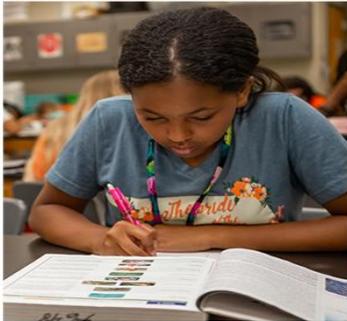




# 2020-2021



## BOARD OF EDUCATION SPECIAL MEETING

November 19, 2020

# COVID-19 Health Data Updates

Board of Education Meeting

November 19, 2020

**DRAFT**

# Refresher: our Health Data Monitoring Process

- The three categories of metrics will be monitored weekly
- If a foundational health care metric hits threshold, or we detect an early warning from one of our indicators, evaluation and discussion will be triggered.
  - Data is compiled and initially reviewed on Fridays.
  - Evaluation and discussions occur on Monday mornings.
  - Daily monitoring begins when metrics are close to thresholds
- Evaluations address both specific school sites and the entire district.



**Four types of potential actions** can occur based on our assessment of the data:

1. No changes necessary at this time.
2. Additional monitoring of all data points coupled with increased, targeted rapid COVID testing.
3. Shift from in-person to full distance learning at a specific classroom, school, or multiple schools.
4. Change the default mode of instruction for some or all grade levels through a formal recommendation to the Board of Education.

# Refresher: Foundational & Contextual Data

## Early Warning Indicators at TPS Schools

- These data will help us to monitor conditions that are more localized and specific to our context. These data will help us to be more sensitive to conditions within schools to know if cases are higher or lower than overall county averages. These metrics are:
  - Tulsa Public Schools rapid testing results
  - New case rates for team members and students (TPS contact tracing)

## Foundational School System Metrics

- These internal data measure our ability to appropriately respond to early warning indicators and enact the necessary safety precautions at our schools. These metrics are:
  - Availability of necessary PPE
  - Rates of quarantine
  - Staffing capacity

## Foundational Health Care Metrics

- These core metrics will help us understand overall rates of community spread. These data will help us to assess overall risk and changes in our greater community that may necessitate a change in our response. The core metrics are:
  - 7-day rolling average of new cases in Tulsa Public Schools boundary (*calculated from public data*).
  - 7-day rolling average of new cases in Tulsa County

# High level assessment from 11/19 health data review

## Early Warning Indicators

- Over the last week, our contact tracing numbers have doubled; we believe this is relative to the increase in people in our buildings.

### UPDATE:

- Out of a total of 624 PK-3 classrooms district-wide, 22 (3.5% of classrooms, and 6 in one school) were shifted to distance for this week;
- 5 athletic teams (representing two schools) are in quarantine.
- Our schools have strong practices and protocols in place; based on our current data, **COVID-19 exposures are happening outside of our schools.**
  - This trend is consistent with the experiences of school districts in our area and beyond.

# High level assessment from 11/19 health data review

*continued*

WORKING DRAFT

## School System Metrics

- We are maintaining adequate levels of personal protective equipment across the system.
- Due to team members on leave or in quarantine/isolation, staffing levels are stretched but not yet critical.
  - Our transportation and custodial teams are at capacity; our child nutrition team has shifted secondary staff to support meal service at elementary;
  - Our health services team continues to experience shortages due to leaves and quarantines, the Student and Family Support Services team is providing coverage at impacted school sites;
  - We continue to face a shortage of substitute teachers; early childhood teacher assistants are helping to cover classes.
  - The Talent Management team continues to process leave of absence requests that represent less than 1% of staff at this moment in time.

## UPDATE:

- One elementary school shifted to distance learning. Due to a combination of staffing challenges and external COVID-19 close contacts we have inadequate capacity to support in-person learning until 12/2.

# High level assessment from 11/19 health data review

*continued*

## Health Care Metrics

- The 7-day rolling average for Tulsa County has reached the 50+ threshold.
- While Tulsa Country rates are increasing, the rates in our district boundary and for students ages 5-17 are also increasing but continue to be below the county average.

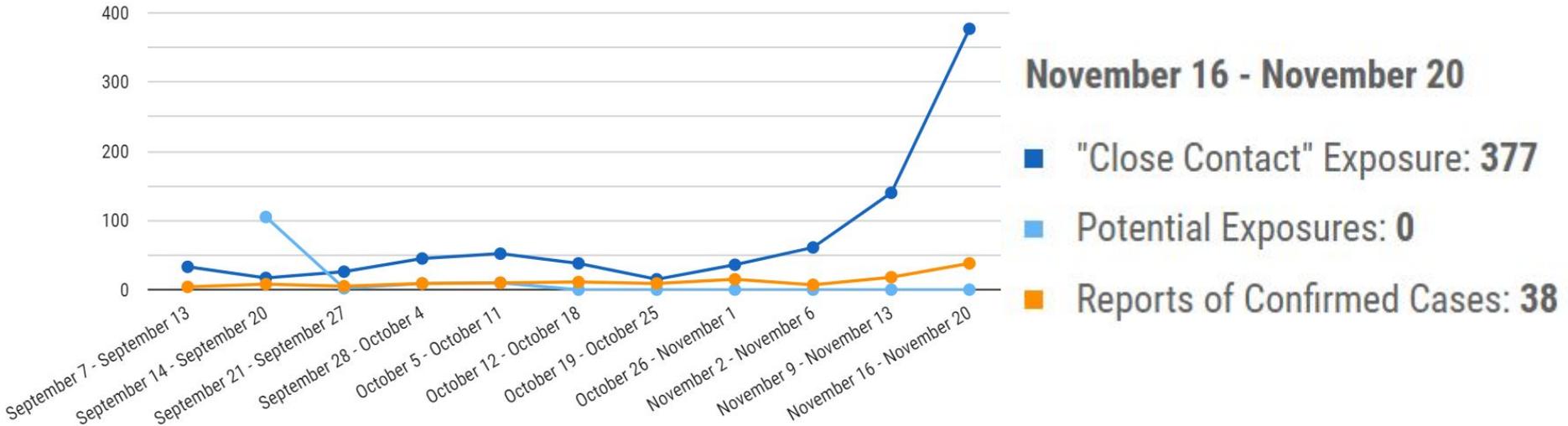
## Other Considerations

- Without additional safety measures *outside of schools* **and** if nothing changes in surrounding areas, it is likely that our rates will increase.

