Effective July 21, 2021

On July 20, 2021, the Clark County Board of Commissioners held an emergency meeting to consider the recommendations of the Southern Nevada Health District (SNHD) regarding face coverings and possible

Policies are changing

Some events have already been more cautious and pushed planning to early '22

25+ events (mostly HC) have moved to vaccine mandates in the last week

Healthcare attendees have already been more reticent even before the Delta variant began to push case counts

Most show '22 as preference citing herd immunity which requires vaccinations for children

Public health officials in urban areas will likely enact gathering restrictions and mask mandates

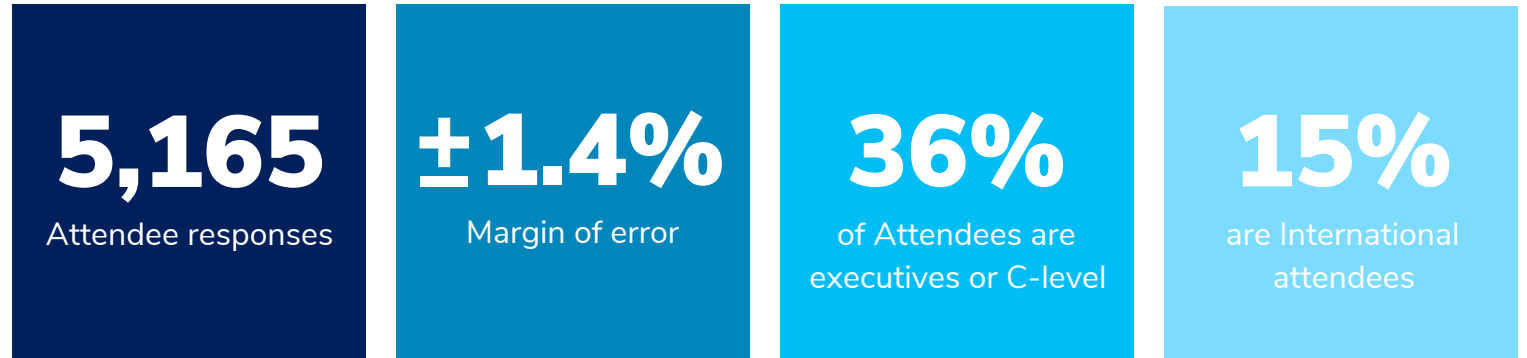
Political influence weighs heavily

The U.S. currently bans entry for most noncitizens who within the last 14 days have been in the U.K., European Union nations, Ireland, China, India, South Africa, Iran, and Brazil

