

COVID-19 & DENTISTRY

Measuring the Rebound in Patient Volume
& Clinical Update



David Reznik, DDS

Director of the Oral Health Center of
Grady Health System's Infectious
Disease Program

Gary Severance, DDS

Executive Leader of Professional
Relations, Henry Schein Dental



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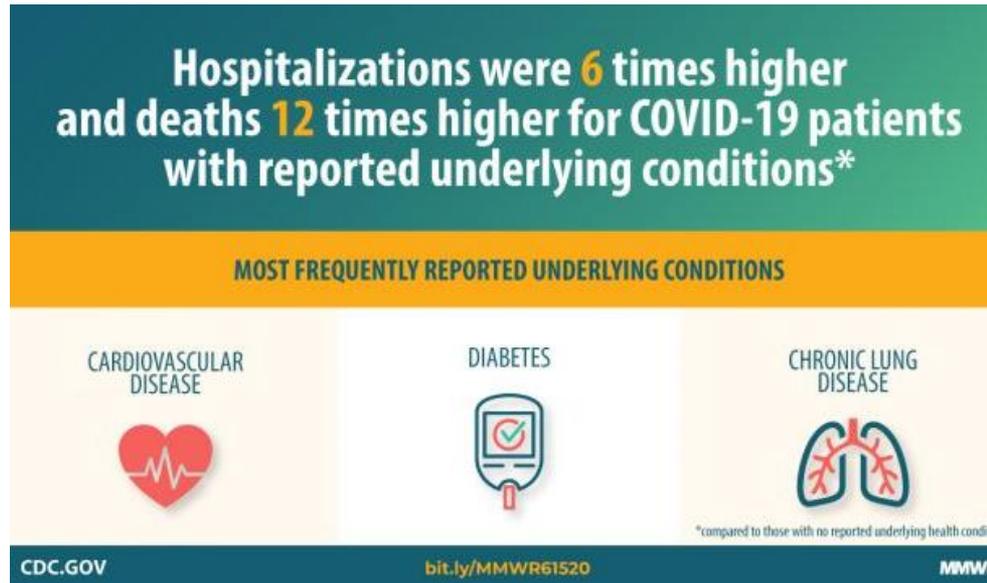
Newest HPI Poll Data

Sustained Rebound in Dental Practices

According to HPI data, 90% of dental practices are now open for elective care, with all but two states open for elective dental procedures the first week of June

- Patient volume has rebounded to 53% of pre-COVID-19 levels, up from 38% two weeks prior
- 70% of dentists indicated their schedule was at least half full
- PPE stockpiles in dental offices have increased, with fewer dental offices indicating they have no supply of PPE such as N95/KN95 masks, face shields and gowns

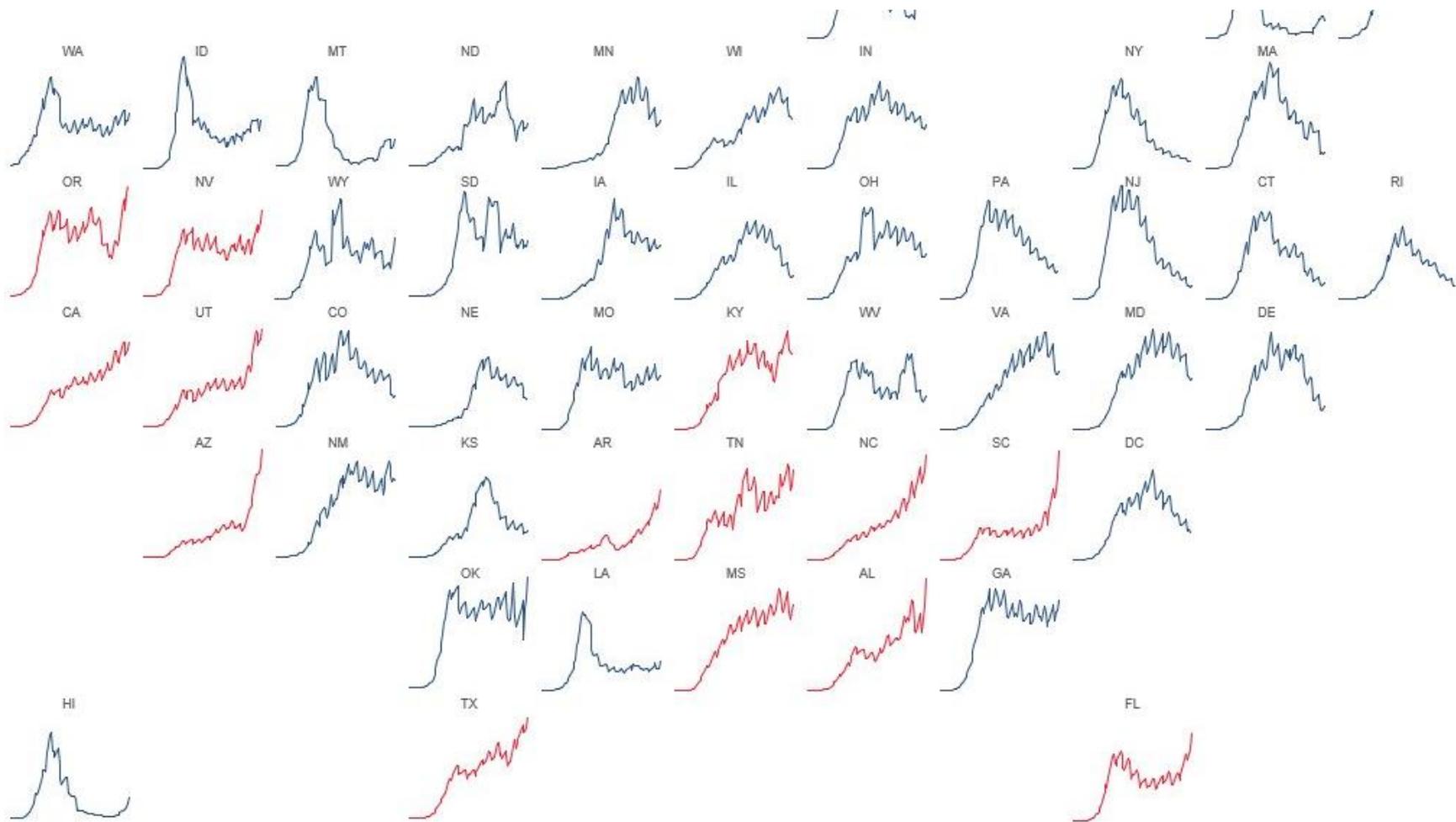
Coronavirus Disease 2019 Case Surveillance — United States, January 22–May 30, 2020



- Most common underlying conditions leading to COVID-19 related hospitalization
- Cardiovascular Disease (32%), Diabetes (30%), and Chronic Lung Disease (18%)

Parts of U.S. See Record Increase in COVID Cases

- “New coronavirus cases and hospitalizations in record numbers swept through more U.S. states, including Florida, Texas and Arizona, as most push ahead with reopening”
- “Alaska, Arkansas, California, Florida, North Carolina, Oklahoma, and South Carolina all had record numbers of new cases in a recent 3-day period”
- “As of last weekend, coronavirus cases were still increasing in 18 states – several of which saw record or near-record highs”



Increase in COVID Cases Due To...