# Early Warning Indicators at TPS Schools - TREND

UPDATED

Number of **potential exposures**, **close contact exposures**, and **confirmed cases** found by Tulsa Public Schools over time



\* Report cover cases from the previous Friday through the close of business on Thursday.

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# Early Warning Indicators at TPS Schools

Key Covid response actions taken during first week (as of 11/19):

Grade Level	Classrooms in Quarantine	Total number of classrooms
PK	12	93
K	9	128
1	0	133
2	0	137
3	1	133
<b>Subtotal</b>	<b>22</b>	<b>624</b>

- 12 classrooms moved into quarantine due to a **student testing positive from an outside exposure**
- 10 classrooms moved into quarantine due to a **positive or symptomatic teacher/staff**

- 2 additional classrooms that have been in-person all year
- 5 athletic teams at 2 schools were quarantined

In person students and staff numbers for reference:

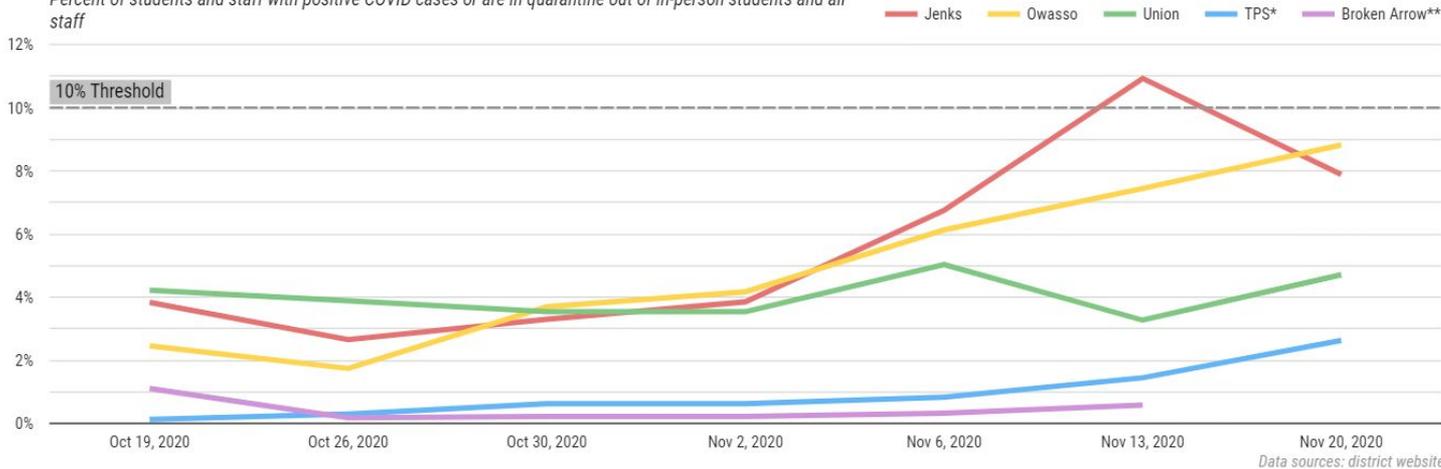
Week of Return	Students	Staff	Total
Week of 11/9-13 with PreK-K back	5,073	5,864	10,937
Week of 11/16-20 with PreK-3 back	9,924	5,864	15,788
Week of 11/30 4-6 back (elem only):	14,287	5,864	20,151

# Early Warning Indicators at TPS Schools - TREND

**UPDATED**

## Local District Comparisons Over Time

Percent of students and staff with positive COVID cases or are in quarantine out of in-person students and all staff



