



**SANGAMON COUNTY
COUNTY BOARD OFFICE**

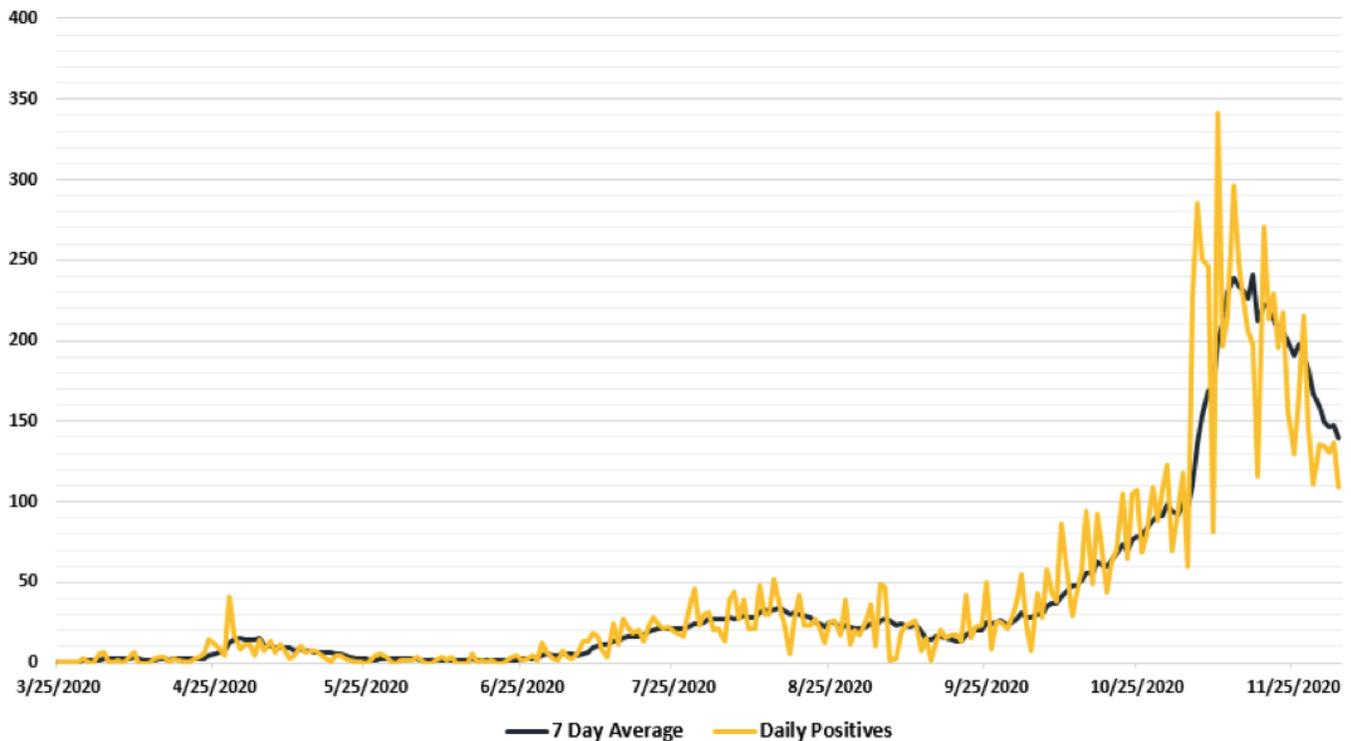
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COVID-19 Q&A

A Little History

A little history may be helpful in understanding where we are and trying to figure out where we think we are going with this virus:

Daily Positives in Sangamon County and Seven Day Moving Average



This chart shows the number of cases reported in Sangamon county since the beginning of the pandemic. The yellow line that swings wildly up and down is the cases reported per day. You can see how, just following that data from point to point, it is difficult to perceive any pattern. To address that problem statisticians create a “rolling average” (the black line) that combines several days data in effort to smooth out the daily information.

Look at the small bump in that black line on the left of the chart during March and April. That is our first experience with COVID when no one knew quite what to expect and everything was shut down. We didn't know how bad it was at the time, but it turns out that it wasn't too bad or maybe keeping everyone at home kept it from getting very bad.

That bump is what statisticians call a "bell curve." In a typical "bell curve" something being measured starts out low, rises to a peak (like a mountain) and then drops back to a low level in almost the same pattern as the way it rose. Most of the time this shape on a graph looks something like a church bell; which is why they call it a bell curve. This shape repeats itself over and over and over again in nature and biology.

