COVID-19 Football Tracker

A tool to detect recent COVID-19 outbreaks in U.S. counties that host pro football events. The tool leverages machine learning to predict how fast an outbreak could spread at the county level by estimating the doubling time of COVID-19 cases.
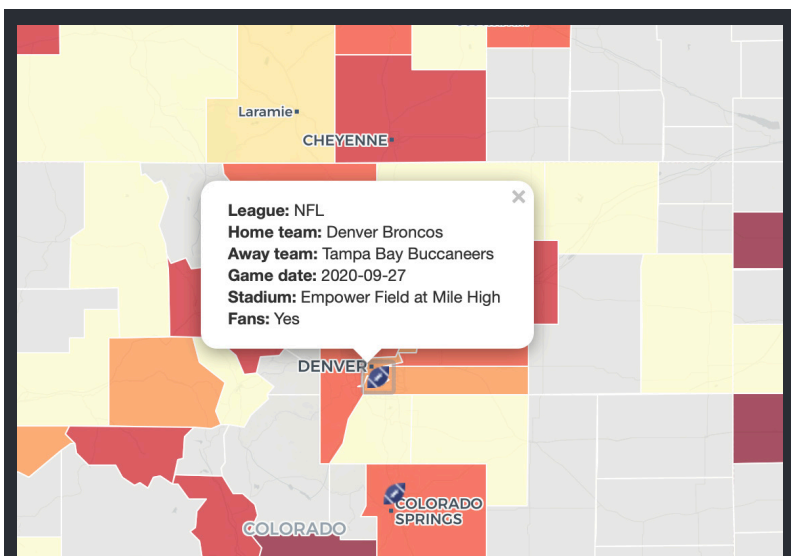
October 16, 2020

COVID-19 doubling time

- 0 to 1 week
- 1 to 2 weeks
- 2 to 3 weeks
- 3 to 4 weeks
- 4 to 5 weeks
- 5 to 6 weeks
- More than 6 weeks

The doubling time calculation accounts for:

- Reported COVID-19 cases and deaths
- Face mask mandates
- Social distancing policies
- Social vulnerability (such as income level)
- Changes in tests performed
- Rate of positive tests

The football tracker adds additional data to the Outbreak Detection Tool. It allows users to see how fast COVID-19 cases are increasing in counties with NFL or NCAA stadiums that have hosted games or might host games in the future.

League: NFL
Home team: Denver Broncos
Away team: Tampa Bay Buccaneers
Game date: 2020-09-27
Stadium: Empower Field at Mile High
Fans: Yes

Public health officials can work with team officials and asses the situation to see if and when fans should be allowed to attend games.

Example: stadiums in CO have been allowing fans to attend, however the doubling time for COVID-19 in counties that stadiums are located in have been getting shorter. Stadiums such as Empower Field may want to re-asses for future games.

Stadium	Date	Home	Away	Fans	New cases (past week)	Avg. daily cases per 100K (past week)	14-day incident case trend	COVID-19 doubling time
Empower Field at Mile High	9/27/20	Denver Broncos	Tampa Bay Buccaneers	Yes	1067	21		3 to 4 weeks