COVID-19 and Public Health: A Discussion Session for Campuses

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Deputy Commissioner of Clinical Affairs

July 13, 2020

Kentucky Public Health
Prevent. Promote. Protect.

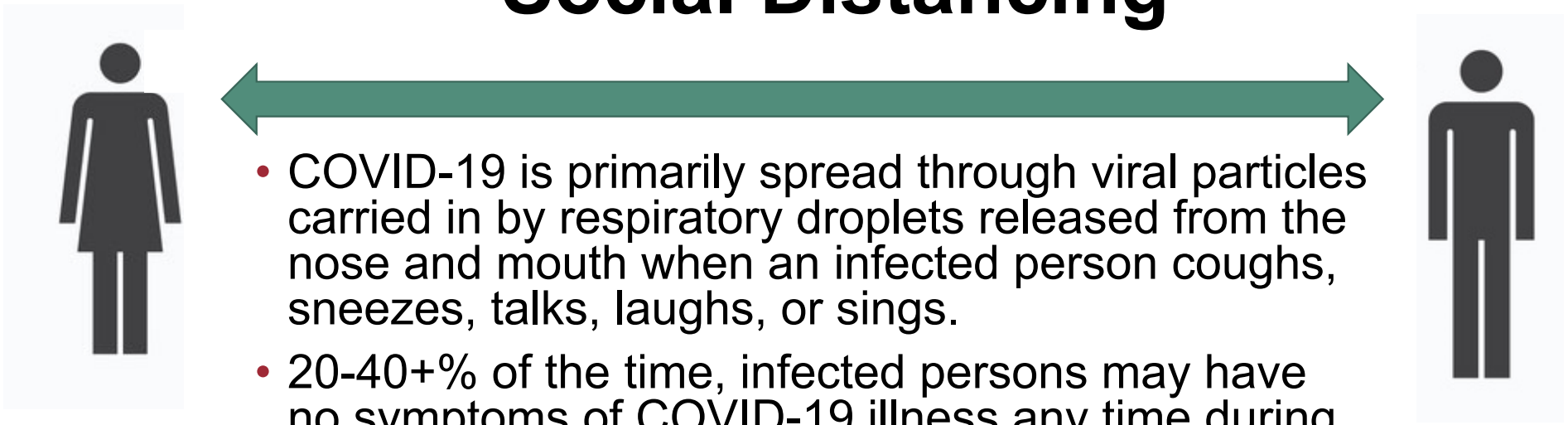
COVID-19 Perspective

- SARS-CoV-2, COVID-19, did not exist as a human disease before late 2019.
- February 2020, the Lombardy region in northern Italy.
- Early March, the disease was spreading in Seattle, Washington and California.
- On March 6, the first Kentucky resident tested positive for COVID-19 and Gov. Beshear declared a state of emergency.
- On March 13, President Trump declared a national state of emergency.
- In March, modeling predicted unmitigated spread of COVID-19 could cause the death of 45,000 – 90,000 Kentuckians and 2 – 4 million Americans, roughly 1 – 2% of our state and our nation in a single year.
- Now the US has experienced the devastation in New York, followed by Louisiana, Texas, Florida, and Arizona.
- There is no vaccine, no cure, and no effective COVID-19-specific treatment.

Public Health Risk Reduction Tools

- Social Distancing
- Cloth Face Coverings
- Screening and Temperature Checks
- Hand and Surface Hygiene
- Contact Tracing

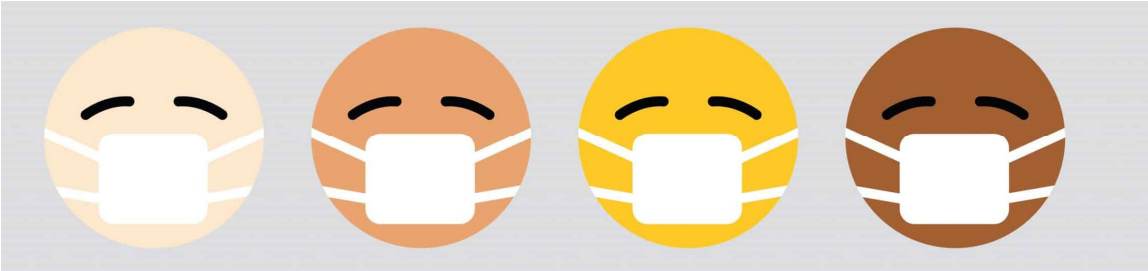
Social Distancing



- COVID-19 is primarily spread through viral particles carried in by respiratory droplets released from the nose and mouth when an infected person coughs, sneezes, talks, laughs, or sings.
- 20-40+% of the time, infected persons may have no symptoms of COVID-19 illness any time during their infection and spread the virus to others.
- Infected persons can spread viral particles for two days before symptoms manifest - called preinfection.
- Staying ≥six feet apart from others is an essential tool we have to mitigate this pandemic.

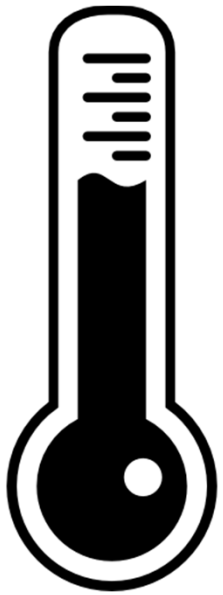
Cloth Face Coverings

- Since the coronavirus spreads by respiratory droplets, covering the nose and mouth is the way a person can prevent spreading the virus if they are not six feet away from others.
- Cloth face coverings provide the barrier needed to diminish the spread (surgical masks and N95 masks are not needed in schools except for certain nursing activities) and can protect the wearer to some degree.



Screening and Temperature Checks

- Although many people with COVID-19 infection are asymptomatic, more than 60% do have symptoms.
- Requiring persons with symptoms or active infection to self-isolate is essential to reduce disease spread.
- Fever is the most common symptom of COVID-19.
- Preventing a student or staff member with a temperature >100.4° to enter schools will substantially decrease the potential exposure of students and staff to this illness.



Hand and Surface Hygiene

- Viral particles transmitted in respiratory droplets live for variable time on objects and surfaces.
- Our hands frequently touch our eyes, nose, and mouth thereby increasing the risk of spreading infection.
- Frequent hand cleaning and sanitizing reduces the risk of transmitting disease.
- Frequently cleaning surfaces contaminated by respiratory droplets is also an important step to reduce transmission of disease.