Now look a little further along this chart to the June/July period. You can see how the number of cases was starting to rise again. The left side of the "bell" (ok, it looks more like a hill) starts to take shape. But then the line drops off and the right side of the bell doesn't look symmetrical; its shorter than the left side. This illustrates another interesting aspect of viruses and humans. The normal course of the virus would be to rise to a peak and then fall back more or less symmetrically. But humans have a unique interaction with viruses. If they bother us, we change our behavior which interrupts the natural, smooth pattern of a virus's growth and decline. In June and July when we saw the virus starting to rise, we took some mitigation steps (and we all, naturally became more cautious) which had the effect of interfering with the virus's natural growth pattern.

Now look at October and November. You can quickly see that the virus spread and the number of cases in our community was growing incredibly fast. The numbers were growing much faster and much larger than anything we had experienced in March/April or June/July. These were truly alarming numbers. This is why Governor Pritzker issued a series of executive orders. This is why we followed these orders. This is why, although we implemented these orders in a phased manner, to try to help our struggling bars and restaurants, the numbers exceeded the allowable phased criteria in four days. In fact, at one point Sangamon County's rate of spread of the disease was **the 11th highest in the country.**

So the numbers are going up and we have the ability to adjust our behavior to bring the numbers down. So what? We deal with the flu every year without all these rules and regulations.

In the beginning we didn't know very much about what we were facing with COVID-19. But now, after months of experience and data collection we know that the virus that causes COVID-19 is more contagious than the flu but 8 to 16 times more deadly and capable of severely debilitating some victims who survive. It is true that it is most dangerous for people over the age of 70 or people with other underlying conditions, but that is a lot of people. In our community it could be as much as 40% of the population.

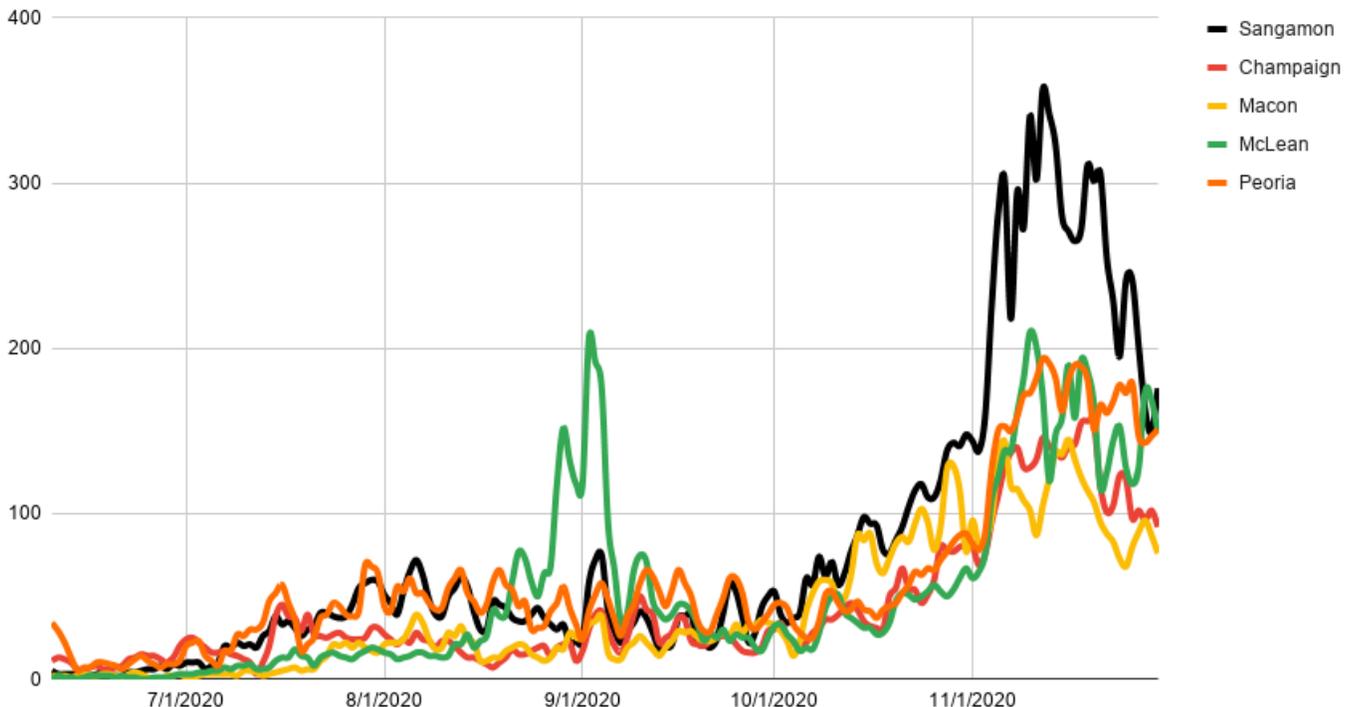
Wouldn't it be more sensible to focus our efforts only on old people and those people with underlying conditions.