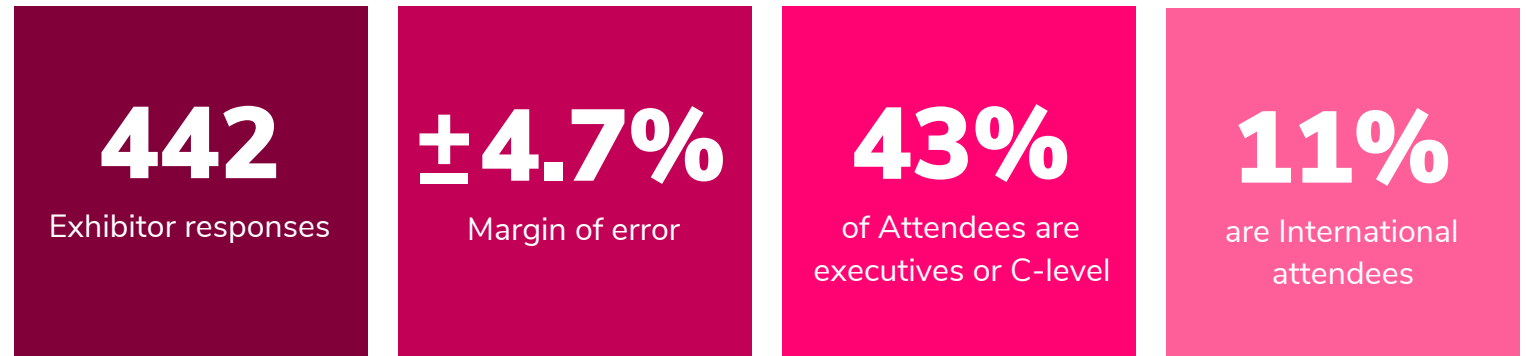
Deeper dive into the data

Respondent snapshot from
August Pulse Survey

Attendee profile



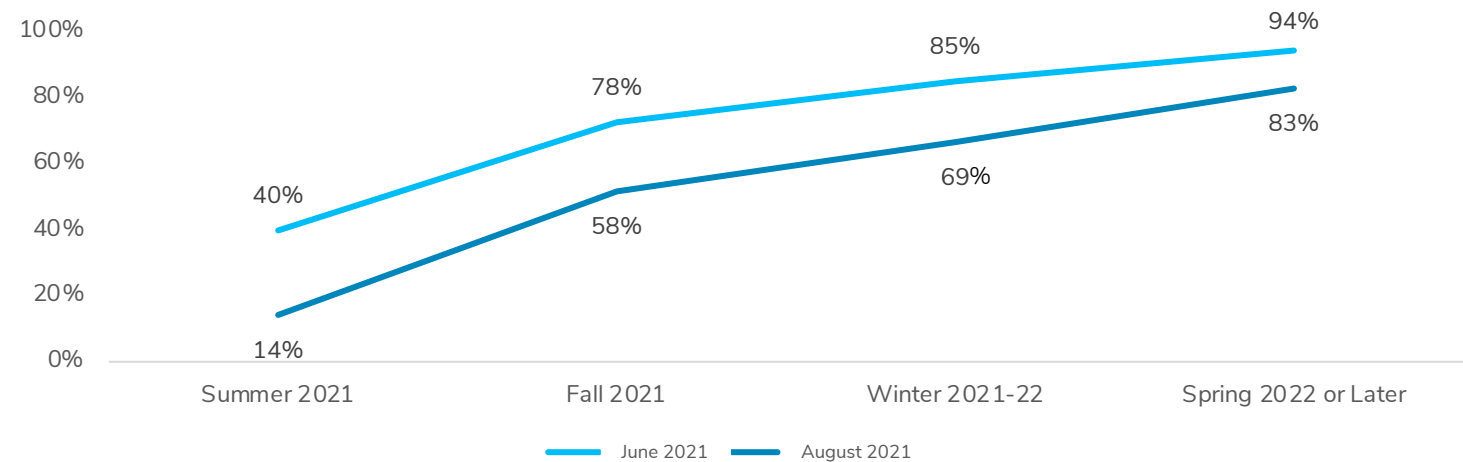
Exhibitor profile



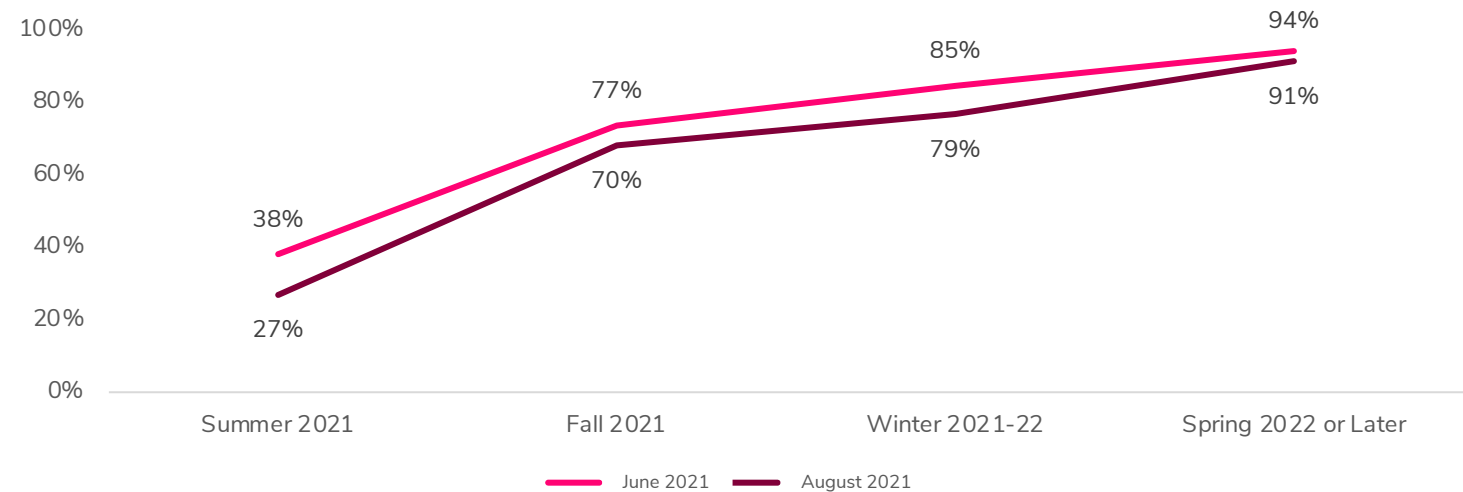
Uncertainty will impact attendance at upcoming events