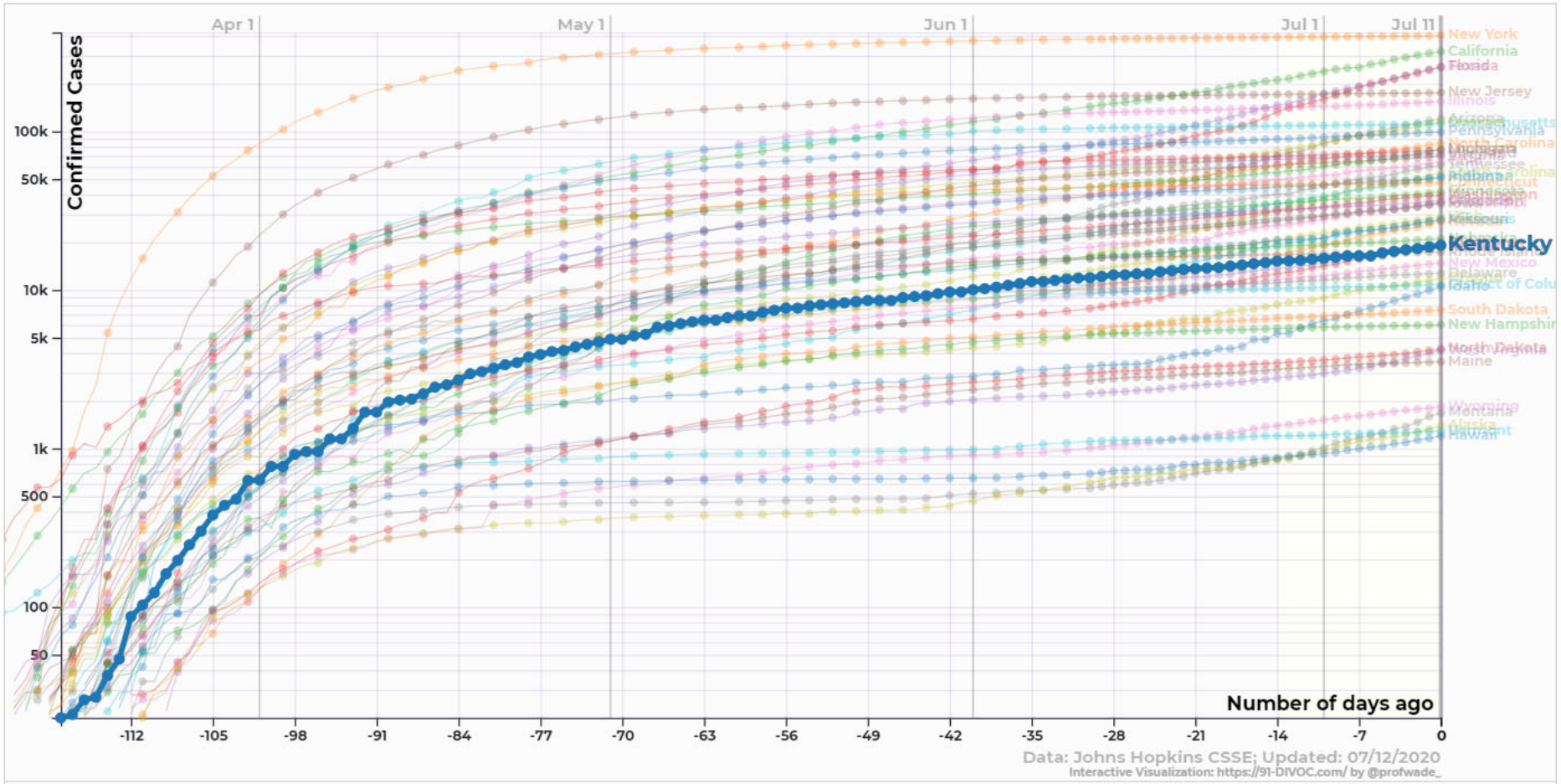
Contact Tracing

- Public health has used contact tracing for decades to **identify** a person with a communicable illness, **isolate** that person, and **quarantine** others with high risk exposure to the infected person to prevent disease spread.
- This technique has worked with measles, chicken pox, mumps, and multiple other illnesses seen in school settings.
- Having a plan to prevent exposure of your students and staff to COVID-19 should include preparing to assist contact tracers with their investigations.

Balancing Public Health with Other Concerns

- These tools are disruptive to our lives as we have known them.
- Until medical science produces a vaccine, treatment, or cure, these tools, however disruptive, are the ones available to reduce the risk of rapid COVID-19 spread with its associated overwhelming of the healthcare system and loss of human life.
- These tools require education, adaptation, patience, and tolerance.
- The Kentucky Department for Public Health and local health departments stand ready to advise and assist school systems in implementation of these tools.

Confirmed COVID-19 Cases by US States/Territories



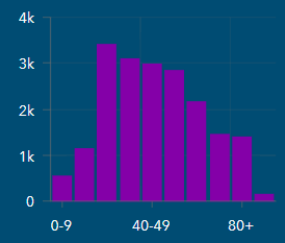
Highlight: Kentucky | Show: All States & DC | Data: Total Confirmed Cases | Scale: Log Linear

X-Axis: Days ago (right aligned), all data | Y-Axis: Scale to Highlight and Cur. Max | Animate

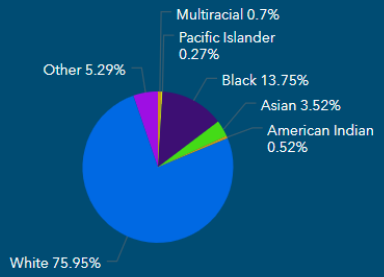
KDPH COVID-19 Dashboard

Cases
19,121

Cases by Age Group

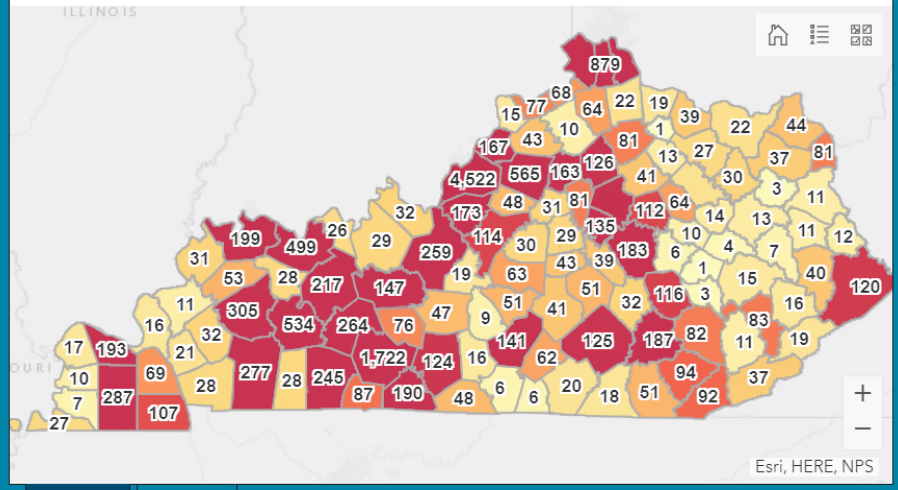


Cases by Race
where race known



Race | Ethnicity | Sex

Cases by County
Click a county for more information



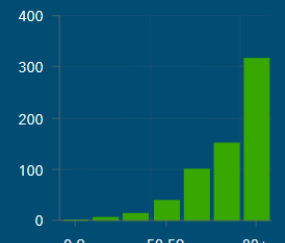
Case Map | Rate Map

Total Cases by County List

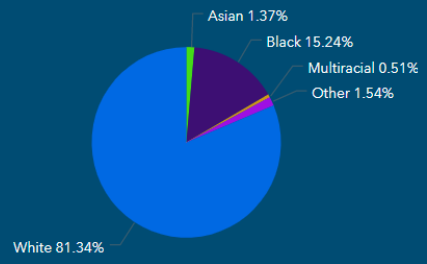
- Jefferson: 4,522
- Fayette: 1,814
- Warren: 1,722
- Kenton: 879
- Boone: 712
- Shelby: 565
- Muhlenberg: 534
- Daviess: 499
- Campbell: 323
- Hopkins: 305
- Graves: 287
- Christian: 277
- Butler: 264
- Hardin: 259
- Logan: 245
- Ohio: 217
- Henderson: 199
- McCracken: 193
- Allen: 190
- Laurel: 187
- Madison: 183
- Bullitt: 173
- Oldham: 167
- Franklin: 163
- Grayson: 147
- Adair: 141
- Jessamine: 135
- Scott: 126