- **The increase in cases is not necessarily because of increased testing; in some places, cases and hospitalizations are on the rise even as testing rates fall**
- In 6 states, the seven-day average of new cases has increased since May 31 while the average number of daily tests being conducted has declined
- In 14 others, the rate of new cases is increasing faster than the increase in the average number of tests
- There are many warning signs in the data that the U.S. is entering a resurgence of the pandemic after states lifted restrictions

Info On Patients w/ COVID-19-Related Diabetes

Medscape

- “Emerging evidence suggests that COVID-19 may actually trigger the onset of diabetes in healthy people,” and now “a new global registry has been established to collect data on patients with COVID-19-related diabetes”
- A letter about the new registry was published in the New England Journal of Medicine

Mutations – D614G

- A specific mutation in the new coronavirus can significantly increase its ability to infect cells, according to a study by U.S. researchers from Scripps Research Institute in Florida
- The research may explain why early outbreaks in some parts of the world did not end up overwhelming health systems as much as other outbreaks in New York and Italy
- The mutation, named **D614G**, increased the number of "**spikes**" on the coronavirus - which is the part that gives it its distinctive shape; those spikes are what allow the virus to bind to and infect cells

Mutations – D614G

- “The number—or density—of functional spikes on the virus is 4 or 5 times greater due to this mutation”
- The D614G mutation in particular has been flagged as an urgent concern because it appeared to be emerging as a dominant mutation
- This study demonstrated **in a lab** “that viruses carrying that particular mutation [D614G] infect more cells and are more resilient than those without it”
- The researchers “cautioned against drawing conclusions about whether the variant, which has been circulating widely since February, spreads more easily in humans,” and “**there is no evidence that it is more deadly or harmful**”

Warning: The Scripps Research study is currently undergoing peer review and was released last week amid reports of its findings.

Coronavirus Vaccine Tracker

Pre-clinical: Scientists give the vaccine to animals such as mice or monkeys to see if it produces an immune response

- **125 candidates**

Phase 1: Scientists give the vaccine to a **small number** of people to **test safety and dosage** as well as to confirm that it stimulates the immune system

- **8 candidates**

Phase 2: Scientists give the vaccine to **hundreds of people** split into groups, (e.g. age) to see if the vaccine acts differently in them; these trials further test the vaccine's safety and ability to stimulate the immune system in an expanded population

- **8 candidates**

Coronavirus Vaccine Tracker

Phase 3: Researchers give the vaccine to **thousands of people**; many of these trials are double-blinded:

- One group receives vaccine
- One group receives placebo

The goal is to determine if the vaccine candidate will protect against SARS- CoV-2

- **2 candidates**

Approval: Regulators will review trial results and decide whether to approve the vaccine candidate or not; *during a pandemic, a vaccine may receive emergency use authorization before getting formal approval*

Types of Vaccines in Research for COVID-19

Genetic vaccines: Vaccines that use one or more of the coronavirus's own genes to provoke an immune response

Viral Vector vaccines: Vaccines that use a virus to deliver coronavirus genes into cells and provoke an immune response

Protein-Based: Vaccines that use a coronavirus protein or a protein fragment to provoke an immune response

Whole-Virus Vaccines: Vaccines that use a weakened or inactivated version of the coronavirus to provoke an immune response

Repurposed Vaccines: Vaccines already in use for other diseases that may also protect against COVID-19

U.S. COVID-019 Vaccine Warp Speed Program

The U.S. government's Operation Warp Speed program has selected [five vaccine projects](#) to receive billions of dollars in federal funding and support before there's proof that the vaccines work. The five companies selected by the U.S. government include:

- Moderna – mRNA vaccine
- Pfizer with German company BioNTech and the Chinese drug maker Fosun Pharma to develop their mRNA vaccine
- Oxford University and AstraZeneca – Viral Vector vaccine candidate
- Johnson & Johnson – Viral Vector vaccine candidate
- Merck – Viral Vector vaccine candidate

All five companies will have access to additional government money, help in running clinical trials and financial and logistical support for a manufacturing base.

Dr. Fauci – JAMA Network Interview

“I’m cautiously optimistic that, with the multiple candidates that we have with different platforms, we’re going to have a vaccine that shows a degree of efficacy that would make it deployable. The reason I think so is that one makes a pretty good immune response against this coronavirus.

Even though the deaths are profound for this outbreak, the majority of people make an immune response which clears the virus. If the body is capable of making an immune response to clear the virus and natural infection, that’s a pretty good proof of concept to say that you’re going to make an immune response to a vaccine.”

Dr. Fauci – JAMA Network Interview

“However, having said that, there’s never a guarantee, ever, that you’re going to get an effective vaccine. I’m concerned a little bit more about the [durability of response](#) than I am about whether you’re going to get a protective response. Because if you look at the duration of protection, when you recover from one of the several benign coronaviruses that cause the common cold, the durability of protection is only measured in a year or less, as opposed to some of the other infections where you could have [a] 10-, 15-, 20-year degree of protection.”

Medication Update

- The Food and Drug Administration has revoked the emergency authorization for **hydroxychloroquine** and **chloroquine** for the treatment of covid-19, after numerous studies led the agency to conclude that it “is no longer reasonable to believe” they are effective
- However, the AIDS Clinical Trials Group (ACTG), has recently started to enroll a clinical trial for mild to moderate COVID-related illness involving **hydroxychloroquine** and **azithromycin**

Scientists Hail Dexamethasone 'Major Breakthrough'

Results of the RECOVERY trial announced on June 16th, 2020, showed dexamethasone, which is used to reduce inflammation in other diseases, **reduced death rates by around a third (1/3) among the most severely ill COVID-19 patients admitted to hospital.**

Warning: This research study is currently undergoing peer review and was released this week amid reports of its findings.

RECOVERY Trial

- “It’s going to be very hard for any drug really to replace this, given that for less than 50 pounds (\$63.26), you can treat eight patients and save a life,” he told reporters in an online briefing
- The RECOVERY trial compared outcomes of around 2,100 patients who were randomly assigned to get the steroid, with those of around 4,300 patients who did not get it
 - ❖ The results suggest that **one death** would be prevented by treatment with dexamethasone among **every eight ventilated** COVID-19 patients
 - ❖ One death would be prevented among every 25 COVID-19 patients that received the drug and are on oxygen
 - ❖ Among patients with COVID-19 who did not require respiratory support, there was no benefit from treatment with dexamethasone

NIH Launches Analytics Platform

To Harness Nationwide COVID-19 Patient Data to Speed Treatments

- The National Institutes of Health has launched a centralized, secure enclave to store and study vast amounts of medical record data from people diagnosed with coronavirus disease across the country
- It is part of an effort, called the [National COVID Cohort Collaborative \(N3C\)](#), to help scientists analyze these data to understand the disease and develop treatments

NIH Launches Analytics Platform

To Harness Nationwide COVID-19 Patient Data to Speed Treatments

- The N3C is funded by the [National Center for Advancing Translational Sciences \(NCATS\)](#), part of NIH; the initiative will create an analytics platform to systematically collect clinical, laboratory and diagnostic data from health care provider organizations nationwide
- It will then harmonize the aggregated information into a standard format and make it available rapidly for researchers and health care providers to accelerate COVID-19 research and provide information that may improve clinical care

NIH Launches Analytics Platform

To Harness Nationwide COVID-19 Patient Data to Speed Treatments

- There currently are 35 collaborating sites across the country and the platform contains [diverse data](#) from individuals tested for COVID-19
- Having access to a centralized enclave of this magnitude will help researchers and health care providers answer clinically important questions they previously could not, such as:
 - ❖ Can we predict who might need dialysis because of kidney failure?
 - ❖ Who might need to be on a ventilator because of lung failure?
 - ❖ Are there different patient responses to coronavirus infection that require distinct therapies?"