Source: Attendee Survey, Exhibitor Survey
Question: U.S. health officials expect everyone will be eligible to be vaccinated by May 2021. When would you expect to attend your next in-person event?

Attendee return timeline



Exhibitor return timeline



Summary of key findings



In-person business events can happen safely through the fall, despite delta and the seasonal increase in COVID cases expected

- Participants (including attendees, exhibitors, staff) have a vaccination rate 80% or greater (and climbing), imparting a coverage ratio that drastically cuts transmissibility of COVID-19 at such events.
- Because of their controlled nature (e.g., registration required, private spaces, set times, etc.), in-person business events are self-contained bubbles, separate from the surrounding city, meaning the in-person event has little to no impact on community spread and vice versa. For recent August events, at <0.1%, infection rates were 65–95% lower than the US at large.
- Business events have a demonstrated history of using various tools to host in-person events safely such as testing, vaccinations, PPE, social distancing, enhanced cleaning, etc., depending on what the current health situation calls for. Over 90% of participants are not opposed to additional health and safety protocols that will enable them to gather safely. Any that do have issues would choose to stay home, mitigating any added risks of potential infections from such controlled gatherings.
- Coupled with our already high vaccination rates, attending an in-person event is no riskier—in fact, less risky in most cases — than going to the grocery store, school, or other essential daily activities.

Summary of key findings



Attendees and exhibitors want to return to in-person events, despite some concerns over the delta variant

- 87% consider events irreplaceable, with less than 1% expecting to never return.
- Just holding the event is the #1 reason to get attendees and exhibitors to events, above CDC guidance, vaccination rates, and health and safety protocols.
- Though attendees and exhibitors are concerned over the recent rise in cases, which is adding some uncertainty to their return dates, that concern can be addressed through targeted communications.
- As corporate travel restrictions are impacting participant attendance, it will be critical to help companies understand the importance of their participation in in-person events.

The impact on business, brand, and local economies makes participation in such events essential

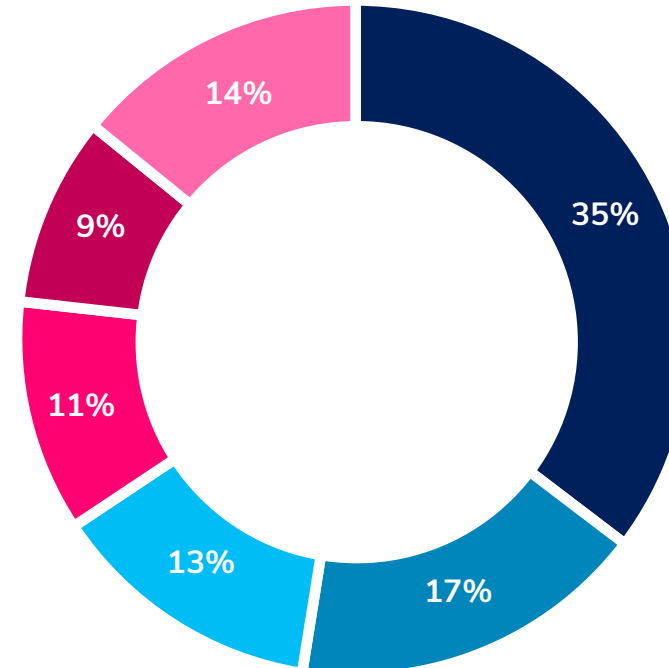
- In total, pre-pandemic, in-person events contributed almost \$400 billion in direct economic impact (or 1.8% of the U.S. GDP)—more than computer and electronic products manufacturing, auto manufacturing, and the arts, entertainment and recreation industries, just to name a few.
- For many businesses, attendance at such events is not optional. 44% of exhibitors and 48% of attendees expect their companies to send as many if not more people to in-person events through 2021.