Deaths
622

Deaths by Age Group

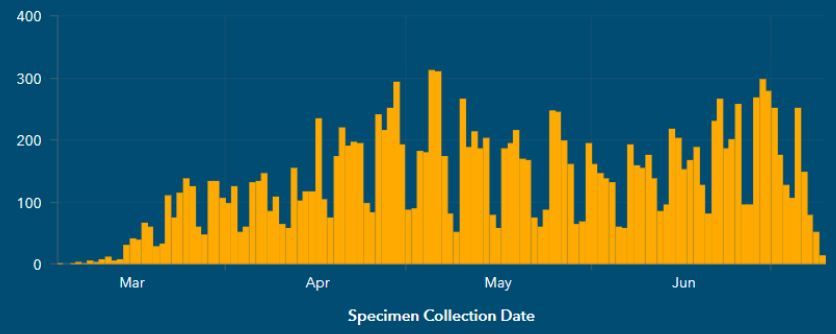


Deaths by Race
where race known

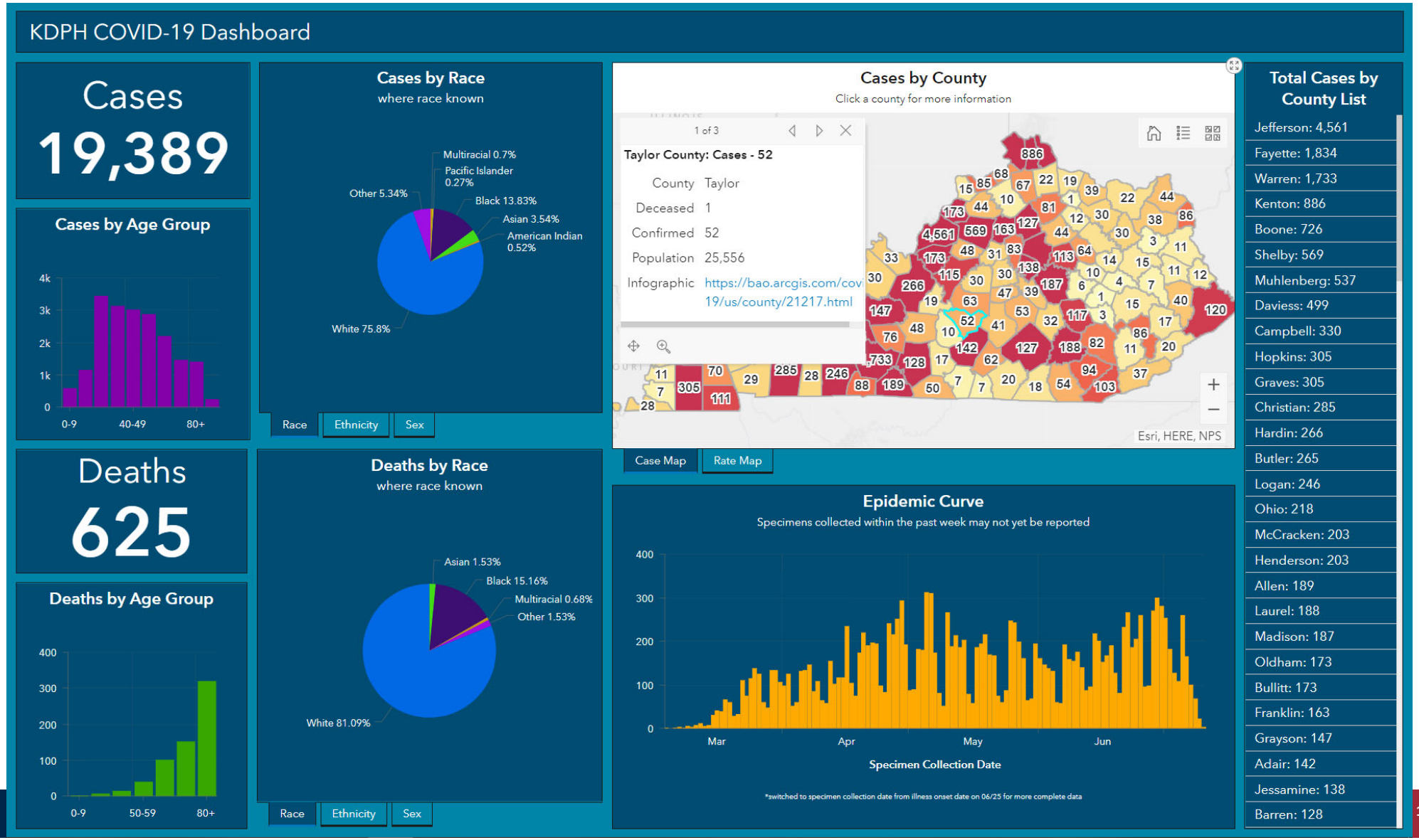


Race | Ethnicity | Sex

Epidemic Curve
Specimens collected within the past week may not yet be reported

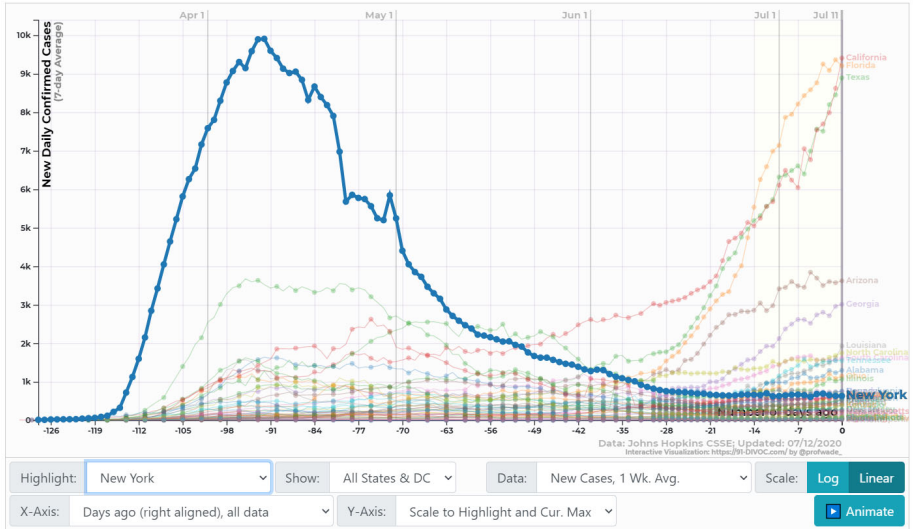


*switched to specimen collection date from illness onset date on 06/25 for more complete data

