**Page Title:** Holiday risk estimator

**Header:** To help the public make informed decisions this holiday season, the Pandemic Prevention Institute has developed a tool that roughly estimates the probability that someone arrives infected to an event and how vaccination and rapid testing immediately before the event affect that risk.

We focus on a few key scenarios for both event sizes and mitigation measures that can be taken to make that event safer, based on the latest science on test sensitivity, vaccine effectiveness against infection, and case reporting rate. We use real-time case and vaccination data by county to provide local real-time situational awareness.

While this tool doesn’t explicitly consider Omicron, we hope it can be used to help the public identify mitigation measures that can help keep themselves and their families safe during this holiday season -including rapid testing before indoor gatherings, encouraging boosters as soon as eligible, and minimizing the size of large gatherings. Of note, as we learn more about vaccine effectiveness against Omicron, this risk estimator will be updated to reflect the latest science.

# Map Title: What is the chance someone arrives infected at a 20 person event in my county?

# How do vaccine requirements and rapid testing the morning of the event affect this?

**<<Map>>: https://public.flourish.studio/story/1067262/**

**Map Descriptor/other intel:**

**\*Shading indicates the probability that one or more individuals are infected at an event of X (20,40) people held in a county, assuming we are selecting from the population of that county at random. The pop-ups for each county indicate how that probability changes when   
1. All attendees take a rapid test the morning of the event**

**2. All attendees are fully vaccinated but no one tests before**

**3. All attendees are fully vaccinated and take a rapid test the morning of the event**

**These risk estimates are based on county-level case data and vaccination rate data, as well as a number of assumptions around case reporting rates, vaccine effectiveness, and infectious duration. In reality, the risk of someone showing up infected at an event depends on a number of external factors not considered here such as age, prior behavior, and prior infection status of attendees.**