Additional findings

- Healthcare attendees are the most risk averse, but healthcare exhibitors are the most positive and ready to go
- If we look at respondents for fall shows specifically, apart from certain types of healthcare events, the numbers for attendance go up by an average of 11%
- Vaccination rates are higher than 80% in most categories of attendees & exhibitors
- Health and safety are of obvious concern but, “I just want to see the event held” and public health guidelines are the biggest impetus for return

**Primary need
for attendees to
return is that
“the event is held”**

Primary Need to Return to In-Person Events



- The event is held
- CDC or other trusted healthcare professional recommends it is safe to do so
- Health and safety protocols (e.g, mask mandates)
- Adult (18+) vaccination rate
- Event not located in a hot spot
- Other

Source: Attendee Survey
Question: What is the one thing you would need to see to get you to return to in-person events?

The good news **(yes, there's good news)**

1

Coupling the controllable nature of events + industry vaccination rates, attending an event is no riskier than most normal daily activities



**That's right...
Safer than
most daily
activities**



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Infection rates at recent events lower than general rates

Category	Cases/population	Infection Rate
General Population	293/100,000 Based on a 7-day rolling average	.293%
Lollapalooza (Chicago) No mandates; tested on site	206/385,000	.053%
Medical event (Las Vegas) Vaccine and mask mandate	3/17,500	.017%
Medical Event (Boston) Mask mandate	5/5,000	.100%
Retail B2B event (New York) Venue had a mask mandate	2/7,000	.028%

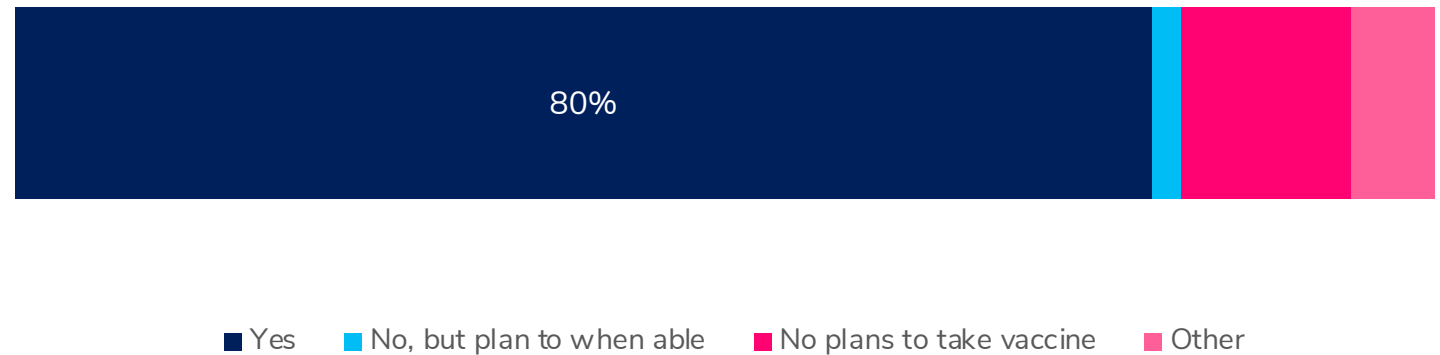
Sources: Washington Post & CDC (general population), show data (tracking + contact tracing)

2

In-person business events have high vaccination rates, which drastically cut transmissibility of COVID-19