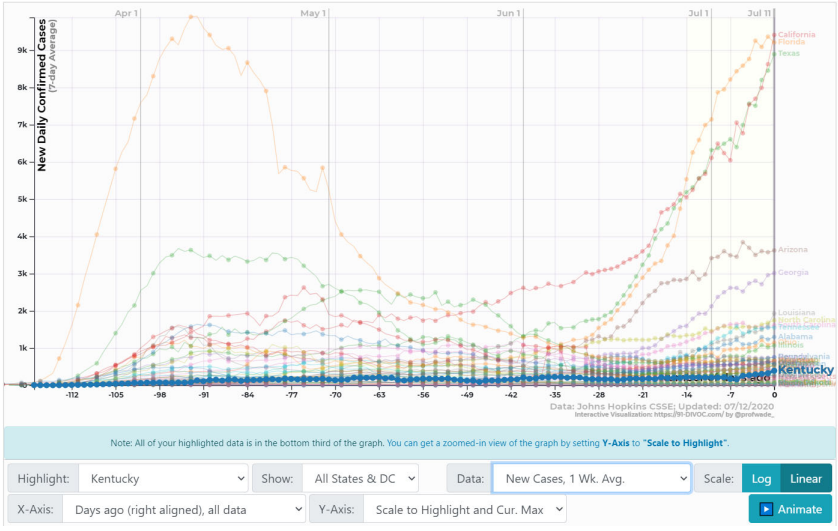

KDPH COVID-19 Dashboard
Cases
19,389
Cases by Age Group
4k
3k
2k
1k
0
0-9
40-49
80+
Cases by Race
where race known
Multiracial 0.7%
Pacific Islander 0.27%
Other 5.34%
Black 13.83%
Asian 3.54%
American Indian 0.52%
White 75.8%
Race
Ethnicity
Sex
Cases by County
Click a county for more information
1 of 3
Taylor County: Cases - 52
County Taylor
Deceased 1
Confirmed 52
Population 25,556
Infographic https://bao.arcgis.com/cov
19/us/county/21217.html
Esri, HERE, NPS
Case Map
Rate Map
Total Cases by County List
Jefferson: 4,561
Fayette: 1,834
Warren: 1,733
Kenton: 886
Boone: 726
Shelby: 569
Muhlenberg: 537
Daviess: 499
Campbell: 330
Hopkins: 305
Graves: 305
Christian: 285
Hardin: 266
Butler: 265
Logan: 246
Ohio: 218
McCracken: 203
Henderson: 203
Allen: 189
Laurel: 188
Madison: 187
Oldham: 173
Bullitt: 173
Franklin: 163
Grayson: 147
Adair: 142
Jessamine: 138
Barren: 128
Deaths
625
Deaths by Age Group
400
300
200
100
0
0-9
50-59
80+
Deaths by Race
where race known
Asian 1.53%
Black 15.16%
Multiracial 0.68%
Other 1.53%
White 81.09%
Race
Ethnicity
Sex
Epidemic Curve
Specimens collected within the past week may not yet be reported
400
300
200
100
0
Mar
Apr
May
Jun
Specimen Collection Date
*switched to specimen collection date from illness onset date on 06/25 for more complete data

Early Pandemic: New York vs Kentucky
New York – An Ominous Warning

New Confirmed COVID-19 Cases per Day by US States/Territories

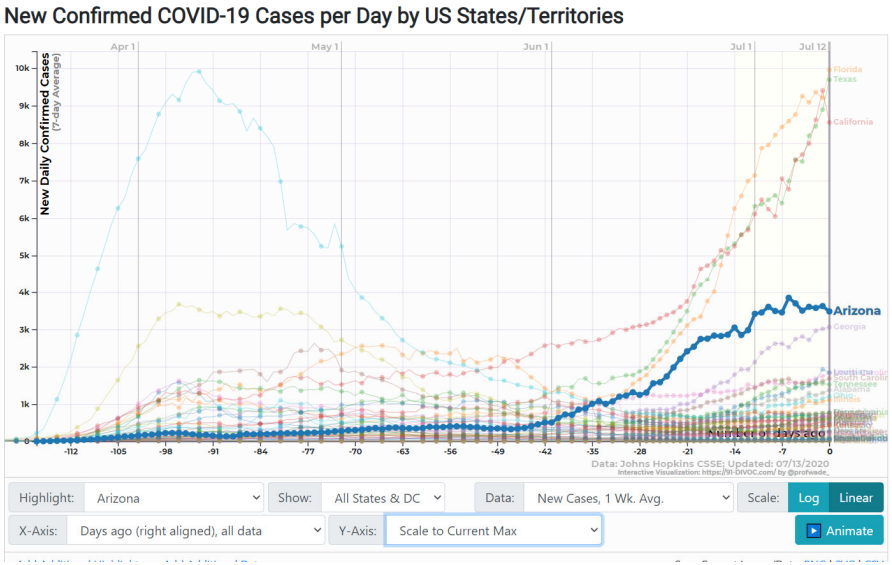


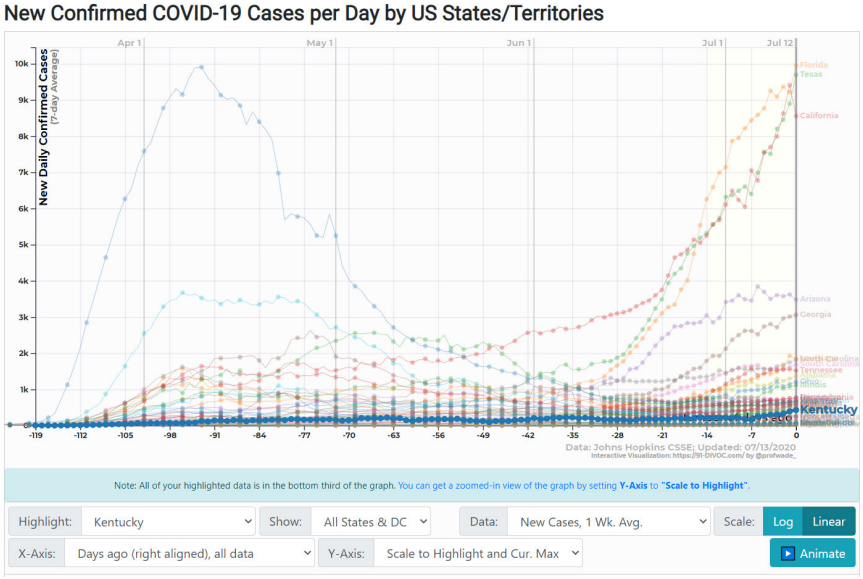
New Confirmed COVID-19 Cases per Day by US States/Territories



http://www.91-divoc.com/pages/covid-visualization/
Accessed 7/12/2020

Current Pandemic: Arizona vs Kentucky
New York in the Desert? Not in the Bluegrass.





