

# The Kansas Unified Testing Strategy

Using diagnostic, screening, and surveillance COVID-19 testing to keep Kansans healthy and safely accelerate the economy



## Diagnostic

### Symptomatic

Provide sufficient testing to identify the virus and protect symptomatic Kansans

### Outbreak

Detect clusters early, and quickly deploy testing when an outbreak is identified



## Screening

Provide on-going individual testing for critical populations before they become symptomatic

Understand the prevalence of COVID-19 within our communities, and detect clusters early

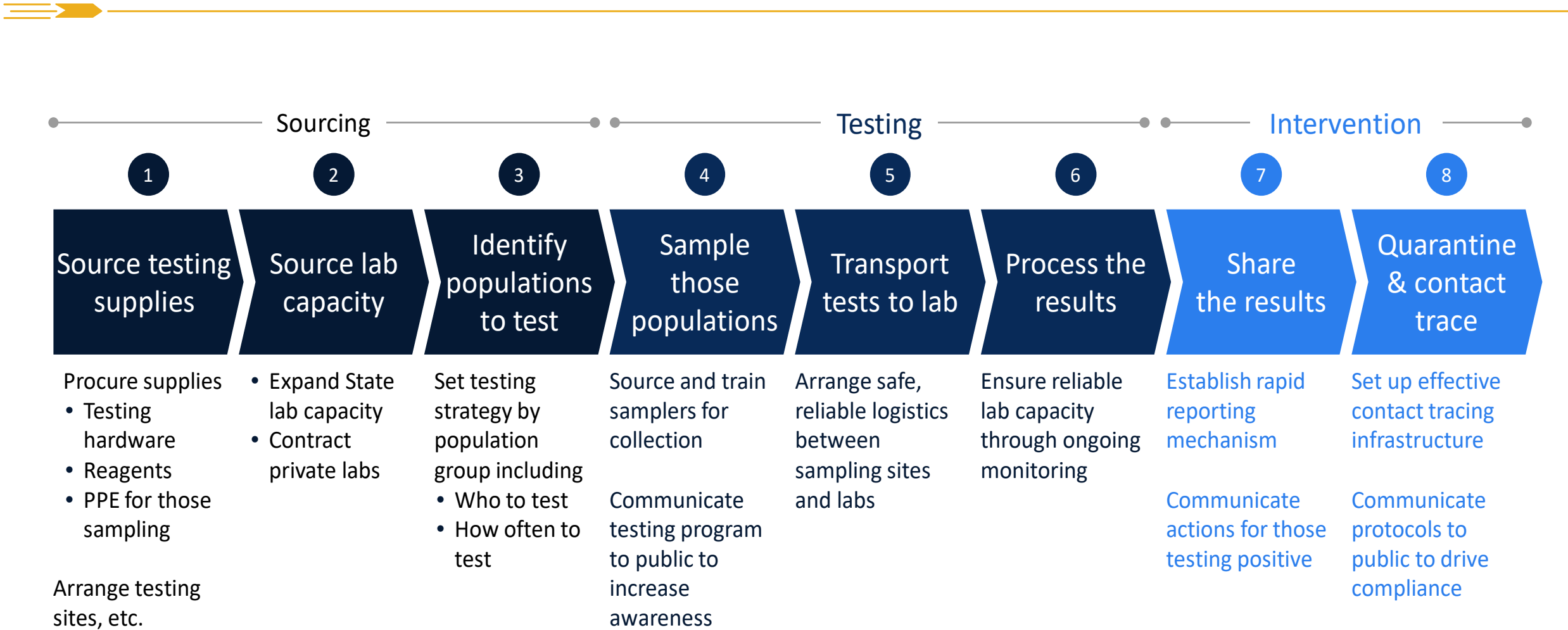


## Surveillance

Provide on-going group testing for specific populations within Kansas

Understand the prevalence of COVID-19 within our communities, and detect clusters early

# Kansas Unified Testing Strategy | Steps Involved in COVID-19 Testing



# Kansas Unified Testing Strategy | Goal to test all symptomatic individuals, rapidly respond to potential outbreaks, and set up early warning system for critical populations



## Diagnostic (Those With Symptoms)

### Symptomatic

Diagnostic testing for any Kansan that displays any symptom related to COVID-19

### Outbreak

Outbreak procedures:

- Contact tracing & contact testing for those exposed to confirmed cases
- Response coordinated with outbreak point person at each facility with over 50 people (default to facility manager as outbreak point person)

Outbreak procedures conducted for all populations with confirmed COVID-19 cases

- Outbreak risks: Meatpacking, contact sports (K-12)

Symptomatic and outbreak testing will be conducted using the following technologies:

- PCR testing collected via: Saliva testing
- PCR testing collected via: Nasal or NP swab testing
  - More accurate for individual diagnosis
  - When testing symptomatic, contacts, and full outbreaks, accuracy is primarily important



## Screening (High Risk Populations)

### Screening

Regular testing of individuals who do not have symptoms and are not close contacts of known cases

Screening testing across key populations:

- Nursing homes & long-term care (LTC) facilities
- Education (K-12)
- Correctional facilities
- High risk populations
  - Tribal nations
  - Communities of color
  - Dense populations (>50K populations)
- First responders

Screening testing will be conducted using the following technologies:

- Antigen testing collected via: Nasal swab
  - Faster results, but less accurate than PCR testing
- PCR testing collected via: Saliva
- PCR testing collected via: Nasal or NP testing
  - More accurate, and will be used to confirm positive cases from antigen testing



## Surveillance (Medium Risk Populations)

### Surveillance

Pooled testing of groups of people who do not have symptoms and are not close contacts of known cases

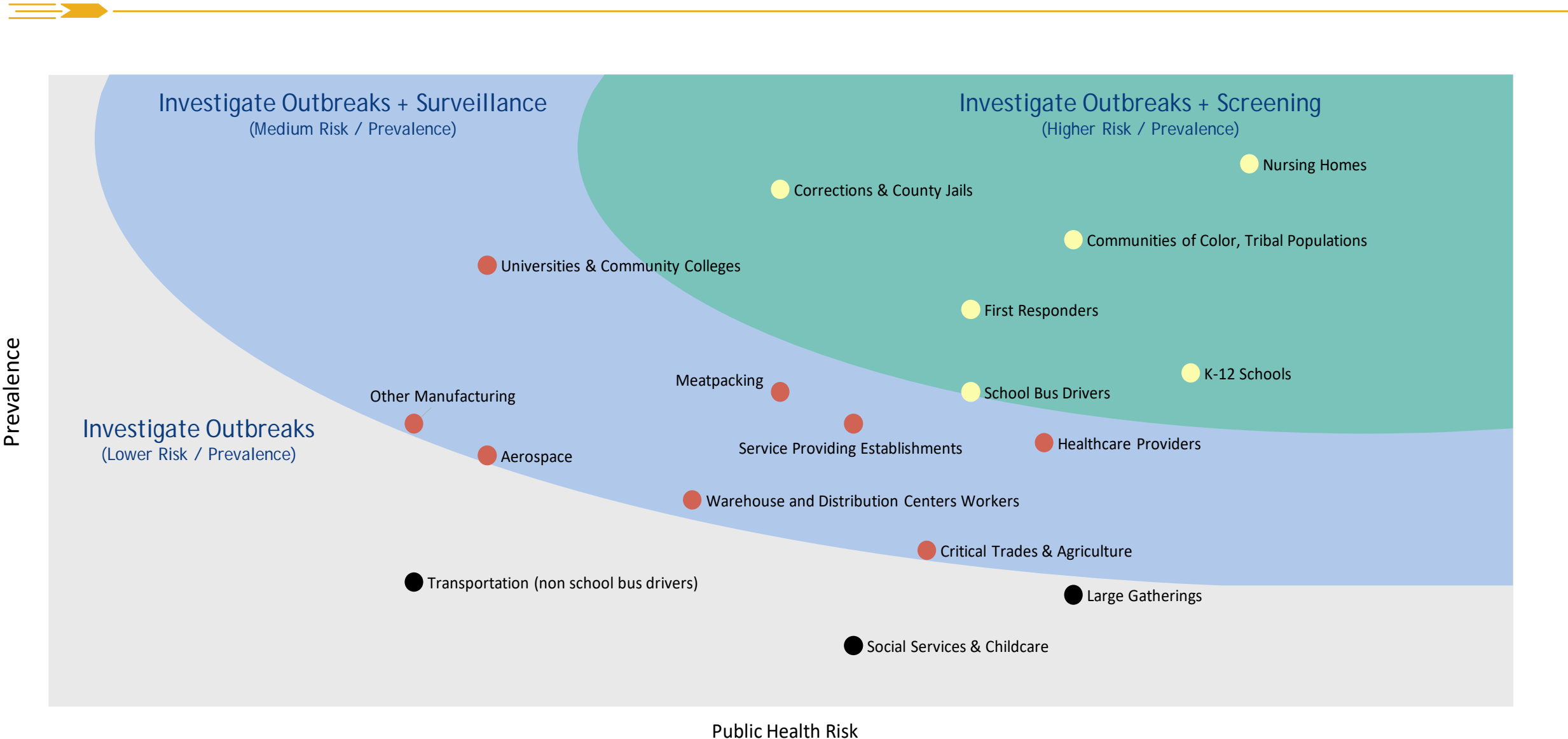
Surveillance testing across key populations:

- Meatpacking Industry
- Higher education institutions
- Service industry workers
- Healthcare providers
- Manufacturing

Surveillance testing will be conducted using the following technologies:

- Wastewater testing
- Pooled testing (saliva or Nasal/NP-based testing)
  - Lower costs and greater ease of sampling collection
  - Specific positive cases will be identified using PCR testing on individuals in population

# Kansas Unified Testing Strategy | Public Health response tools to be used differently across priority populations based on public health risk & virus prevalence



Note: Public Health Risk defined as vulnerability of population & widespread transmission risk

Source: KUIMC, KDHE, OSHA

# Kansas Unified Testing Strategy | How can Kansas strengthen data-driven decision making for timely, informed decisions to beat COVID-19

## *How can Kansas strengthen data driven decision making?*

### **Fill data gaps currently in the system**

- More collaboration with local health departments
- Increase frequency of data collection from partner organizations
- Less reliance on national data & trends, more reliance on Kansas specific data & trends
- Apply multiple cuts to the data for a more holistic view

## *What data is needed to drive decision making?*

Positivity rate

Infection rate

Death rate

Hospitalization rate

Data on timing on test scheduling

Testing result turnaround

Contact tracing completion and turnaround

## *How can Kansas use data to make decisions?*

### **Shorten end to end turnaround testing time**

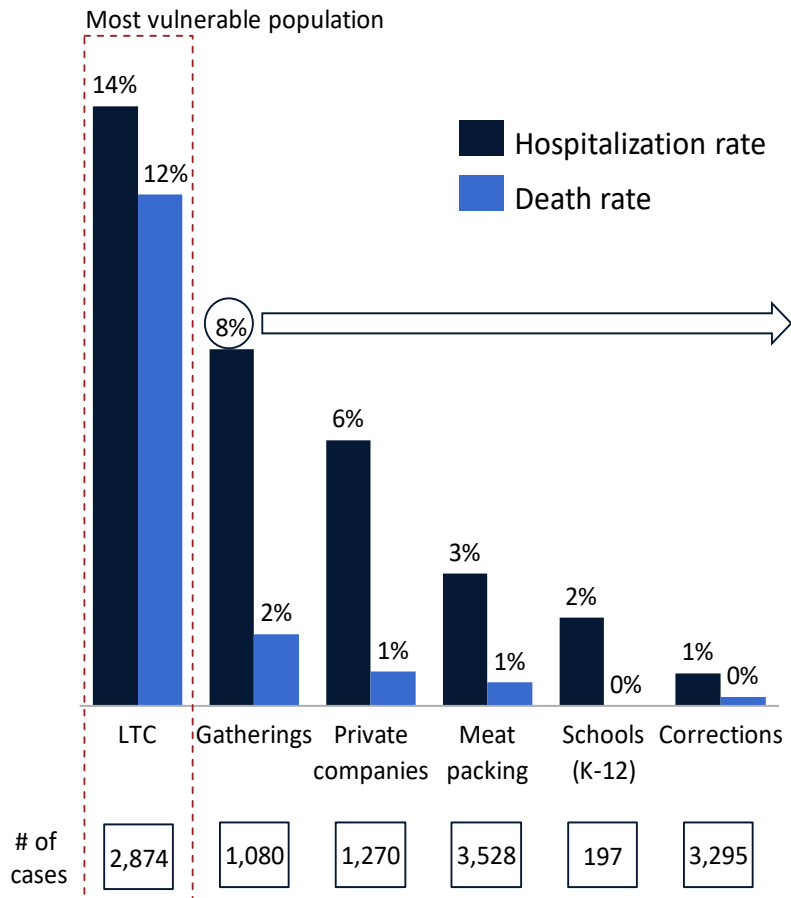
- Identify bottlenecks in testing process
- Determine which bottlenecks can be improved