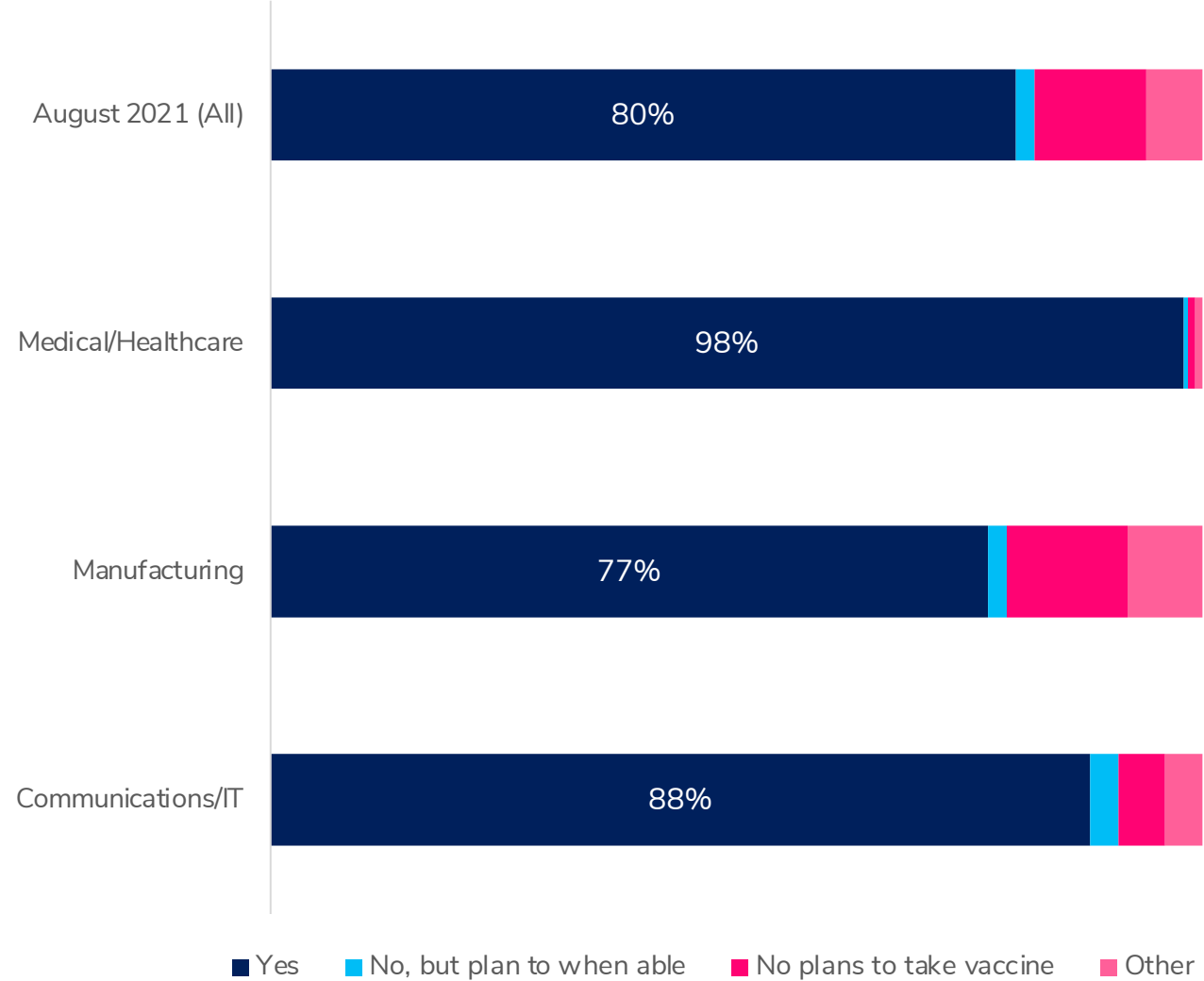


**In-person
business events
have an average
vaccination rate
of 80%**



Source: Attendee Survey
Question: Have you been vaccinated?