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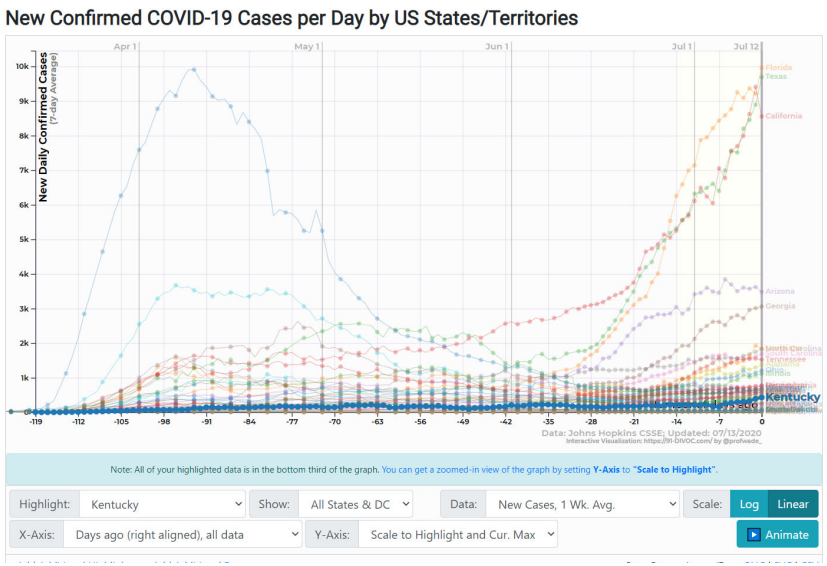
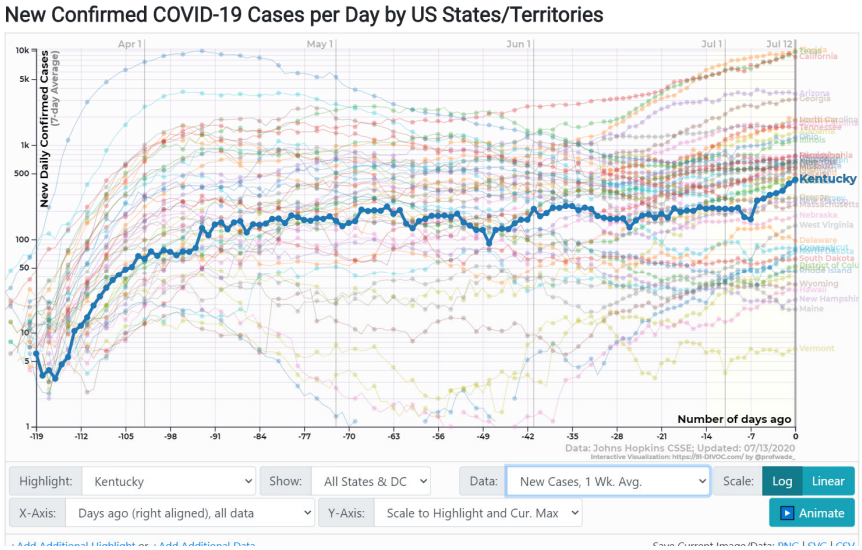
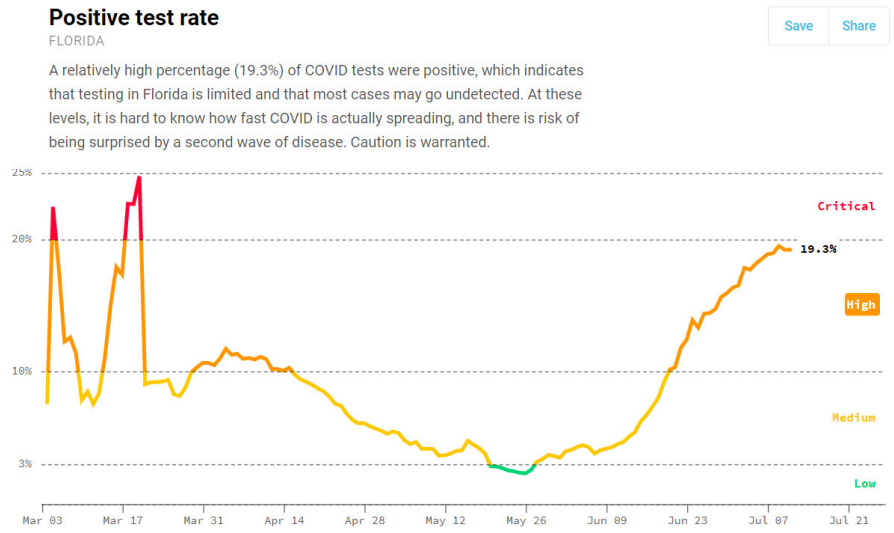
Current Pandemic
KY Spotlight Only

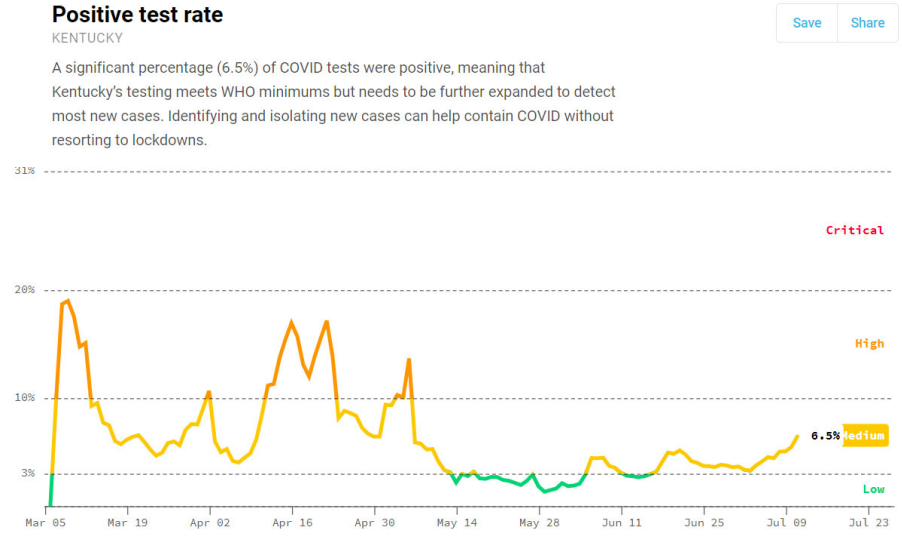




http://www.91-divoc.com/pages/covid-visualization/
Accessed 7/13/2020

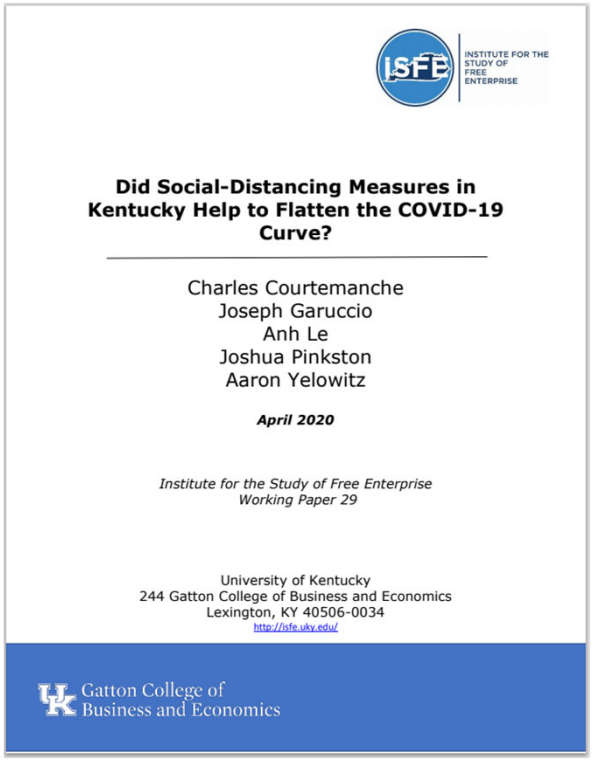
Florida vs. Kentucky
Surge in FL After Public Health Orders Lifted





https://covidactnow.org/
Accessed 7/12/2020

UK Gatton College of Business and Economics: Social-Distancing Slowed COVID-19



INSTITUTE FOR THE STUDY OF FREE ENTERPRISE

Did Social-Distancing Measures in Kentucky Help to Flatten the COVID-19 Curve?