NIH Launches Analytics Platform

To Harness Nationwide COVID-19 Patient Data to Speed Treatments

- A key component is the harmonization of data, which translates the different ways that contributing hospitals store patient data into a single, common format to enable combined 'apples to apples' analyses
- Contributing sites add demographics, symptoms, medications, lab test results, and outcomes data regularly over a five-year period, enabling both the immediate and long-term study of the impact of COVID-19 on health outcomes

REDUCE YOUR **STRESS**:

- Know the **common signs of stress**.
- Talk with **family and friends** by **phone, text, or email**.
- Take breaks from **news stories, including social media**.
- Practice **healthy habits, including exercise**.





ADA.org/HPI

hpi@ada.org



ADA American Dental Association®

The Dental Care Rebound: How Far Have We Gotten? How Far Will We Go?

June 11, 2020

HPI Health Policy Institute

ADA American Dental Association®



Moderator

Marko Vujicic

Chief Economist & VP
ADA Health Policy Institute



Panelists

Steve Beuchaw

Director, Wolfe Research



Ty Hamilton

Chief Operating Officer,
P&R Dental Strategies



Vijay Sikka

CEO/Founder, Sikka
Software Corporation



Stephen E. Thorne

CEO/Founder, Pacific
Dental Services



Webinar Administrator

Adriana Menezes

Director, Operations
ADA Health Policy Institute



Webinar Administrator

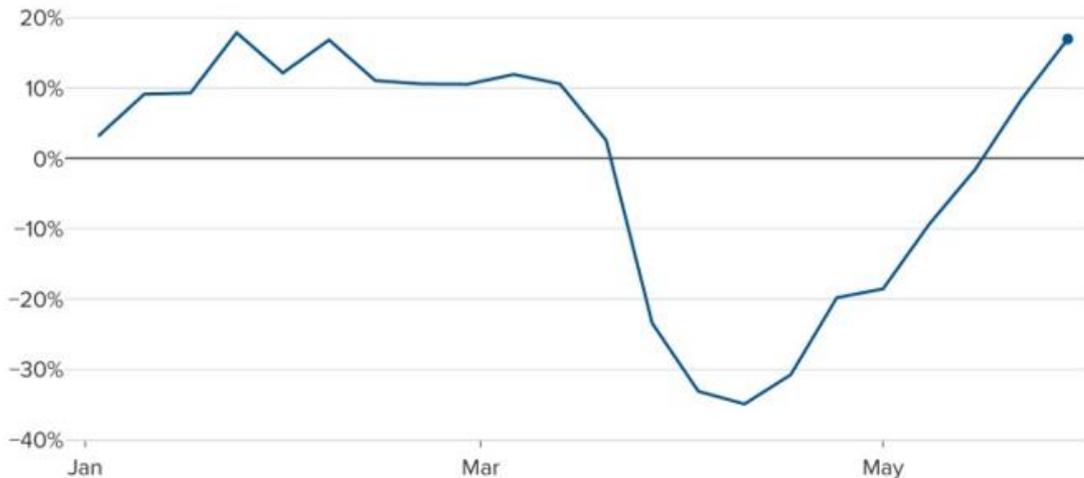
Sylvia Zeno

Manager, Administrative Services
ADA Health Policy Institute

The Economic Recovery

U.S. Home purchases

Year-over-year change in mortgage applications for purchasing a single-family home



SOURCE: Mortgage Bankers Association Purchase Index. Data through May 29, 2020.

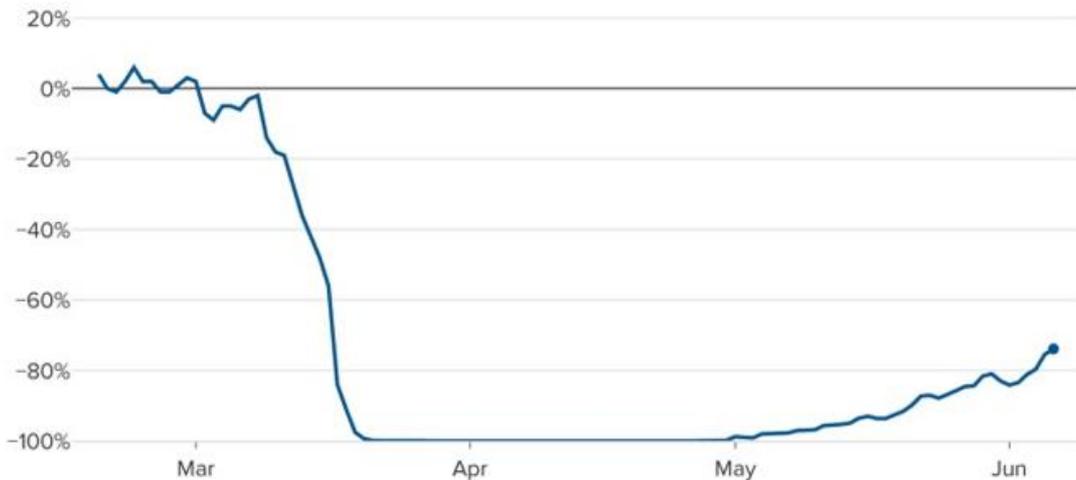


Insight: The public is slowly starting to get back to usual activities.

The Economic Recovery

U.S. Restaurant bookings

Year-over-year change in seated diners at restaurants on the OpenTable network



SOURCE: OpenTable. Data through June 6, 2020. Only states or cities with 50+ restaurants in the sample are included.