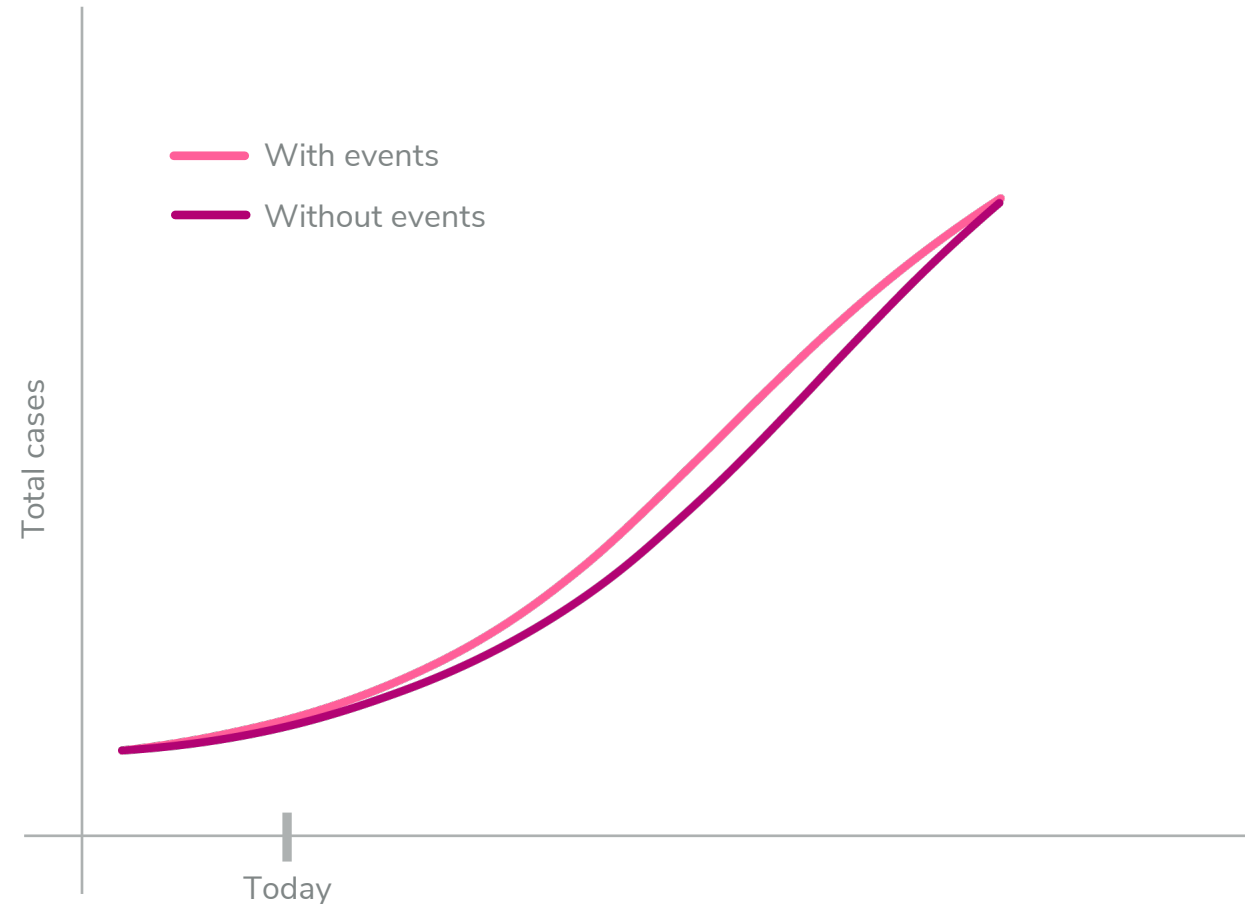
Vaccination rates vary by industry vertical, but are higher than US average



Source: Attendee Survey
Question: Have you been vaccinated?