We are focusing resources on vulnerable populations. Our medical advisory team developed a review, coaching and counseling program for all of the elder care facilities in our community. Beginning in the early weeks of the outbreak our doctors visited these facilities, at considerable personal risk, to work with them. This program has become a model for other counties around the state. But when you include underlying conditions like obesity, diabetes, lung and heart disease almost 40% of the population qualifies as vulnerable. This is a population so large that it is impossible to protect it without all of us taking some precautions.

Well, why is Sangamon County being so strict? Many other counties are only loosely observing the Governor's orders.

Another chart may help explain this more clearly. This chart tracks the number of cases reported in a number of counties that are very similar to Sangamon. These are counties that we often use for comparison. They are roughly the same size, with the same demographic mix. They are characterized by a single large metropolitan area and surrounded by relatively rural counties. You can see from this chart that for most of the year, our case count more or less tracked with our peer counties but beginning in the fall, our case count was substantially higher than our peer group. This is one important reason why Sangamon County needed to make more serious enforcement efforts to bring down the rate of spread:

Comparable Counties 3 Day Rolling Average



Why is Sangamon so much worse?

We simply don't know.

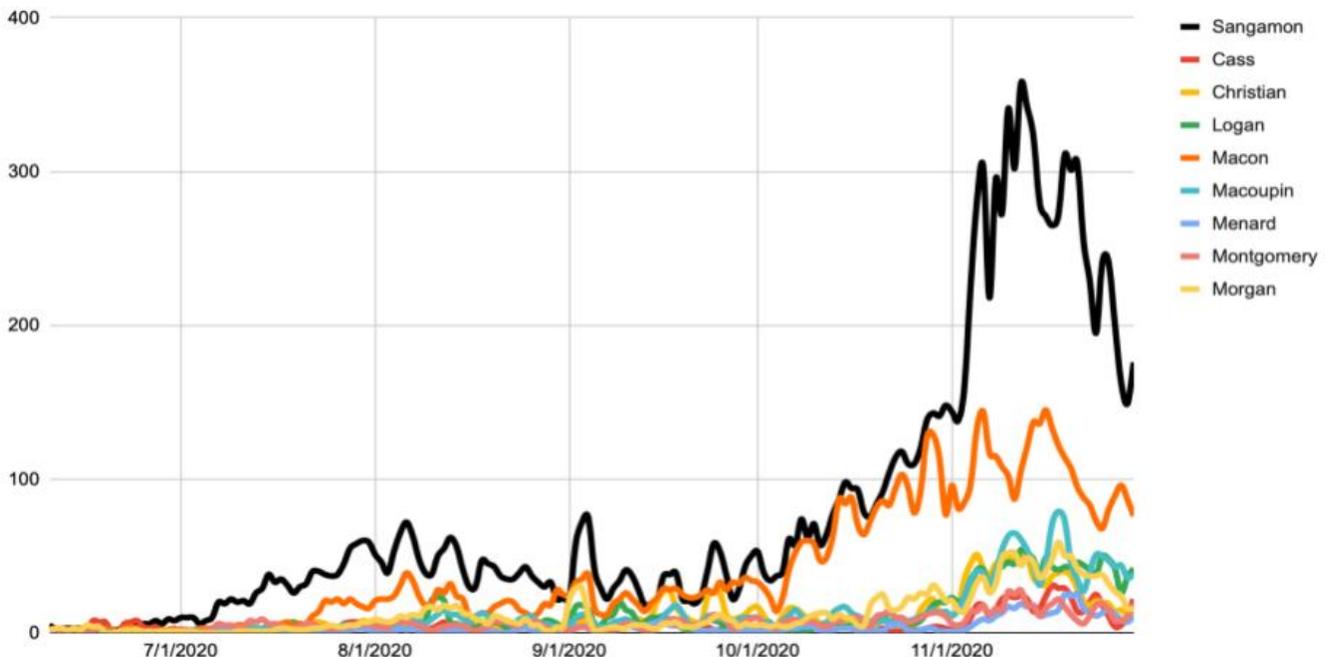
Are we the only county being so strict?