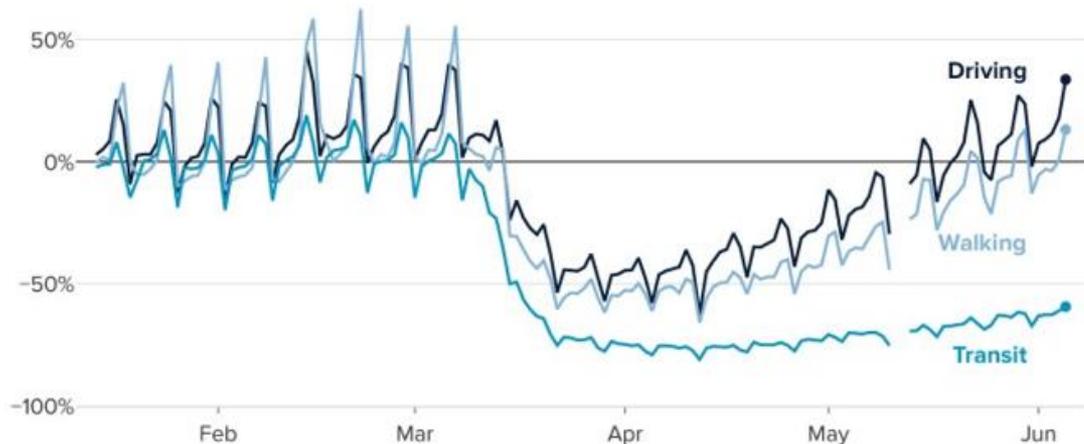


Insight: The public is slowly starting to get back to usual activities.

The Economic Recovery

Change in requests for directions on Apple Maps

Compared to January 13, 2020 baseline. Data is for United States only.



SOURCE: Apple. Data through June 5, 2020.



Insight: The economic recovery is gaining steam.



Mobility Trends Reports

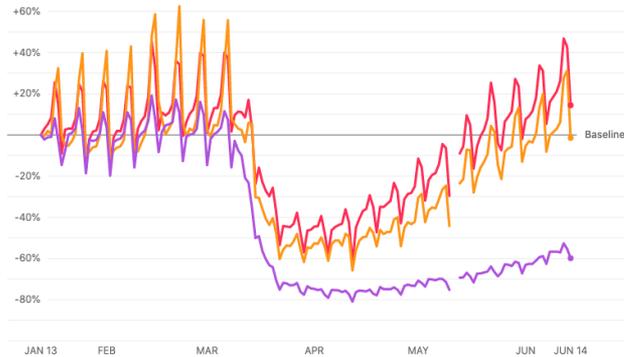
Learn about COVID-19 mobility trends. Reports are published daily and reflect requests for directions in Apple Maps. Privacy is one of our core values, so Maps doesn't associate your data with your Apple ID, and Apple doesn't keep a history of where you've been.



Mobility Trends

Change in routing requests since January 13, 2020

Search (for example Italy, California, or New York City)
United States

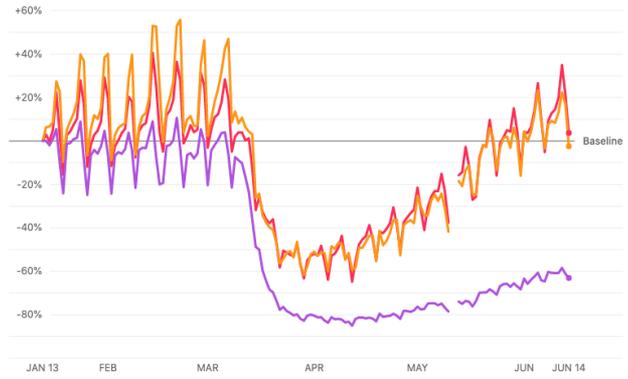


- Driving +14%
- Walking -1%
- Transit -60%

Mobility Trends

Change in routing requests since January 13, 2020

Search (for example Italy, California, or New York City)
Canada



- Driving +4%
- Walking -2%
- Transit -63%



Mobility Trends Reports

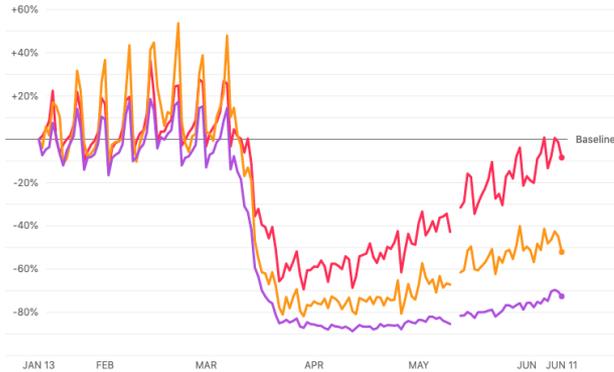
Learn about COVID-19 mobility trends. Reports are published daily and reflect requests for directions in Apple Maps. Privacy is one of our core values, so Maps doesn't associate your data with your Apple ID, and Apple doesn't keep a history of where you've been.



Mobility Trends

Change in routing requests since January 13, 2020

Search (for example Italy, California, or New York City)
New York City, New York, United States

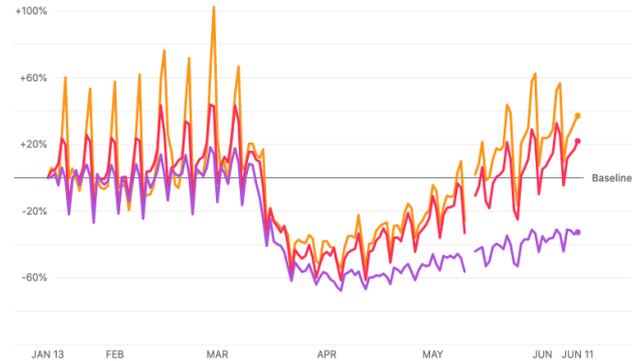


- Driving -8%
- Walking -52%
- Transit -73%

Mobility Trends

Change in routing requests since January 13, 2020

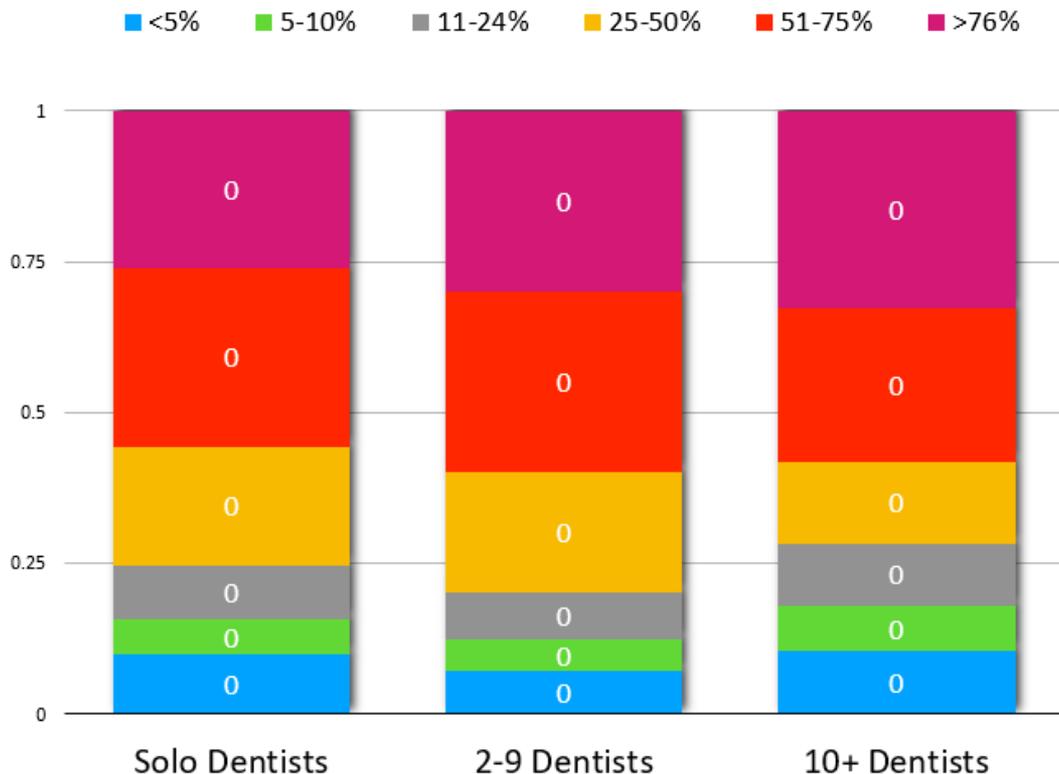
Search (for example Italy, California, or New York City)
Dallas, Texas, United States