**Events have NOT
been shown to be
a major driver of
case counts**

Event Vax > Community Vax



Source: Epistemix

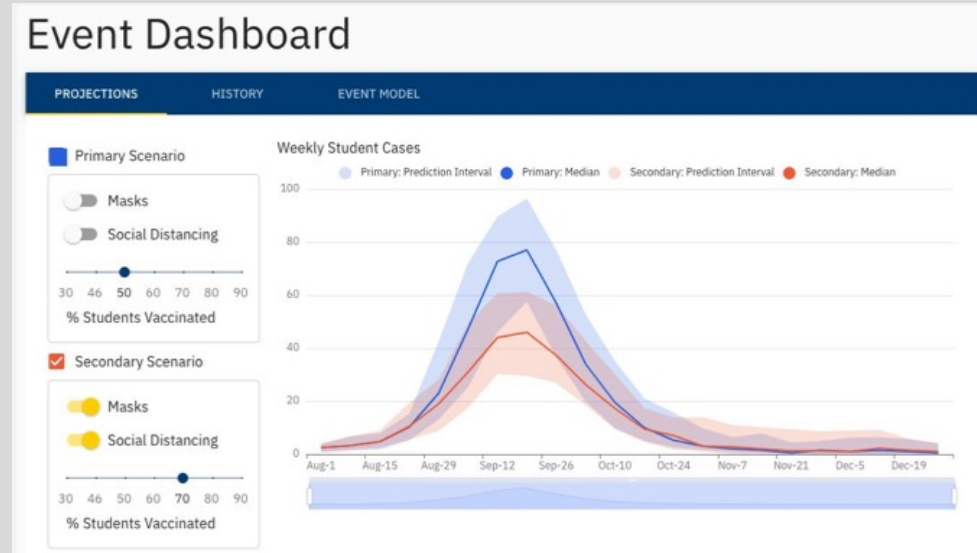
3

**Because of their
controlled nature,
these events are
self-contained
bubbles**



**Organizer was
able to reduce risk
by more than 8X**

Las Vegas case study



Source: Epistemix

EPISTEMIX

Freeman¹

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MIT Indoor Gathering Safety Model Research Tool

COVID-19 Indoor Safety Guideline

[Kasim Khan](#), [John W. M. Bush](#), and [Martin Z. Bazant](#)

Bazant & Bush, A guideline to limit indoor airborne transmission of COVID-19, [PNAS\(2021\)](#), Beyond Six Feet, [medRxiv\(2020\)](#)

Monitoring carbon dioxide to quantify the risk of indoor airborne transmission of COVID-19 ([Bazant et al., 2021](#))

<http://web.mit.edu/bazant/www/COVID-19/>

<https://github.com/kawesomexhan/covid-indoor>

Language:

English

Units:

British

Mode:

Basic

About

Room Specifications - Details

Human Behavior - Details

Frequently Asked Questions

Room Specifications - Details

Total floor area (sq. ft.): 100000

Average ceiling height (ft.): 35

Ventilation: 8.0 hr⁻¹ (outdoor ACH)

Better Mechanical Ventilation

Filtration System: MERV 10

Residential/Commercial/Hospital

Recirculation Rate: 10.0 hr⁻¹

Fast

Relative Humidity: 75%

1%: Very Dry 30%: Dry 60%: Average 99%: Very Humid

Need more control over your inputs? Switch to Advanced Mode using the dropdown at the top of the page.

Room Specifications:

Custom

Human Behavior:

Masks, Speaking

Age Group:

Adults (15-64 years)

Viral Strain:

Delta (B.1.617.2 India)

To limit COVID-19 transmission* after an infected person enters this space, there should be no more than:

1000 people for 220 hours (9 days)

In contrast, the six-foot (or two-meter) rule would limit occupancy to 2777 people which would violate the guideline* after 79 hours (3 days).

*The guideline restricts the probability of [airborne transmissions](#) per infected person to be less than the risk tolerance (10%) over the cumulative exposure time listed. Other risk scenarios are considered in Advanced Mode. Specifically, one may consider the prevalence of infection in the population, immunity acquired through vaccination or previous exposure, and the risk to a specific individual.

If this room has 5000 people, the guideline* would be violated after 44 hours.

If people spend approximately 4 hours here, the occupancy should be limited* to >11111 people.

Example data only

MIT Indoor Gathering Safety Model Research Tool

COVID-19 Indoor Safety Guideline

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Frequently Asked Questions

Room Specifications:

Custom

Human Behavior:

Masks, Speaking

Age Group:

Adults (15-64 years)

Room Specifications - Details

Total floor area (sq. ft.): 10

Average ceiling height (ft.):

Ventilation: 8.0 hr⁻¹ (outdoor)

Better Mechanical Ventilation

Filtration System: MERV 10

Residential/Commercial/Industrial

Recirculation Rate: 10.0 hr⁻¹

Fast

Relative Humidity: 75%

1%:

Very Dry

Dry

30%: Dry

60%: Average

99%:

Very Humid

Humid

Need more control over your inputs? Switch to Advanced Mode using the dropdown at the top of the page.

If this room has **5000** people, the guideline* would be violated after **44 hours**.

250 people for >14 days

500 people for >14 days

1000 people for 220 hours (9 days)

In contrast, the six-foot (or two-meter) rule would limit occupancy to **2777 people** which would violate the guideline* after **79 hours (3 days)**.

*The guideline restricts the probability of [airborne transmissions](#) per infected person to be less than the risk tolerance (10%) over the cumulative exposure. Other risk scenarios are considered in Advanced Mode. Specifically, one may consider the prevalence of infection in the population, immunity acquired through exposure, and the risk to a specific individual.