We don't know the answer. We do know that many counties with much lower positives have done much less mitigation probably because they haven't felt the need for more strict rules. We also know that Winnebago County, St.Clair County, Logan County and the City of Decatur have taken some actions similar to ours.

Ok, so maybe we had a more serious problem that needed a more serious response, but what good will it do for Sangamon to impose restrictions when the counties surrounding us don't impose restrictions? That's not fair.

First of all, the virus doesn't care about fair. Secondly, we can't control the actions taken by the counties surrounding Sangamon any more than they can control what we do. But perhaps the most important point is that these counties pose much less of a risk to us, than we pose to them. Except for Macon, which has its own strong mitigation effort, the other surrounding counties are one-sixth our size and largely rural without any dense population center that can facilitate the spread of the disease. The surrounding counties' experience with COVID is much different than ours. Again, a chart may help illustrate how insignificant a threat these counties pose to us compared to the threat we pose to ourselves:

Neighboring Counties, 3 Day Rolling Average



Maybe our numbers just look bad because we are a regional medical center?

No. At the beginning of the pandemic everyone was scrambling to implement a good data collection and retrieval process. But at this point, we can have a high level of confidence in the information. The data we have are for Sangamon County residents who have tested positive for the disease. Champaign is a regional medical center with more robust testing but a lower case count; Rockford is a regional medical center with a larger population than Sangamon but Sangamon's positivity rate is higher.

I've heard that Sangamon's positives are so high because we count people who *probably* have COVID as *positive* for COVID.

No. The state does make a distinction between *positive* and *probable* cases but we never count a *probable* case as a *positive*. Only people who test positive are counted in our positives. Since November 6th, people who test positive using a rapid result test, have been classified as "probable" by the state of Illinois, but these are still positive test results.

Aren't the numbers based on tracing? Some people who appear to be "in-the-know" say the tracing process is a mess. Everyone's heard of at least one person who tested positive and didn't hear from the county for days.

The numbers are not based on tracing. The numbers are based on reporting from the labs processing the tests. This process has been quite accurate and secure.

The tracing system depends on matching the positive test with a name and reporting this information from the state to the county. In the beginning this process was a little chaotic, but the numbers were relatively small and the process soon caught up. It is, however, much faster for the test administrator to tell the person tested than for the test administrator to tell the state and the state to tell the county and the county to begin the contact tracing process. As a result, many people know the result of their test before hearing from the contract tracers and, in this day of instant communication, many people who are positive for COVID, quickly inform all their friends and contacts before the County even receives the information from the state. This gives the impression that the county tracing staff is slow to make contacts, but the truth is the county tracers can't possibly match the speed of a person with a positive test who broadcasts the information on social media.

Then, there are those people who do not share the information with any of their contacts and refuse to cooperate with the contact tracers in any way. This makes contact tracing almost impossible.

Finally, large numbers of cases can simply overwhelm the system. When the rate of new cases was exploding exponentially, even our staff of 41 tracers could not keep up.

But the tracing has no connection to the state's calculation of the number of people testing positive. That number is calculated before any tracing begins.

Science, science, science. Didn't doctors once use leeches to cure disease or drain our blood to reduce a fever? And isn't it true that the doctors have already been wrong in some of their predictions about COVID-19?

There is no doubt that we know more about Covid now than we did ten months ago. And there is no doubt that the history of science is replete with changes in understanding based on testing and observation. Yes, medical science has made misjudgments in the fight against COVID. But the basic metrics are sound, proven from years of experience around the world with many infectious diseases. A community with a positivity rate exceeding 20% of its population or with ICU availability below 20% is in serious trouble.

Well, the hospitals say everything is fine. They're functioning more or less as normal. So why does the our Public Health Department think they're so smart that we have to take draconian measures?

The hospitals have to walk a fine line between re-assuring and alarming the community. The community needs to know that basic health services are available and accessible at the hospitals so that everyone who needs treatment will seek treatment. Otherwise many more lives will be lost, needlessly. As a community we should not mistake the hospitals affirmations that they are ready, willing, and able to help us for a message that they are not concerned about the spread of COVID in our community. Currently, 25% of our available hospital beds are devoted to COVID patients and our ICUs are operating at capacity. The hospitals are concerned. They are very concerned.

Ok, maybe we have some reasons to be more strict in following the Governor's Executive Orders, but why are we picking on the bars and restaurants and destroying these businesses that add so much to our community?