- Walking +37%
- Driving +22%
- Transit -33%

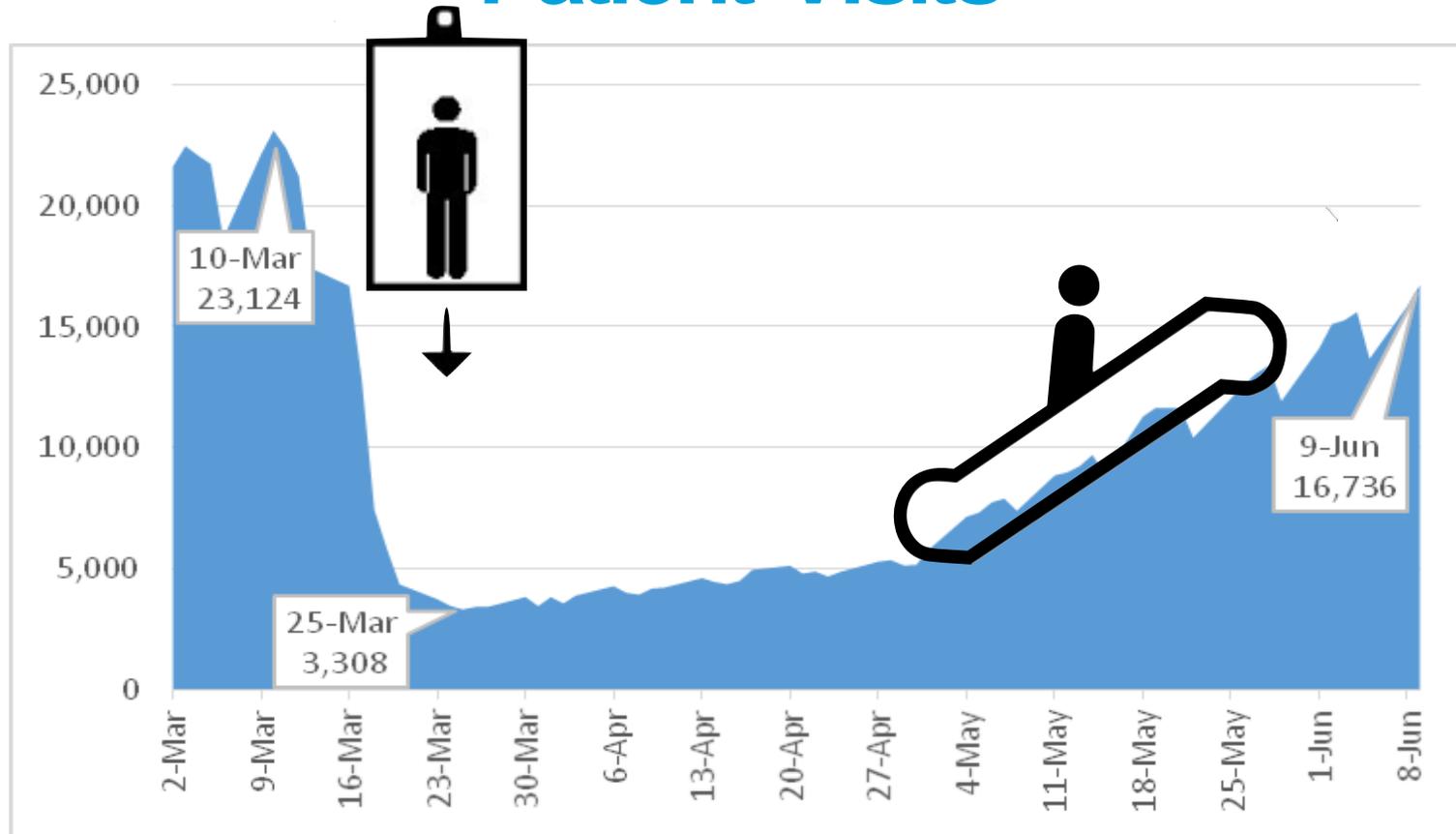
Patient Volume by Practice Size

As more states lift restrictions on dentistry, some dental practices are seeing a rebound in patient volume. About one-third of large dental practices are seeing three fourths or more of their typical patient volume according to a June 1 poll



Source: ADA Health Policy Institute, COVID-19: Economic Impact on Dental Practices (summary results, % rounded)

Patient Visits



PPE Supplies

■ Not sure

■ 0 Days

■ 1-7 Days

■ 8-14 Days

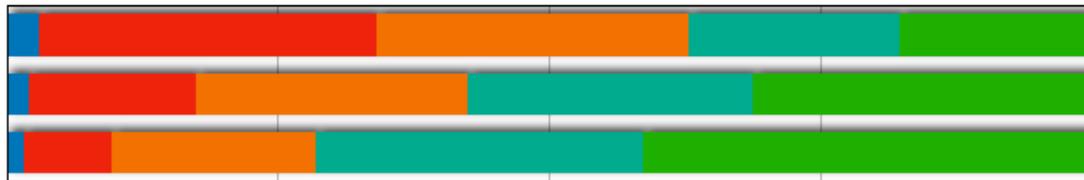
■ >14 Days



Week of May 4

Week of May 18

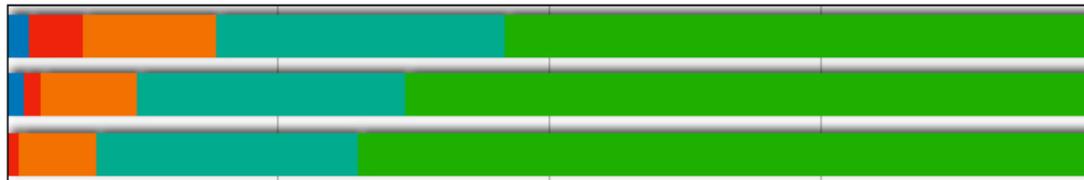
Week of June 1



Week of...

Week of...

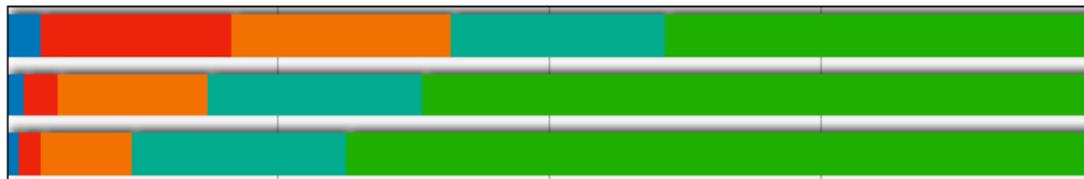
Week of...