If this room has **5000** people, the guideline* would be violated after **44 hours**.

If people spend approximately **4** hours here, the occupancy should be limited* **Example data only**

MIT Indoor Gathering Safety Model Research Tool

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Example data only

Air quality in the space is a critical consideration

Most major convention centers and hotels have significantly upgraded their systems and most spaces are voluminous and similar to outdoor transmissibility.

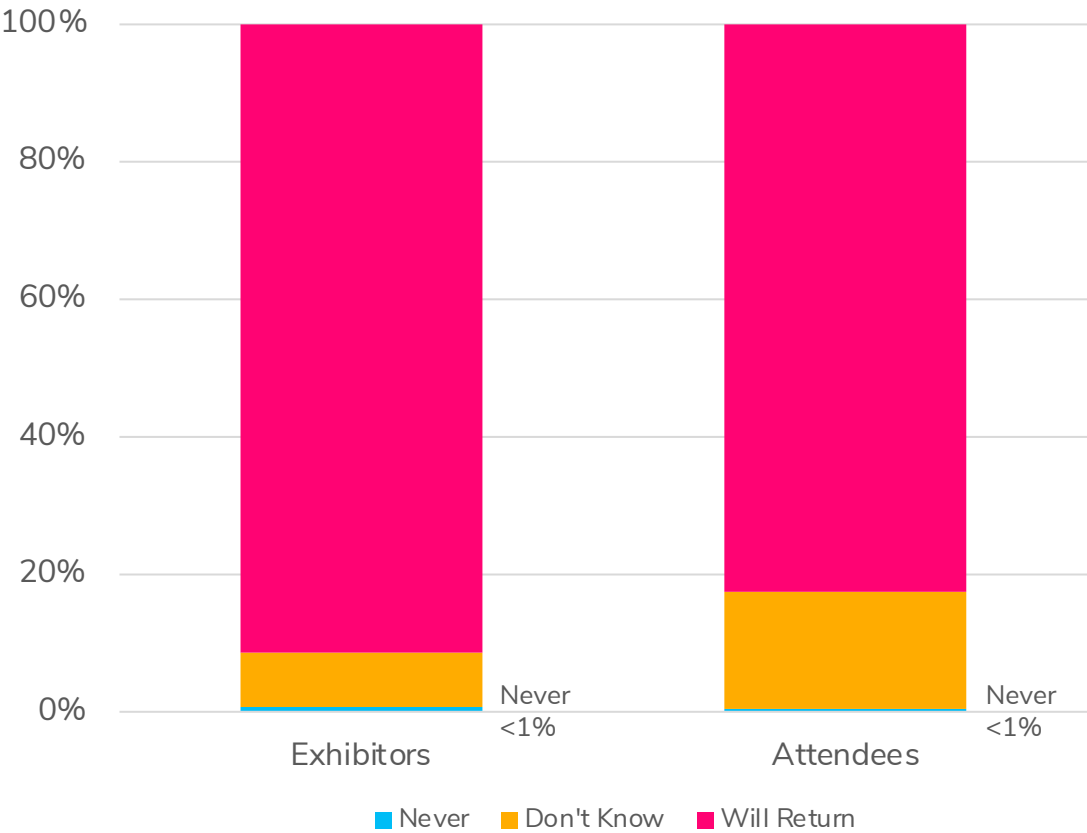


And let's not forget, what we do matters.

Pre-pandemic, in-person events contributed almost \$400 billion in direct economic impact (or 1.8% of the US GDP)— more than computer and electronic products manufacturing, auto manufacturing, publishing, arts, entertainment, and recreation.

**In-person events
remain a critical
channel**

Likelihood to Return to In-Person Events



Our path forward

How should event organizers respond?

Leaders can make choices to ensure safety at events while maintaining attendance and avoiding shutdowns.

Most events will have higher vaccination coverage than the community.

Any mitigation plan reduces risks for exhibitors and attendees. Mitigants: Vaccines, masks, additional factors

Communicate in advance and use data for assurance.

Your demographics, location, and venue matter.

Public health officials say, “vaccinations take the place of lockdowns”.

Freeman¹

For more information:

Freeman Data Solutions: stephanie.anderson@freeman.com

Epistemix: john.cordier@epistemix.com