**Nov 20, 2020**

- Jenks: **7.88%**
- Owasso: **8.82%**
- Union: **4.71%**
- TPS\*: **2.63%**

\*data available as of 11/19

**WORKING DRAFT**

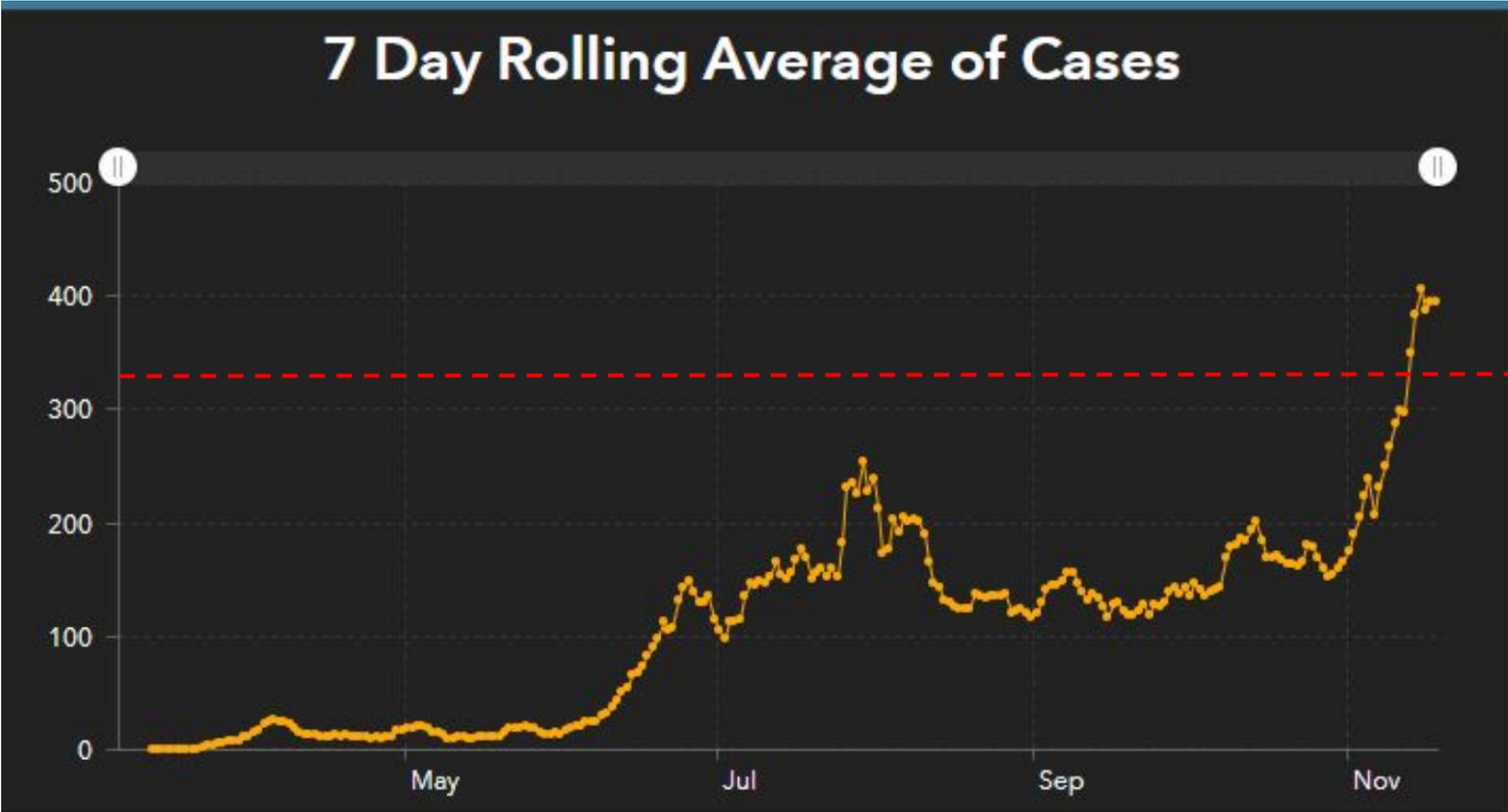
\*TPS in-person students include ESS students and student athletes

\*\*Broken Arrow Public Schools only reports number of confirmed cases and does not include quarantined students. The week of November 16-20, Broken Arrow did not report any data

Data sources: district websites

# Foundational Health Care Metrics - 7 Day Rolling Average

UPDATED



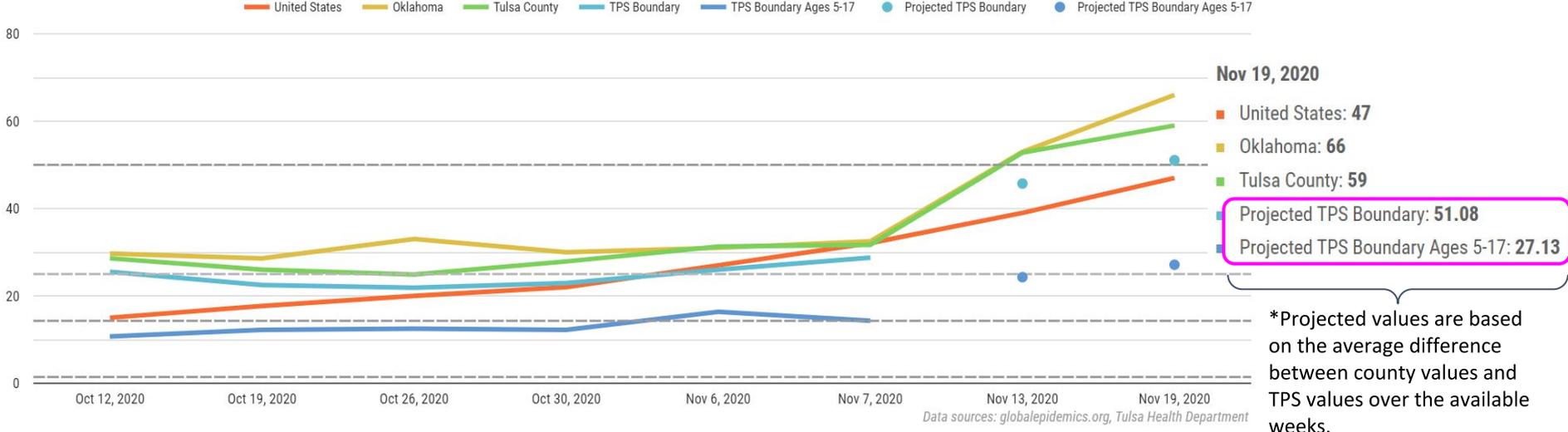
Red zone: >325

Data as of 11/19.

# Foundational Health Care Metrics

**UPDATED**

## 7-day Rolling Average New Cases per 100,000



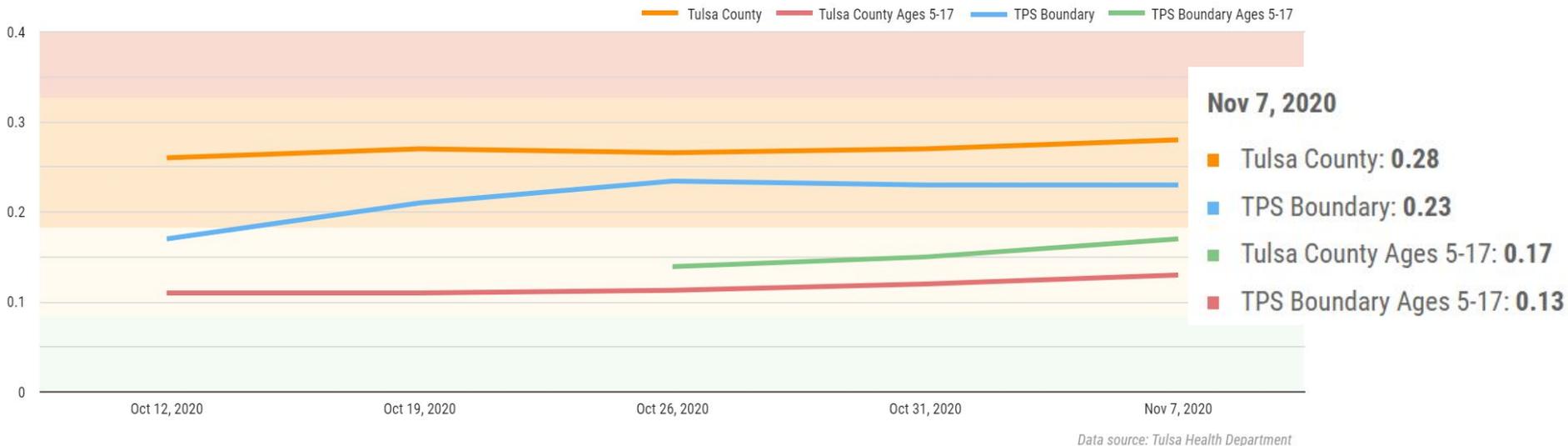
\*Projected values are based on the average difference between county values and TPS values over the available weeks.