Week of...

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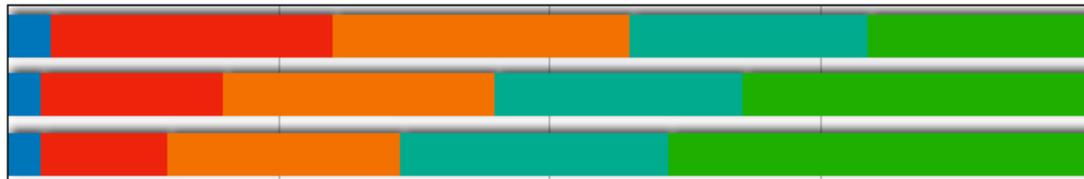
Week of...



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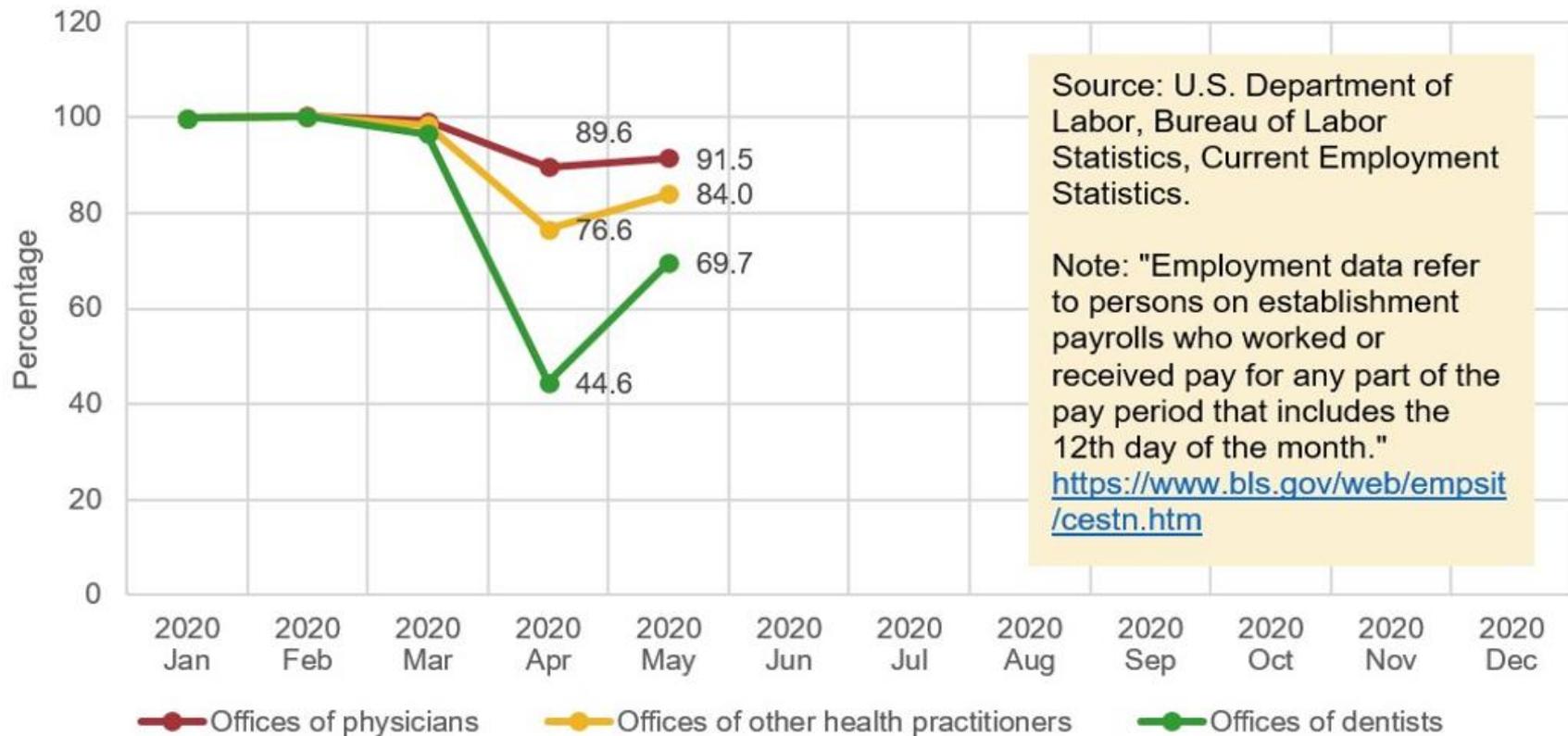


Source: ADA Health Policy Institute, COVID-19: Economic Impact on Dental Practices (summary results, % rounded)

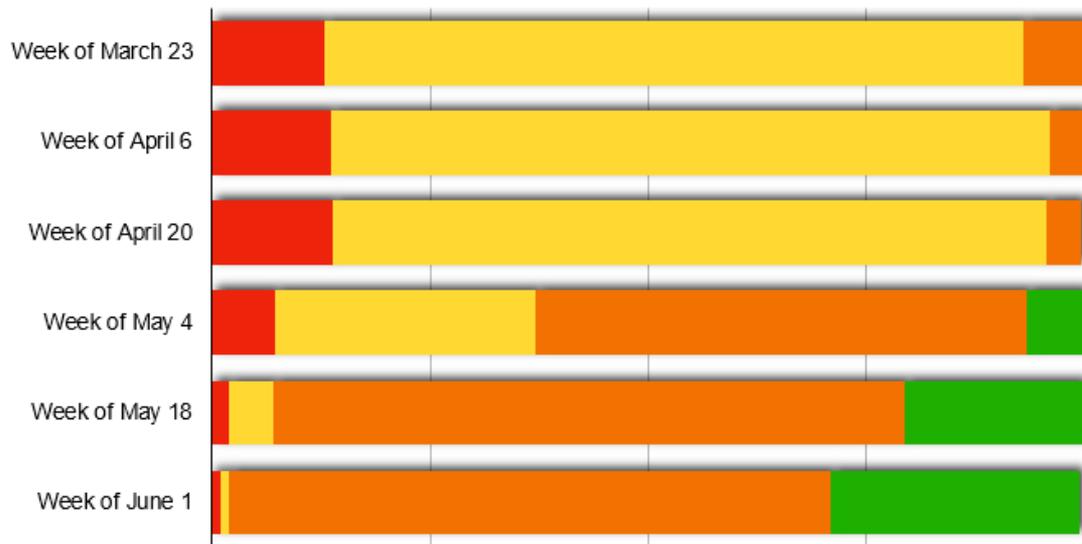
“With a gain of a quarter-million jobs in May, the dental industry is leading the rebound for the health industry.”

“The dental industry gained a quarter-million jobs in May, accounting for a full 10% of the net jobs added across the American economy.”