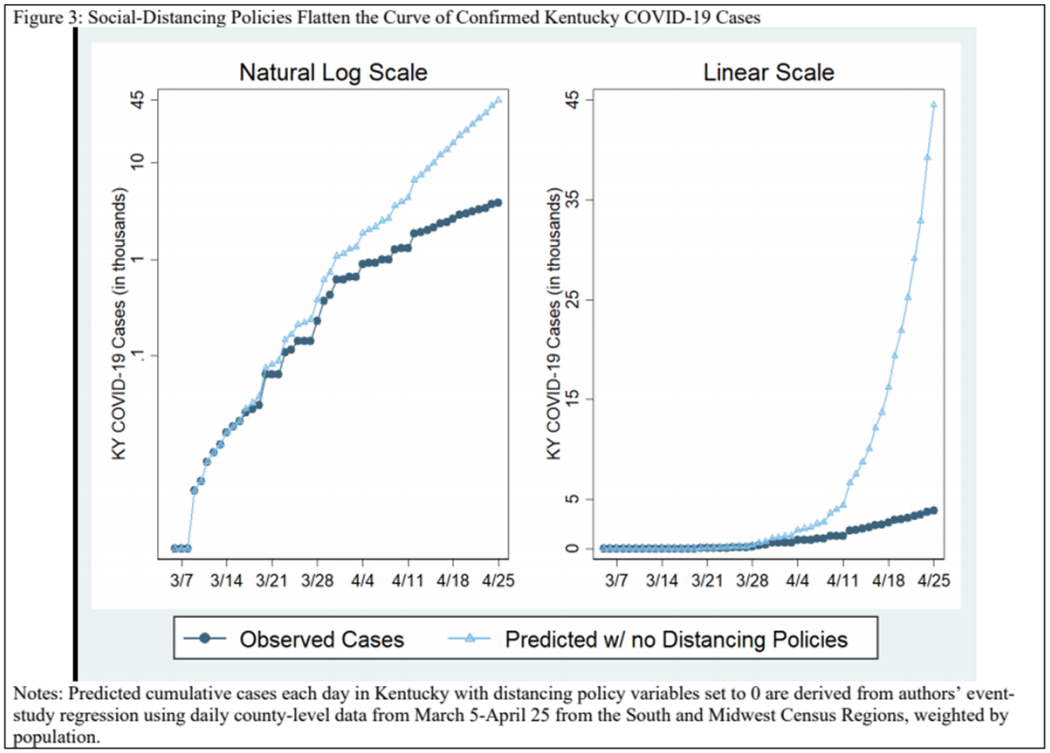
Charles Courtemanche
Joseph Garuccio
Anh Le
Joshua Pinkston
Aaron Yelowitz

April 2020

Institute for the Study of Free Enterprise
Working Paper 29

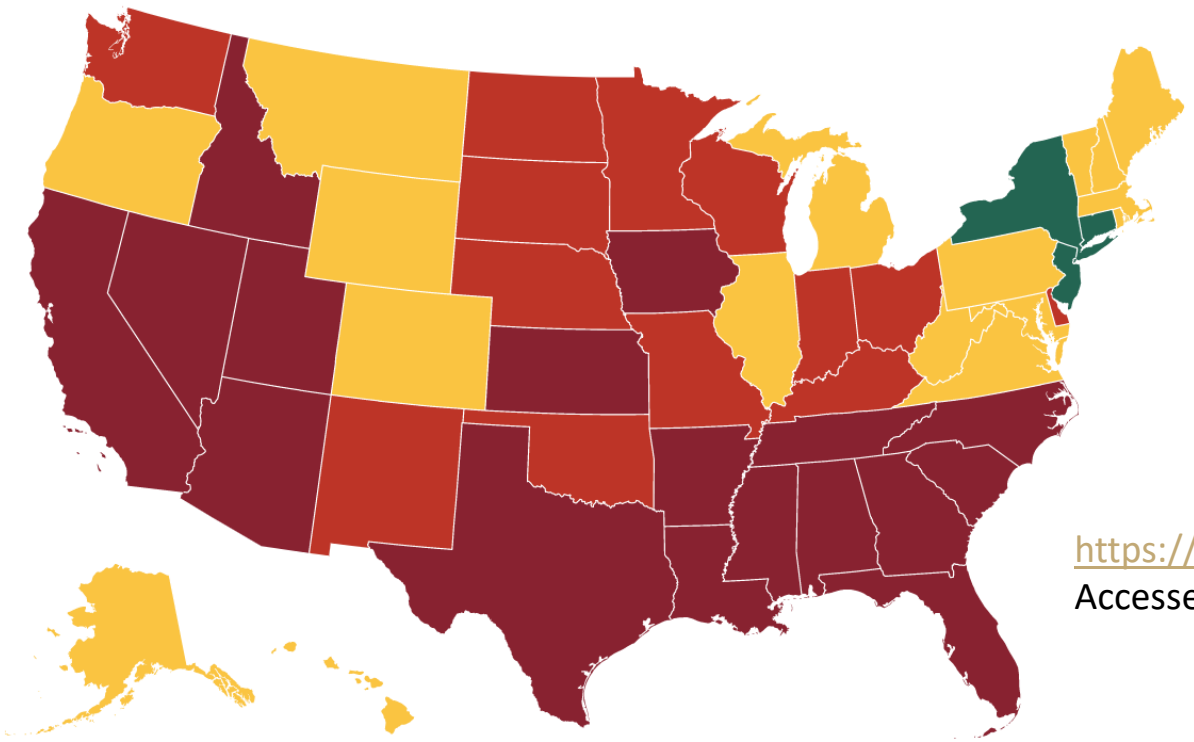
University of Kentucky
244 Gatton College of Business and Economics
Lexington, KY 40506-0034
http://isfe.uky.edu/

Gatton College of Business and Economics



Tracking Our COVID-19 Response

Each state's progress towards a new normal



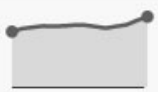
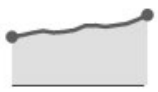
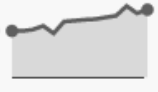
BRUISED RED
Uncontrolled spread

RED
Trending poorly

YELLOW
Making progress

GREEN
Trending better

https://www.covidexitstrategy.org/
Accessed 7/12/2020

STATE NAME	14-DAY TREND OF COVID+	LAST 14 DAYS OF COVID+ (ROLLING)	INFLUENZA-LIKE ILLNESS	% OF TEST TARGET	ICU OCCUPIED	NEW CASES PER MILLION PER DAY	COVID+ RATE IS
Kentucky	85% Increasing	212  392	Minimal Level 1	90%	78% Elevated	88	6.5% Increasing
Illinois	27% Increasing	716  909	Minimal Level 1	157%	55% Normal	72	3.0% Increasing
Indiana	45% Increasing	358  521	Minimal Level 1	65%	66% Normal	77	8.0% Increasing
Missouri	52% Increasing	367  560	Minimal Level 1	96%	61% Normal	91	6.3% Increasing
Ohio	46% Increasing	786  1.1k	Minimal Level 1	109%	47% Normal	98	6.0% Increasing
Tennessee	114% Increasing	724  1.6k	Minimal Level 1	178%	74% Elevated	227	8.5% Flat
Virginia	25% Increasing	535  668	Minimal Level 1	97%	68% Normal	78	5.4% Increasing
West Virginia	241% Increasing	39  133	Minimal Level 1	118%	75% Elevated	74	4.2% Increasing