Everyone agrees that bars and restaurants are vital to the economy and character of our community. No one wants to harm the entrepreneurs and workers who provide this important function. We love these places because they offer us the opportunity to enjoy good food and drink in the company of friends and family. But the very nature of this business model puts our bars and restaurants near the epicenter for spreading the disease. Many people come together, from diverse homes and corners of the community, sit in close proximity, talk with each other (the louder one talks the more virus spreads), and actively engage in putting food and utensils in their mouths. This is a near perfect environment for spreading an airborne virus.

In March we knew very little about the spread of COVID-19, but by this point, numerous studies point to bars and restaurants as a significant location of spread. For example, a study of cell phone data from the state of Washington indicates that the rate of spread of the virus doubled after bars and restaurants re-opened; CDC data indicates that people who test positive for the virus are twice as likely to have visited a bar or restaurant 48 hours before symptoms began; an article in the publication *Nature* cites the high traffic and long exposure times characteristic of dining and drinking as ideal for the spread of the virus.

How is this different from a grocery store or a hardware store or any other business?

Simply put, no other business model requires everyone in close proximity to take their mask off. And no other business model so easily facilitates the close proximity of people from different households (with masks off) for a period of an hour or longer.

Although one local car dealer advertises that it has an employee who eats with his mask on, the simple fact is that you can't eat or drink without removing your mask.

But people want to get together. If you close all the bars and restaurants people will just get together on their own.

It is undoubtedly true that some people will ignore the advice to social distance, wear masks, wash their hands often and avoid at-risk gatherings. We can do nothing to stop this, and if we could, most Americans would view the cost to our personal liberties as too great to endure. To the extent this happens, more of us will get sick, the virus will spread more widely, the pandemic will last longer and more of us will die.

Right now, house parties are a very bad idea.

But consider for a moment the math of a restaurant operation from the point of view of epidemiology. Consider a moderate size restaurant with ten tables seating four people at each. That's 40 people at a single seating. If the restaurant turns those tables three times in a period from noon to 10pm, that creates 120 possible exposures to the virus in a single day. There are some 1,200 bars and restaurants in Sangamon County. Multiply those 120 estimated exposures by the 1,200 bars and restaurants in Sangamon County and you get 144,000 possible exposures in a single day. Cut the traffic estimate by two thirds and the math still suggests more than 40,000 exposures in a single day. The number of contacts at a moderately successful bar would be even higher. Of course, house-parties could spread the virus, but it would require a great many people irresponsibly throwing very large house-parties to generate the kind of efficient exposure model created by the bars and restaurants we love.

But do we have to put all these good people out of business and send their employees to the unemployment lines?

We hope not.

Based on the information we have, the safest way for our bars and restaurants to operate is if they operate under conditions similar to the out-of-doors. (How do we know that is relatively safe? Think about our experience this summer when most service was outdoors and the virus spread was contained.) That is extremely difficult during a central Illinois winter.

One of COVID's most effective methods of spreading is via "aerosols," these are the tiny, light droplets people emit when they breath. These droplets can linger in the air and the concentration can build up in enclosed, poorly ventilated spaces. There is less of a risk in outdoor settings because of the sheer volume of air in circulation.

We have tried to craft rules that allow our bars and restaurants to operate using tents or opening doors and windows that replicate the airflow of the out-of-doors. The owners have done a fantastic job of trying to craft creative solutions to meet the requirements. But it's just very difficult in winter.

In part the answer to this question rests with all of us. If we make an extra effort to patronize these bars and restaurants, dine in where feasible; order carryout as often as possible; support these important businesses in every way that we can; perhaps we can help them through.

I've heard that the County's enforcement of these rules and regulations is very inconsistent, that the rules keep changing and its very haphazard.

In the beginning of any situation when the rules change, there is always a period of adjustment. It is true that the County did change the rules designed to create the equivalent of outdoor airflow from the regulations referred to in the Governor's Order. But we made these changes, after careful consultation with our medical advisors, to make it easier for the bars and restaurants to meet the requirements and still provide a safe environment with sufficient airflow.

The complaints about inconsistency in application of the rules are truly ironic. They are a direct result of our inspectors trying to work with each bar and restaurant owner to find a solution based on the unique configuration of each facility. The solution that might work at one facility will be different at another facility, but the general rule is the same, if two walls in a facility can be essentially 50% open we are achieving an air flow similar to the out-of-doors.

Can't anything else be done to help these good people?