Employment as a Percentage of January 2020 Employment, by Health Care Industry



What is the current status of your dental practice? (27 States that opened to elective care 5 weeks ago)

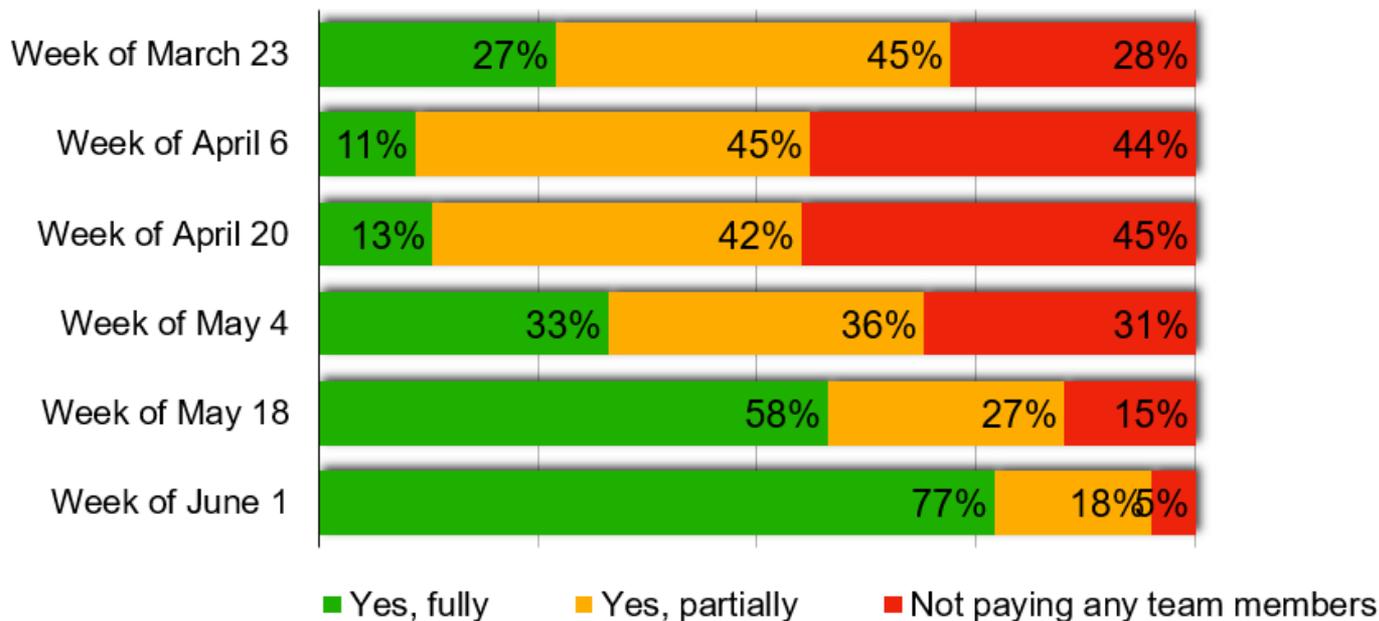


Insight: In the 27 states that have been open for elective care at least 5 weeks, 98% of dental offices are open and 29% report “business as usual”.

■ Closed, not seeing patients ■ Closed, but seeing emergency ■ Open but lower patient volume than usual ■ Open and Business as usual

Source: ADA Health Policy Institute, COVID-19: Economic Impact on Dental Practices

Is your dental practice paying team members (staff) this week?

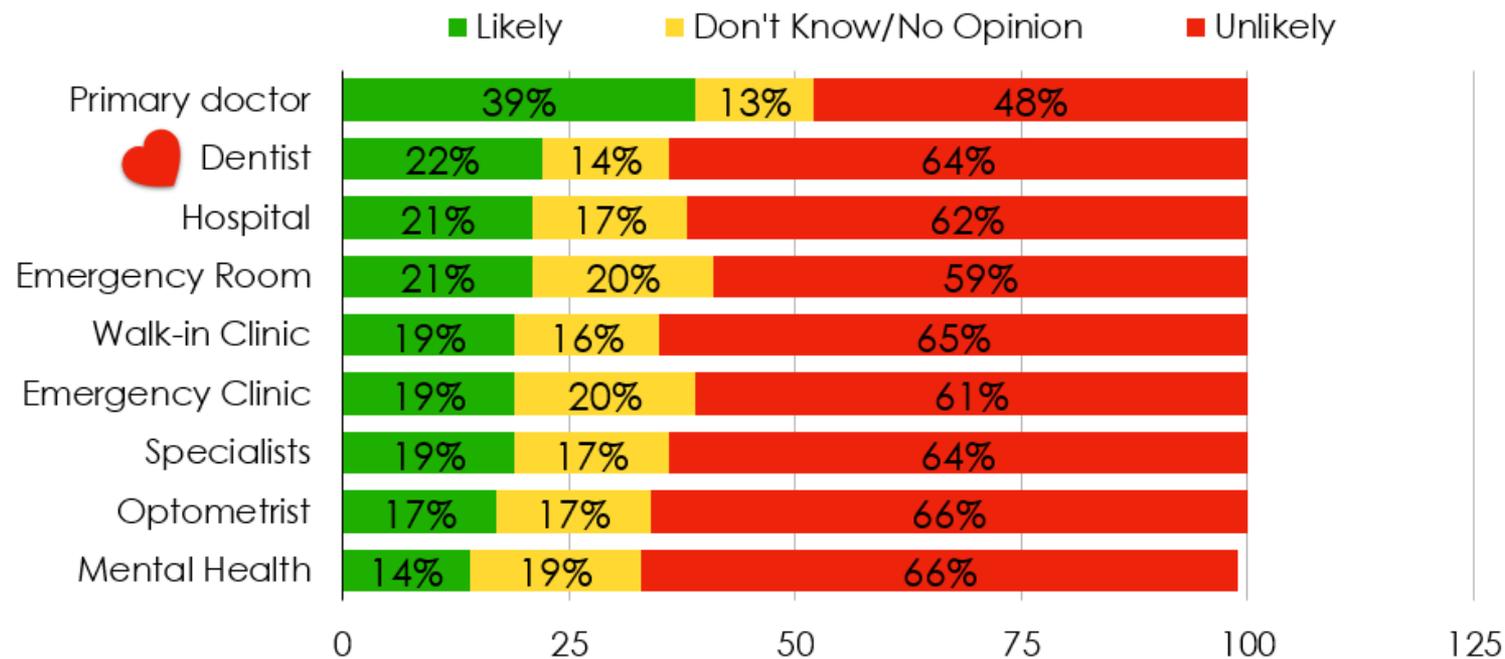


Insight: In the 27 states that have been open for elective care for at least 5 weeks, dental offices are nearly back to full staffing.