### **Identify most vulnerable populations, over time**

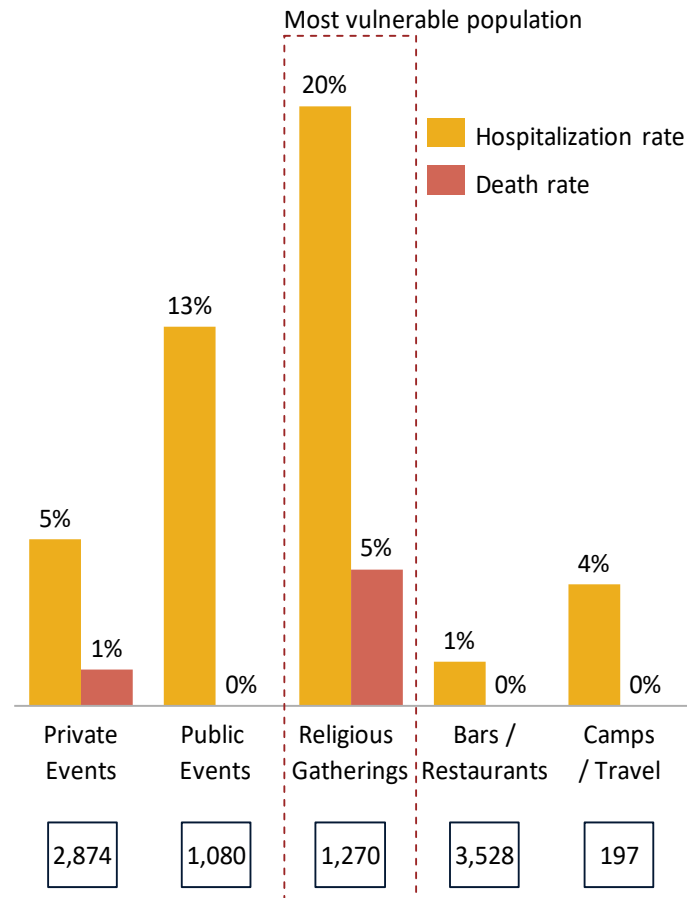
- Use positive, hospitalization, and death rates and trends to identify most vulnerable populations, over time
- Understand how COVID-19 is moving across populations

# Kansas Unified Testing Strategy | Specific vulnerable populations have been disproportionately affected by COVID-19

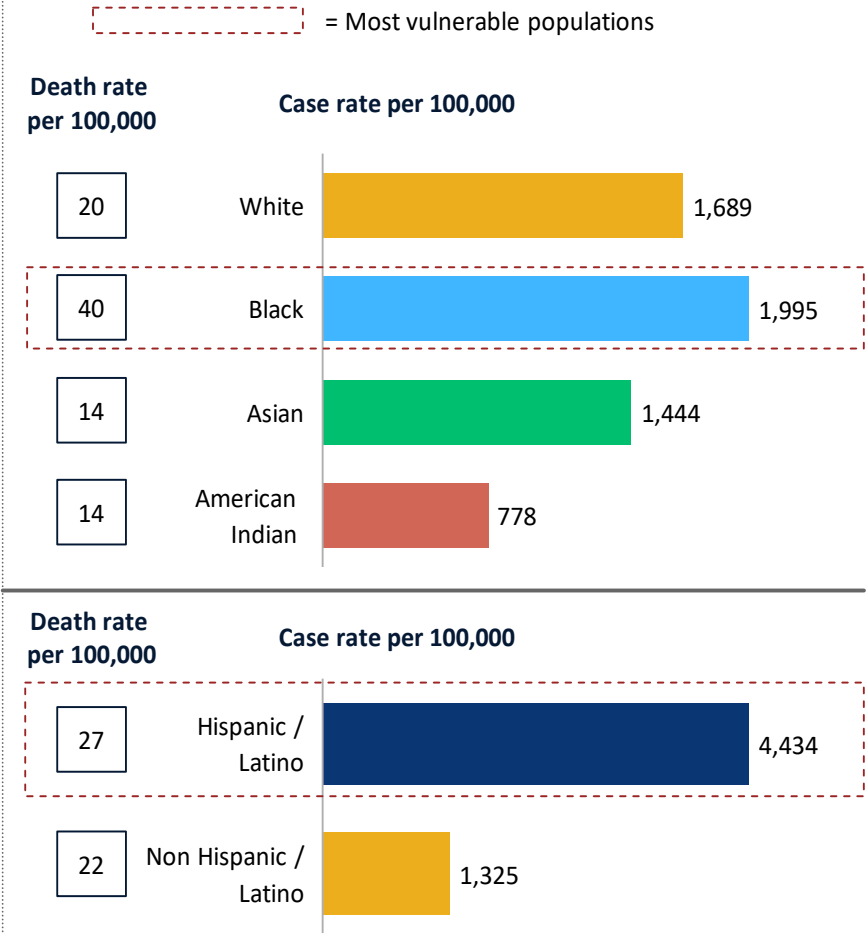
## Hospitalization and death rates by population (as a % of cases)<sup>1</sup>