**WORKING DRAFT**

# Foundational Health Care Metrics

No new data available

## 14-day Rolling Average Daily Active Case Rate per 1000



\* Report cover cases from the previous Friday through the close of business on Thursday. Friday October 30th will be reported next week.

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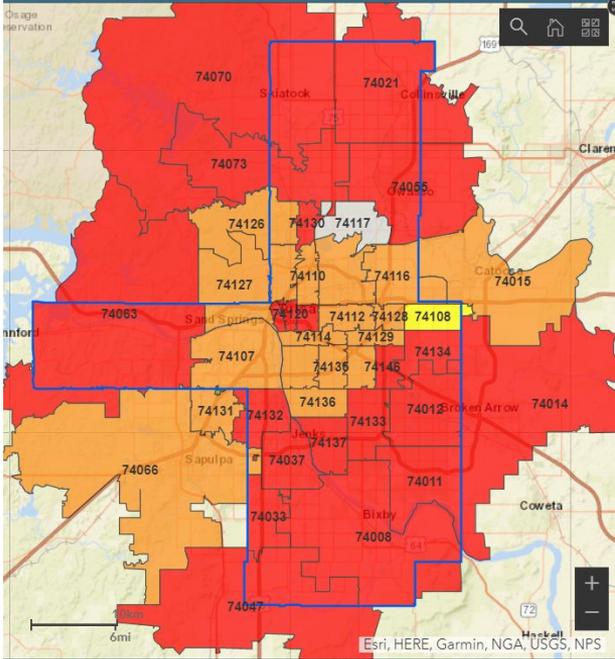
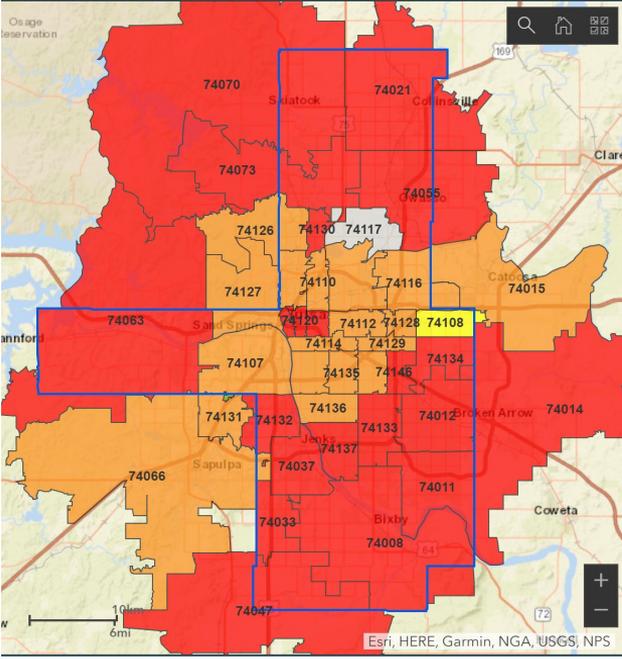
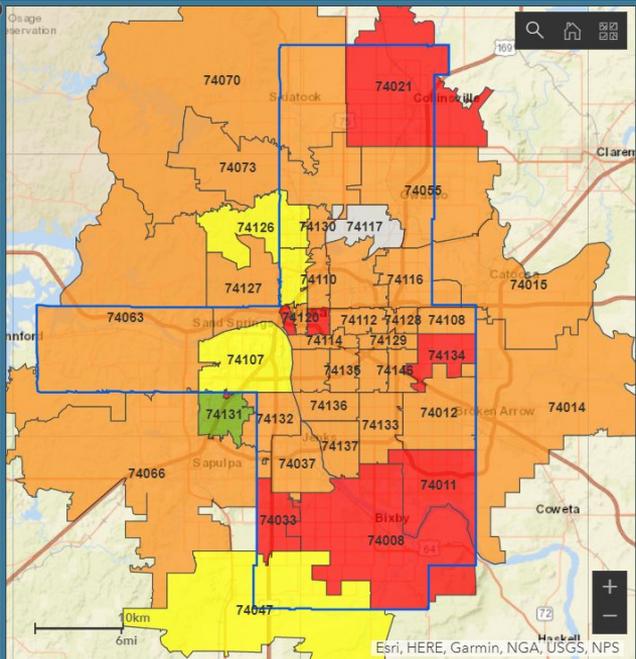
# Foundational Health Care Metrics Tulsa Health Dept Zip Code Map