Source: ADA Health Policy Institute, COVID-19: Economic Impact on Dental Practices

Lion's Share of Adults Unlikely to Seek Non-Covid-19 Treatments Amid Pandemic

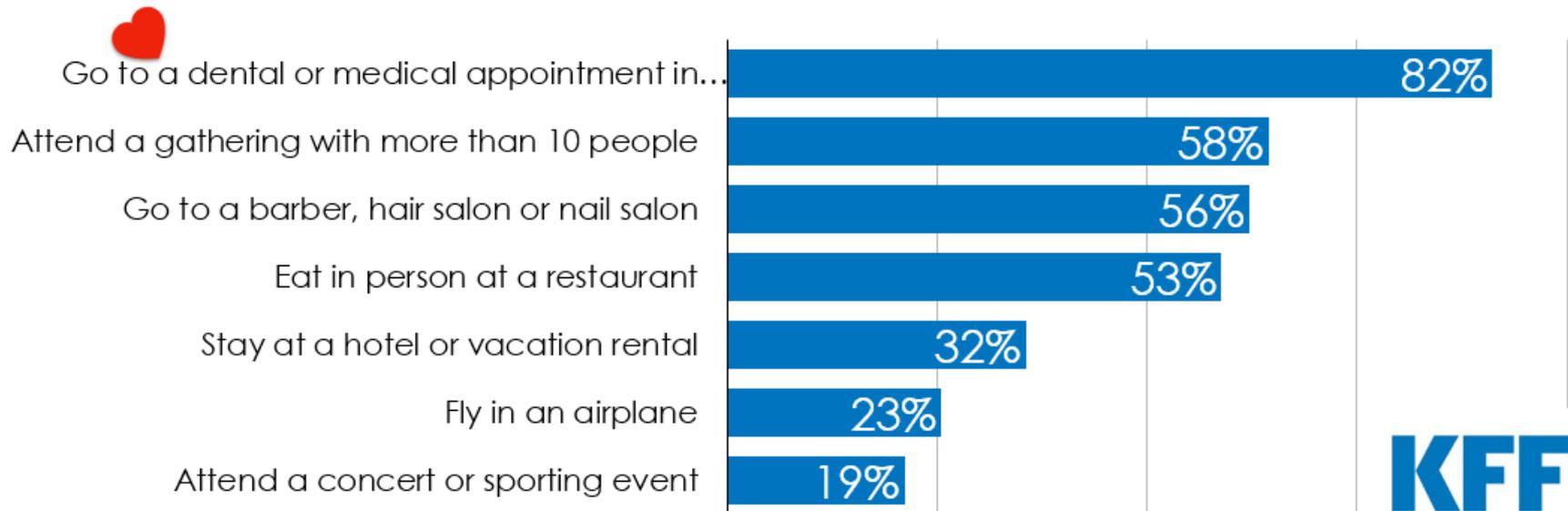
Adults were asked, in light of the pandemic, how likely they were to visit the following for appointments or treatments unrelated to the coronavirus



 Added arbitrarily

Most say some activities will resume in coming months, few say the same about traveling or attending large events

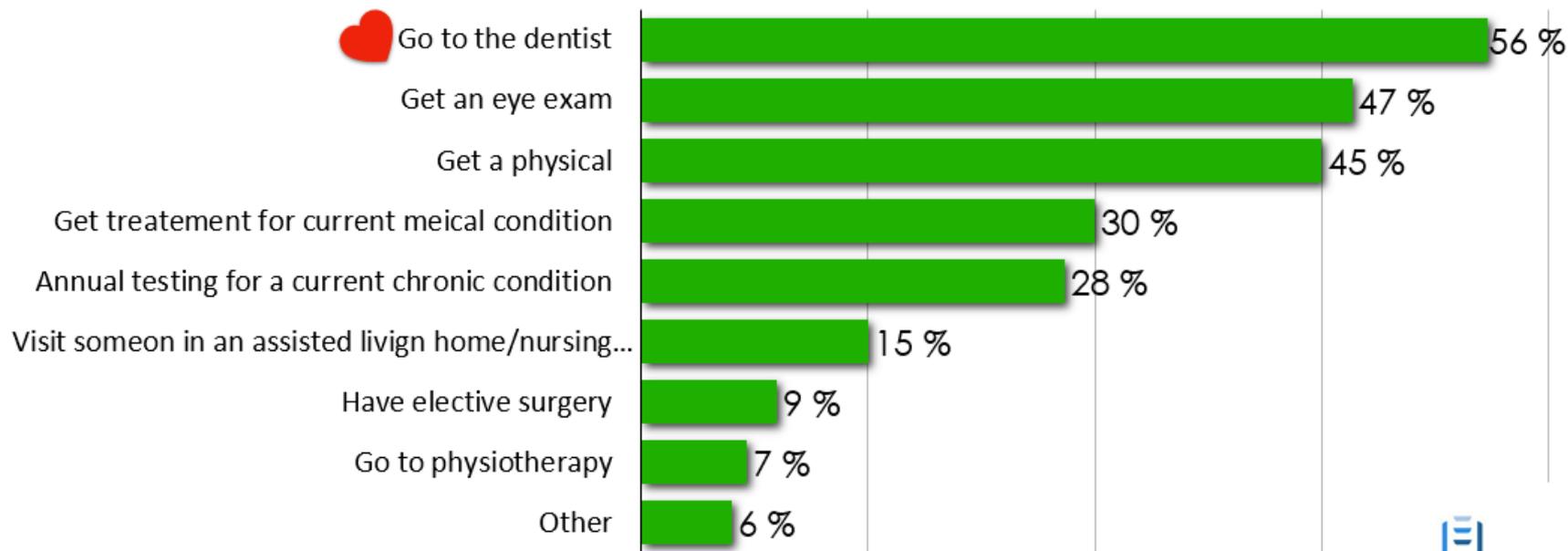
Percent who say it is likely that they will do each of the following in the next three months or they are already doing it



KFF
HENRY J KAISER
FAMILY FOUNDATION

Source: KFF Health Tracking Poll (conducted May 13-18, 2020) See top line for full question wording.  Added arbitrarily

Which of the following are you planning to do in the next 12 months?



TRUE Global Intelligence, the in-house research practice of Fleishman Hillard, fielded an online survey of US adults aged 30-75 on May 4-5, 2020

 Added arbitrarily


FLEISHMAN
HILLARD

Key Take-Aways from June 1st

- As of the week of June 1st, 90% of dental offices in the U.S. were open.
- As of the week of June 1st, patient volume had rebounded to 53% of pre-COVID-19 levels nationwide. In the 27 states that have been open for elective care for at least five weeks, it had rebounded to 64% of pre-COVID-19 levels. Dental practices are hiring back team members steadily.
- The stockpile of PPE in dental offices continues to increase. The past two weeks saw significant improvements in PPE availability, including N95/K95 masks.
- Most dentists report their appointment schedule for the next month is at least half full. But only 8% report it is completely full.
- Consumer attitudes are very encouraging when it comes to visiting the dentist. For now. The data indicate the public is prioritizing visiting the dentist when it comes to “getting back to normal”.
- Taken together, data for the week of June 1st continue to indicate a robust recovery in the dental economy so far.

 @ADAHPI

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ADA American Dental Association®

Thank You!

Have topics you'd like us to cover in next week's webinar on COVID-19 & Dentistry?

- **Email:** webinars@henryschein.com
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- **Complete post-webinar survey**

For more information and a full list of references, please visit the Henry Schein COVID-19 resource center:

www.henryschein.com/COVID19update