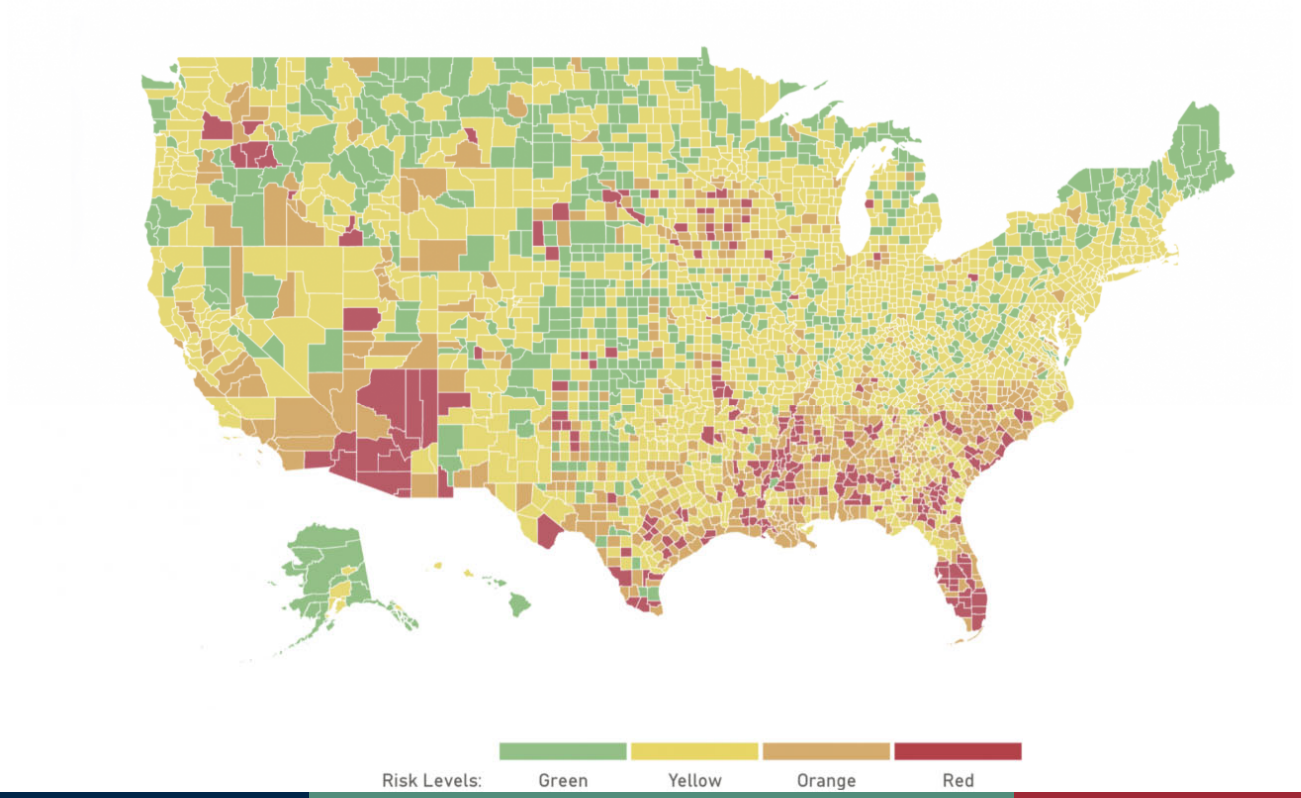
globalepidemics.org

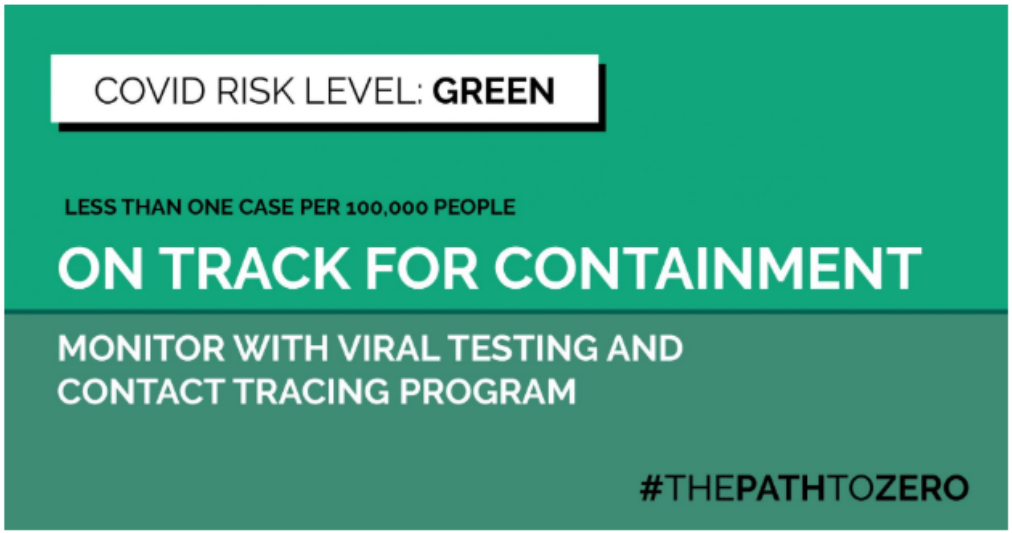
PANDEMICS EXPLAINED
unlocking evidence for better decision making