No new data available

10/31/20

11/07/20

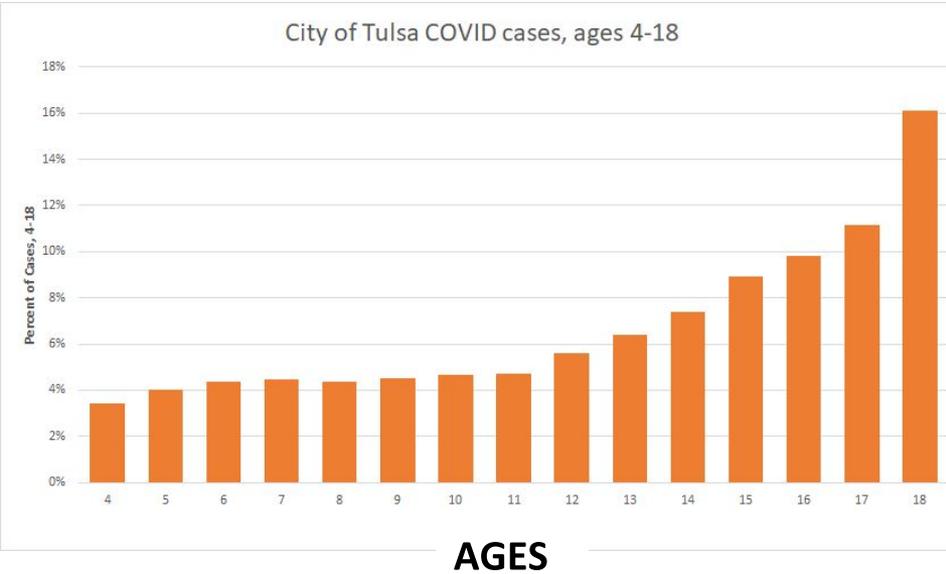
11/13/20



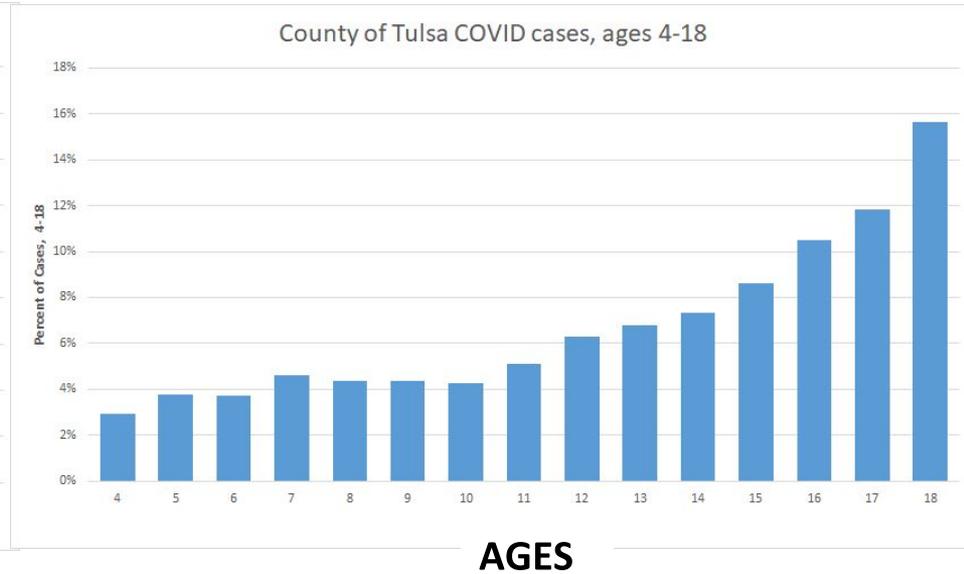
WORKING DRAFT

# Percent of COVID cases by age for 4-18 year olds

(data represents percent of cases of school age children since the start of Tulsa area schools from 8/9 through 11/14)



Total City of Tulsa Cases, ages 4-18: **2,167**



Total County of Tulsa Cases, ages 4-18: **3,552**

# Discussion

# Appendix

# Rapid Testing Pilot



Routine testing of individuals without symptoms or any history of exposure. The objective of screening is to reduce transmission by isolating potentially infected individuals faster to protect public health. Screening tests can also be used on random subsets of a population to determine prevalence.



- Follow Covid Exposure Protocol to isolate individual, do contact tracing and enter information in Covid Tracker.
- Process for referring team member/student who tests positive during screening.
  - Referral to PCR testing
  - Follow Covid Exposure Protocol
- Managing of data - capturing & reporting
  - Notifying designated people of positive cases
  - Share data for early indicator monitoring

Diagnosing symptomatic individuals and close contacts of those infected for clinical and public health decision-making.



- Referral process for individual who may be symptomatic to be evaluated and potentially tested.
- Connection to Covid Exposure Protocol to isolate individual, do contact tracing and enter information in Covid Tracker.
- Process for referring team member/student who tests positive during screening.
  - Referral to PCR testing
- Managing of data - capturing & reporting
  - Notifying designated people of positive cases
  - Share data for early indicator monitoring

# Implementation Update

- Phase 1: Screening testing for adults at elementary schools
  - Prioritize schools in zip codes with higher covid rate (per THD tool)
  - Testing done on Wednesdays at schools
  - Testing done by trained TPS nurses & health care assistants
  - Testing is voluntary
  - Sampling methodology and size designed with THD and limited by test availability
  - Testing expected to start on 11/18
  - Use of test for diagnostic will be driven by test availability and will have options through THD
- Phase 2: Screening testing for adults at elementary schools & adults and students at secondary schools
  - Testing expected to start on 1/04
  - Design under development
  - Testing voluntary and parents can opt out
  - Use of test for diagnostic will be driven by test availability and will have options through THD
- Results will be confidentially reported to employee directly and to district through THD

# Foundational Health Care Metrics - as of 11/17

Oklahoma: 66.0

Tulsa: 59.3



WORKING DRAFT

# Foundational Health Care Metrics

Metric	Value	Threshold Monitored	Description
Tulsa County 7-day rolling average new cases per 100,000 (total)	59.3	$< 1.43$ $< 14.29$ $> 25$ $\geq 50$	Source: globalepidemics.org, data as of 11/17 Oklahoma: 66 US: 47
TPS boundary 7-day rolling average new cases per 100,000 (total)	28.8*		Source: THD as of 11/07 (most recent available) Projected for 11/19: 51.1
TPS boundary 7-day rolling average new cases per 100,000 (5-17 age group)	14.3*		Source: THD as of 11/07 (most recent available) Projected for 11/19: 27.1
Tulsa County 14 day rolling average active case rate per 1000 (total)	0.28*	<b>Red</b> $\geq 0.34$ <b>Orange</b> $\geq 0.18 - 0.33$ <b>Yellow:</b> $.09 - .17$ <b>Green:</b> $\leq .08$	Source: THD as of 11/07 (most recent available)
Tulsa County 14 day rolling average active case rate per 1000 (5-17 age group)	0.17*		Source: THD as of 11/07 (most recent available)
TPS boundary 14 day rolling average active case rate per 1000 (total)	0.23*		Source: THD as of 11/07 (most recent available)
TPS boundary 14 day rolling average active case rate per 1000 (5-17 age group)	0.13*		Source: THD as of 11/07 (most recent available)