## Hospitalization and death rates by gatherings (as a % of cases)<sup>1</sup>



## Case and death rates by race and ethnicity<sup>2</sup>



1. As of September 30, 2020; 2. As of October 6, 2020

Source: [KDHEKS](#), [KUMC](#)

# Kansas Unified Testing Strategy | Testing type and estimated volumes by target populations (I of II)

Target Population	Testing Frequency	Testing Type	Estimated Test Volumes per Month	Potential Type of Tests
Symptomatic	As needed	Diagnostic	50-70K Tests	<ul style="list-style-type: none"> <li>• PCR Saliva</li> <li>• PCR Nasal / NP</li> </ul>
Close Contacts	As needed	Diagnostic	50-70K Tests	<ul style="list-style-type: none"> <li>• PCR Saliva</li> <li>• PCR Nasal / NP</li> </ul>
Nursing Homes	CMS guidelines (e.g., 2 times per week in red zones)	Screening	400-500K Tests	<ul style="list-style-type: none"> <li>• Antigen</li> <li>• PCR Nasal / NP</li> </ul>
K-12 Schools pilot (14 districts)	Weekly	Screening	3-7K Tests	<ul style="list-style-type: none"> <li>• Antigen</li> </ul>
Meatpacking & Food Processing	Monthly	Surveillance	3-7K Tests	<ul style="list-style-type: none"> <li>• Pooled PCR Saliva</li> <li>• Pooled PCR Nasal</li> <li>• Wastewater</li> </ul>
Corrections & County Jails	Bi-Weekly	Screening	10-20K Tests	<ul style="list-style-type: none"> <li>• PCR Saliva</li> <li>• PCR Nasal / NP</li> <li>• Wastewater</li> </ul>
Healthcare Providers	Monthly	Surveillance	10-20K Tests	<ul style="list-style-type: none"> <li>• Pooled PCR Saliva</li> <li>• Pooled PCR Nasal</li> </ul>

Note: Time period from November 1 - December 31, 2020, K-12 schools & CMS Nursing Homes also receiving Abbott antigen testing, supplied by Fed. Govt, State Corrections also supported by State Lab

# Kansas Unified Testing Strategy | Testing type and estimated volumes by target populations (II of II)

Target Population	Testing Frequency	Testing Type	Estimated Test Volumes per Month	Potential Type of Tests
First Responders	Weekly	Screening	40-50K Tests	<ul style="list-style-type: none"> <li>• PCR Saliva</li> <li>• PCR Nasal / NP</li> </ul>
Communities of Color & Tribal Populations	Weekly	Screening	90-120K Tests	<ul style="list-style-type: none"> <li>• PCR Saliva</li> <li>• PCR Nasal / NP</li> <li>• Wastewater</li> </ul>
Colleges & Universities	Weekly	Screening	80-100K Tests	<ul style="list-style-type: none"> <li>• PCR Saliva</li> <li>• PCR Nasal / NP</li> <li>• Wastewater</li> </ul>
Service Providing Establishments	Monthly	Surveillance	70-90K Tests	<ul style="list-style-type: none"> <li>• Pooled PCR Saliva</li> <li>• Pooled PCR Nasal</li> </ul>
Critical Trades & Agriculture	Monthly	Surveillance	30-40K Tests	<ul style="list-style-type: none"> <li>• Pooled PCR Saliva</li> <li>• Pooled PCR Nasal</li> </ul>