Testing Targets Capacity Experts Blog Resources

HARVARD GLOBAL HEALTH INSTITUTE

HGHI Releases Guidance for COVID Suppression

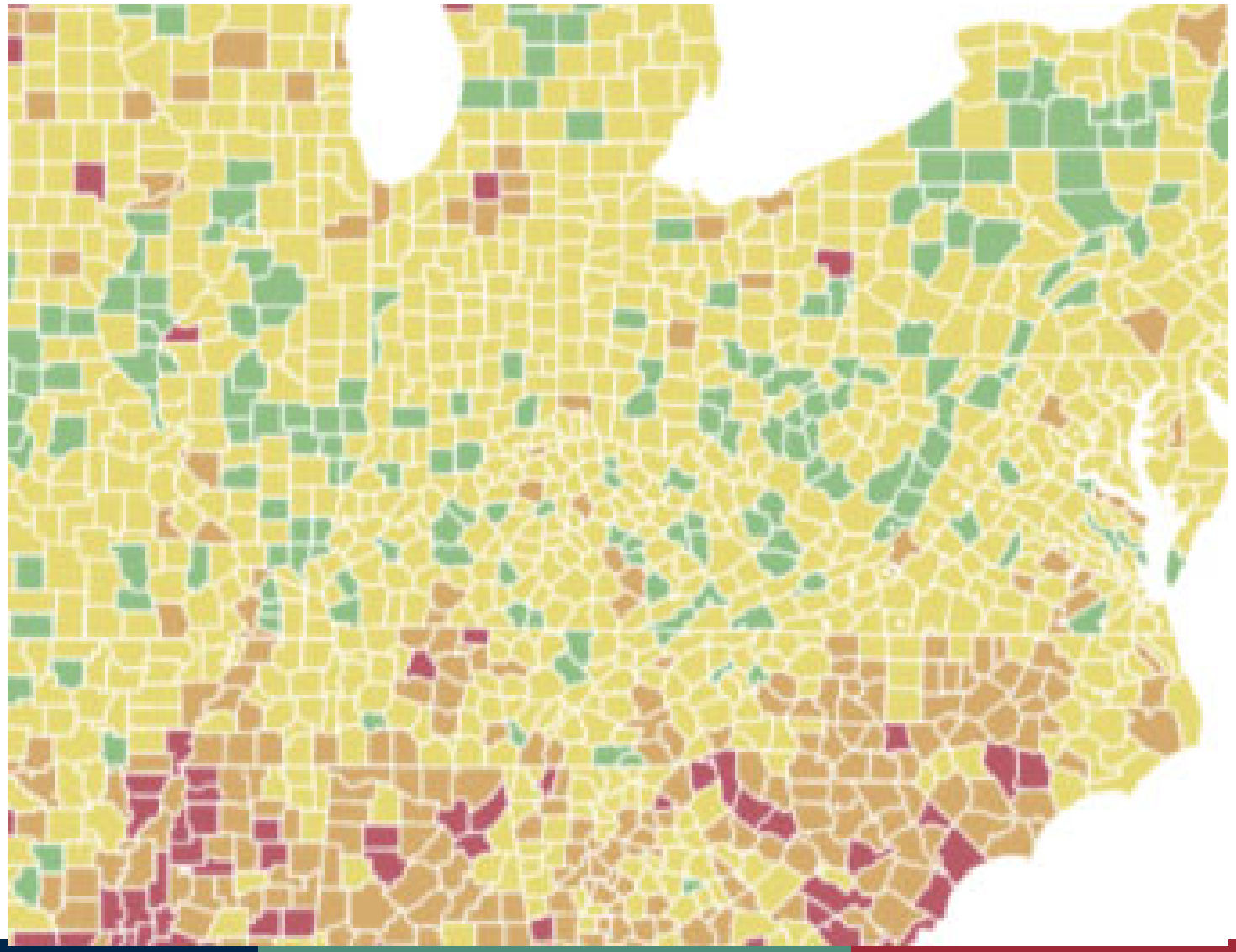


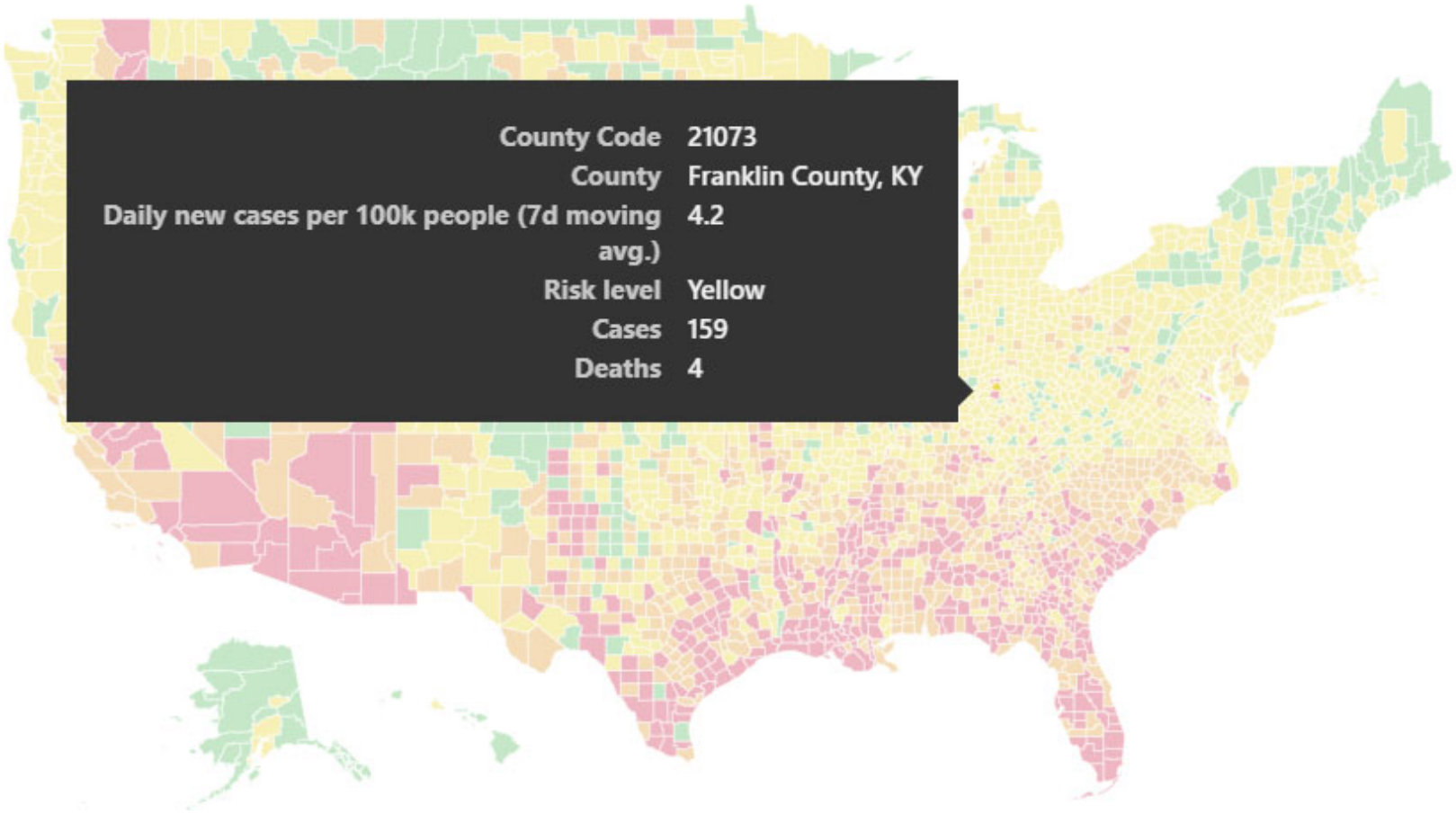

COVID RISK LEVEL: GREEN
LESS THAN ONE CASE PER 100,000 PEOPLE
ON TRACK FOR CONTAINMENT
MONITOR WITH VIRAL TESTING AND CONTACT TRACING PROGRAM
#THEPATHTOZERO


COVID RISK LEVEL: YELLOW
1-9 CASES PER 100,000 PEOPLE
COMMUNITY SPREAD
RIGOROUS TEST AND TRACE PROGRAMS ADVISED
#THEPATHTOZERO


COVID RISK LEVEL: ORANGE
10-24 CASES PER 100,000 PEOPLE
ACCELERATED SPREAD
STAY-AT-HOME ORDERS AND/OR RIGOROUS TEST AND TRACE PROGRAMS ADVISED
#THEPATHTOZERO


COVID RISK LEVEL: RED
25+ CASES PER 100,000 PEOPLE
TIPPING POINT
STAY-AT-HOME ORDERS NECESSARY
#THEPATHTOZERO



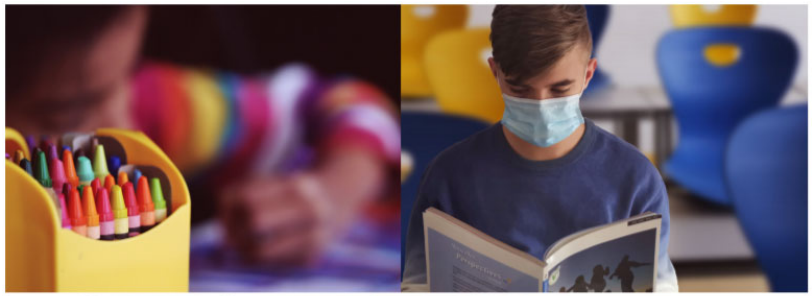

County Code 21073
County Franklin County, KY
Daily new cases per 100k people (7d moving avg.) 4.2
Risk level Yellow
Cases 159
Deaths 4

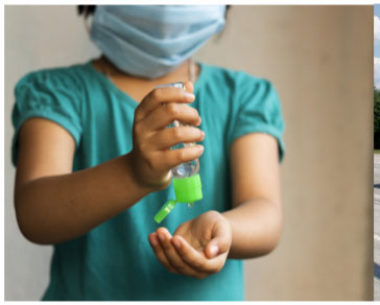
TEAM KENTUCKY

#HealthyAtSchool

Guidance on Safety Expectations and Best Practices for Kentucky Schools (K-12)

Interim Guidance as of June 2020





kycovid19.ky.gov

connie.white@ky.gov

Questions posted

- Large scale events
- Masks
- Postsecondary “requirements”
- Off site internships
- Testing
- Off campus activity by students

kycovid19.ky.gov

connie.white@ky.gov