\* data available 11/20

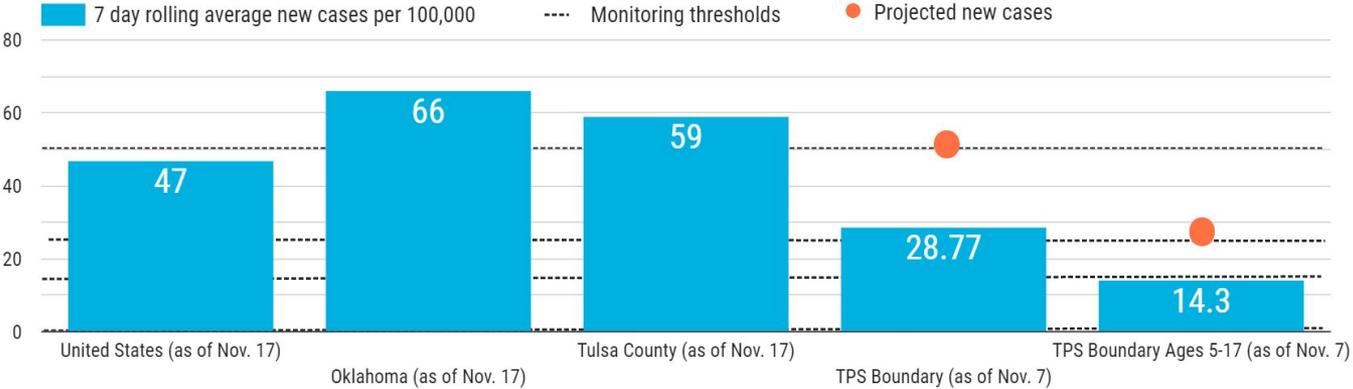
## Additional data:

State Percent Positivity: 12.7 (specimen), 14.7% (Johns Hopkins) for week of 11/6 - 11/12

\*All TPS boundary specific data relies on THD calculations. Data sources available update weekly and lag one week.

WORKING DRAFT

# Cases have spiked in Oklahoma and Tulsa county, and if our patterns hold, Tulsa Public School boundary data may increase proportionally



Data sources: [globalepidemics.org](http://globalepidemics.org), Tulsa Health Department

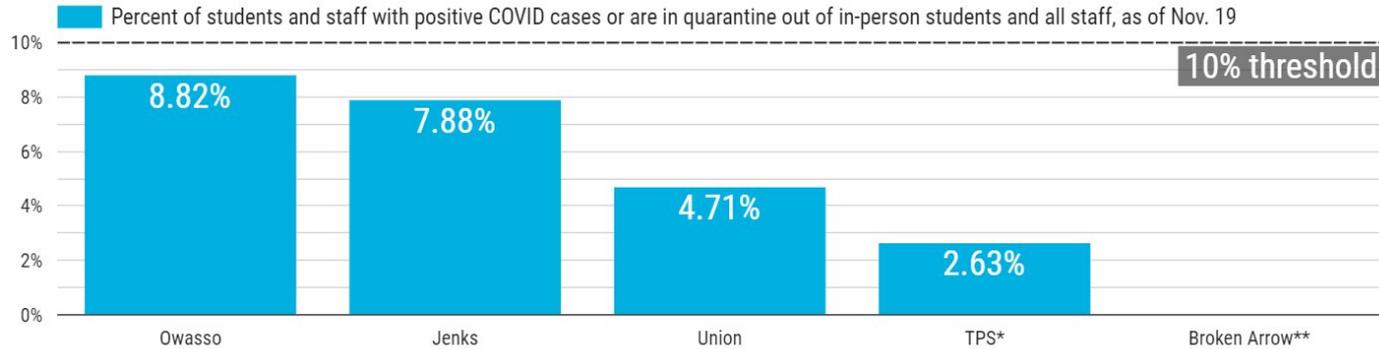
Nov 19, 2020

- United States: **47**
- Oklahoma: **66**
- Tulsa County: **59**
- Projected TPS Boundary: **51.08**
- Projected TPS Boundary Ages 5-17: **27.13**



\*Projected values are based on the average difference between county values and TPS values over the available weeks.

# Early Warning Indicators at TPS Schools - 11/19/20 Update



School District	Number of positive student cases/quarantined students	Total number of in-person students	Number of positive staff cases/quarantined staff	Total number of staff	Number of positive cases/quarantined individuals	Total number of in-person students and all staff	Percent of students and staff with positive COVID cases or are in quarantine out of in-person students and all staff, as of Nov. 19
Owasso	759	8143	60	1143	819	9286	8.82%
Jenks	845	10329	103	1697	948	12026	7.88%
Union	440	9809	113	1928	553	11737	4.71%
TPS*	328	9924	87	5864	415	15788	2.63%
Broken Arrow**	null	15522	null	2350	null	17872	null