Well, we're trying. At the outset of this we took a look at directly supporting these operations. But with 1,200 bars and restaurants, support at that rate of only \$1000 per week (a completely inadequate amount) would exceed \$5,000,000 per month. County taxpayers have no ability to provide that level of support. The City of Springfield received a grant from the federal government, \$500,000 of which they have dedicated to help any business with a loan up to an amount of \$5000. But recognize that allocating the full amount of \$5000 to each applicant, this fund could only help 100 businesses. We will cut licensing fees in half and finance an advertising campaign to support these good businesses. But these are small consolations for the enormity of the problems our bars and restaurants face.

In March/April the bars and restaurants faced similar challenges, but at that time, the federal government offered a "PPP" program that subsidized operating costs in recognition of the extraordinary burden the COVID regulations required, but up to this point, our betters in Washington have not been able to re-authorize this program. County government, through the Regional Leadership Conference (composed of all the municipalities in the county) has written to our state and federal representatives imploring them to help.

At least one lawyer says that what the county is doing is illegal or unconstitutional.

It is important to explain that the Governor's Executive Orders don't provide any enforcement mechanism for what he is ordering everyone to do. So, the Public Health Department in each community and the municipalities are left to figure out what authority they have to enforce the guidelines set down by the state. Our authority is very strictly limited by state law. We have been careful, working with States Attorney Dan Wright, to stay within the limits of state law. We know that at least one lawyer disagrees. So far, every court ruling has agreed with us.

While we might wish that there were no legal objections to the steps we are taking to fight COVID, we acknowledge that the attorney making objections has every right to do so, and, in fact, our system is stronger because he is questioning and challenging our actions. Government is never more dangerous than when it is convinced it is acting on a holy mission. We have tried to act cautiously and respect our previous freedoms.

How can we get out from under these stricter mitigations and how can we get our bars and restaurants back open inside?

The honest answer is we don't know, yet. Our medical advisors and our health professionals are working to develop a plan. It will be driven by the numbers and the science. There is some responsible science for limited indoor operation. You might recall that although the Governor's Order called for no indoor service, Sangamon County initially allowed limited indoor service as a phased implementation of the Governor's order. But when the positive numbers began exploding exponentially we quickly surpassed the metrics our advisors set for reasonably safe indoor dining and we were forced to go to full mitigation.

Recently our numbers have been dropping very fast. This should lead to a revised mitigation plan. But what we don't know, and what everyone is worried about is whether the gatherings over Thanksgiving and, soon, Christmas, will, again, explode our numbers.

This is certain: Every person who attends a house party with multiple families, every Sangmon resident who decides to dine or drink in a neighboring county is demonstrating that they don't really care about the restaurant and bar owners in our community. They are deciding to help the virus spread and keep our numbers up.

Are you enforcing these more strict rules because the Governor has threatened to cut off funding for the community.

The Governor has never threatened to cut off funding to the community either publicly or in private conversations. Every step we have taken has been based on the advice of our medical advisors and our public health professionals.

Why is the county stopping video gaming?

The County has absolutely nothing to do with video gaming. No person associated with the county has any position or influence on any aspect of video gaming. Our medical advisors have not expressed any concern with video gaming that is socially distanced and conducted while wearing a mask with the machines disinfected after each use. Video gaming is entirely regulated by the state.

What is the County doing to enforce social distancing rules at other places of business?

Our medical advisors strongly endorsed the social distancing rules for businesses contained in the Governor's Executive Order. These mitigations are an added burden on our businesses but they have successfully lowered transmission rates.

The County has limited legal authority and limited police resources. We have partnered with the municipalities, including the City of Springfield, to enforce these mitigations because municipalities have additional powers not granted to Counties. The Sheriff's department will exercise what authority it can in the unincorporated areas of the county but enforcement in Springfield and surrounding towns lies primarily with those municipalities. Our general observation is that most businesses have done a tremendous job complying with these regulations.

We understand that these mitigations are not as threatening to the fundamentals of the business as the regulations imposed on our bars and restaurants. This is why the county's current efforts are focused on achieving metrics and a methodology for our bars and restaurants to expand indoor service.

When will this end?

We don't know, but with improved therapies and with effective vaccines on the way, our sense is that we are closer to the end of this pandemic than to the beginning. The last ten months have been difficult, numbingly difficult for the millions who have lost people they love. Our challenge from the virus is different, but there are still those among us who remember multiple *years* of fuel and food rationing, loved ones deployed across the globe, and hard news from distant battlefields. That generation endured bitter sacrifices to secure a better future. What will the future, say of us?