\*TPS in-person students include ESS students and student athletes

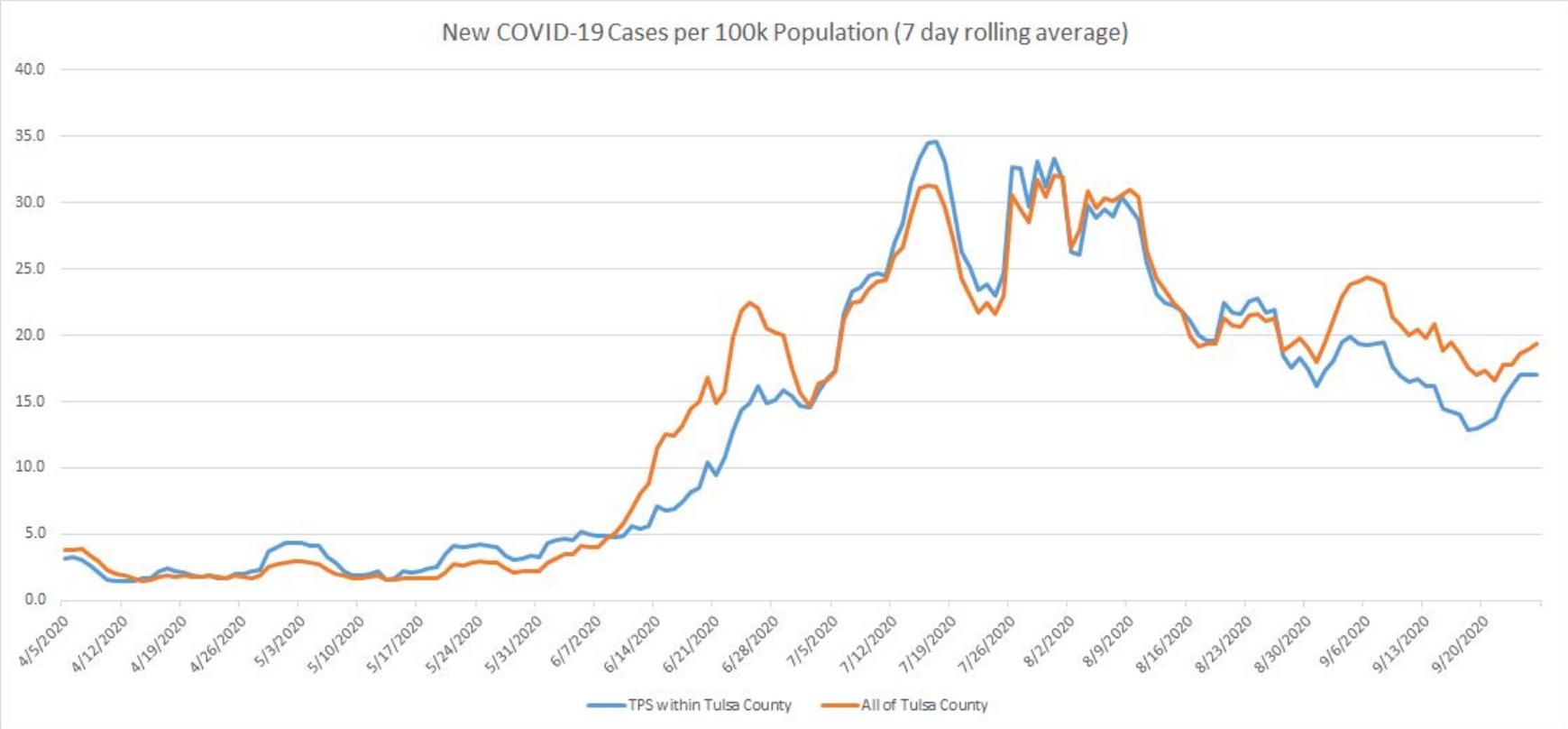
\*\*Broken Arrow Public Schools only reports number of confirmed cases and does not include quarantined students. The week of November 16-20, Broken Arrow did not report any data

Data source: District websites

# Average age of students by grade level

	age 3	age 4	age 5	age 6	age 7	age 8	age 9	age 10	age 11	age 12	age 13	age 14	age 15	total	grade	average age as of 16nov2020
PK 3 yr old	47	13												60	PK 3 yr old	3.7
PK		1,361	412											1773	PK	4.7
K			1,882	625	3									2510	K	5.7
1			3	1,840	709	20								2572	1	6.8
2				3	1,722	792	40							2557	2	7.8
3					2	1,588	826	56	1					2473	3	8.9
4						4	1,555	918	97	5				2579	4	9.9
5							5	1,393	920	134	4			2456	5	11.0
6								5	1,314	864	126	7	2	2318	6	12.0
															7	13.0
<b>Total</b>	47	1,374	2,297	2,468	2,436	2,404	2,426	2,372	2,332	1,003	130	7	2	19298	8	14.0
															9	15.1
<b>Elementary 6th grade students</b>								<b>age 10</b>	<b>age 11</b>	<b>age 12</b>	<b>age 13</b>	<b>age 14</b>	<b>age 15</b>	<b>total</b>	10	16.0
<b>Gr 6</b>								2	475	311	49			837	11	17.0
															12	18.0

# Historical TPS vs County trends

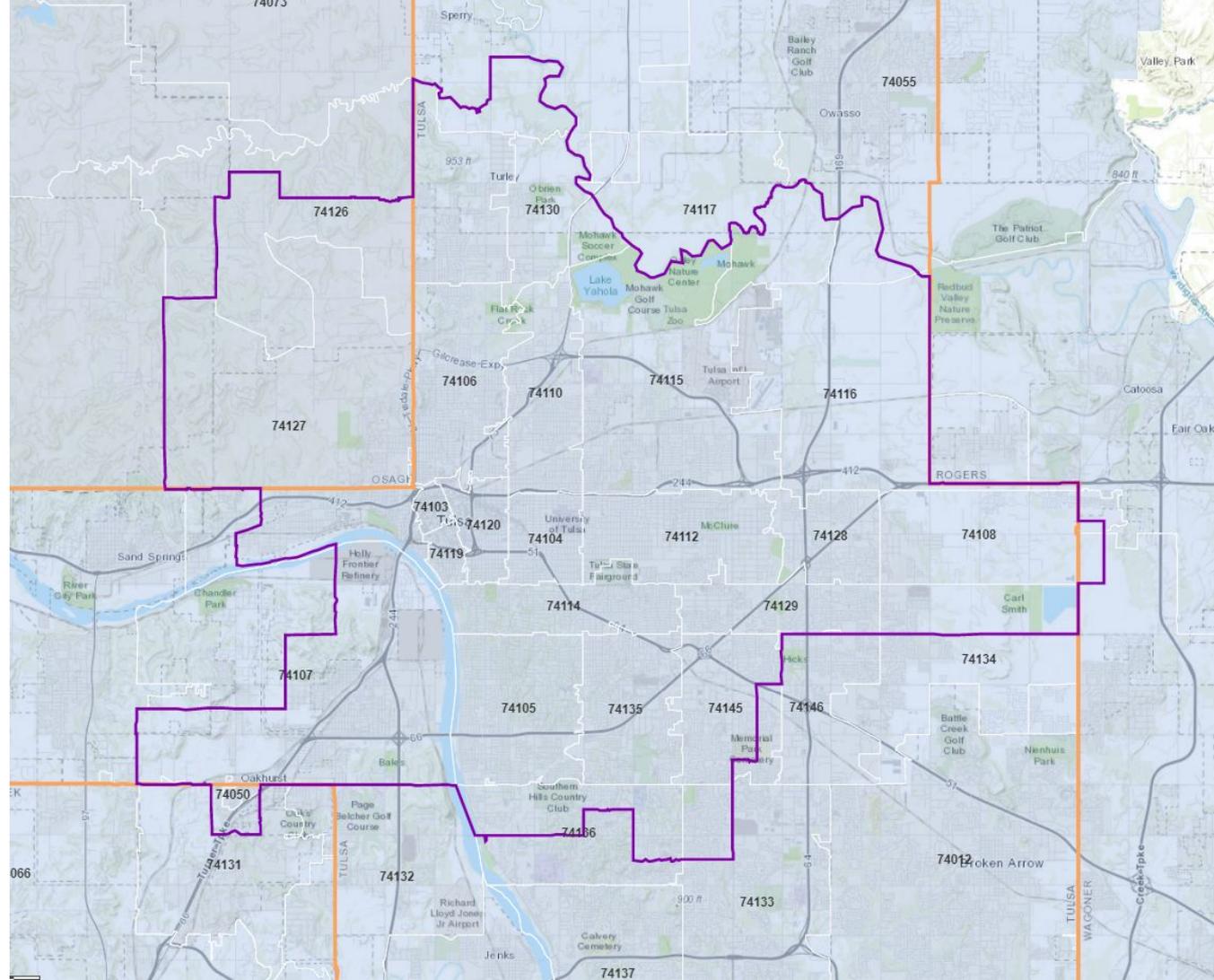


# For reference: Tulsa area zip codes

School District Boundaries - Current



USA Counties



# Health Data Monitoring Process

The three categories of **metrics will be monitored weekly**, and if a foundational health care metric hits threshold, or we detect an early warning from one of our indicators, evaluation and discussion will be triggered.

- Data is compiled and reviewed on Fridays.
- Evaluation and discussions are done by Monday morning.
- Evaluations are done at school level and/or system level depending on data.

The **frequency of monitoring will increase** when metrics are close to thresholds, and or early warning indicators at one or multiple schools are changing.

- Data can be evaluated daily if needed.
- Evaluation and discussion is triggered when foundational health care metric hits threshold, or we detect an early warning from one of our indicators.

# When and how will we respond?

Once a full evaluation is triggered based on meeting a threshold condition, we will recommend one of **four types of potential actions** based on our assessment of the data:

**1. No changes necessary at this time.**

Based on current health and systems data, no changes will be made.

**2. Additional monitoring and through increased, targeted testing.**

Rapid testing efforts will be scaled up and/or targeted towards particular schools to ensure that potential cases are caught earlier, before widespread exposure or outbreak. Data will be re-examined for the following week.

**3. Suspend in-person activity at a specific school or multiple schools.**

If it is necessary to suspend in-person activity at a school, students, families, and staff will be notified shortly after a decision is made. **Notices will be sent by 5 a.m. day of, 10 p.m. day before, or 2 p.m. for mid-day.**

**4. Change the default mode of instruction for the entire district.**

After a full discussion and evaluation is triggered, a formal recommendation will be provided to the Board of Education reporting the suggested default mode of instruction. In emergency situations, the superintendent has the authority to execute individual school or district-wide closures as appropriate.

# Foundational School System Metrics

Metric	Value	Description
PPE Availability	TBD	Greater than 2 weeks of available reserves. Final calculation pending estimated loss rate estimate from first two weeks.
Percent of Students and Staff in Quarantine or Isolation	TBD	See chart for current rates and comparisons to other districts.
Staffing Capacity	TBD	Schools finalizing staffing and coverage plans this week.

## Districts Currently in Distance Learning

District	Elementary	Middle School	High School	Distance Learning Dates	Scheduled Return Date <small>(pending updates)</small>
OKCPS	✓	✓	✓	November 16 - December 18	TBD (next semester)
TPS*	☐	✓	✓	4-6th: August 31 - November 20 Secondary: August 31 - December 18	4-6th: November 30 Secondary: January 4
Union**	☐	✓	✓	November 12 - November 20	November 30
Owasso	☐	☐	✓	November 18 - December 18	TBD (next semester)
Sand Springs	✓	✓	✓	Secondary: November 12 - 24 Elementary: November 20 - 24	November 30
Broken Arrow***	☐	✓	✓	High School: November 9 - 20 Middle School: November 10/12 - 20	November 30
Tahlequah	✓	✓	✓	November 16 - 20	November 30
Jenks	☐	✓	✓	November 16 - December 4	December 7
Skiatook	✓	✓	✓	November 16 - 27	November 30
Bixby****	☐	☐	✓	November 9 - 20	November 30
Muskogee	✓	✓	✓	November 16 - 24	November 30

\*PK - 3 currently in-person, 4th-6th (elementary) scheduled to return in-person on Nov. 30; 1 full elementary school currently in distance learning

\*\*Boevers Elementary currently in distance learning

\*\*\*Aspen Creek Elementary (and ECE center) currently in distance learning

\*\*\*\*North Elementary currently in distance learning

# Site-based staffing capacity

	Classroom Teachers		Non-classroom teaching staff		All site-based staff		Operations staff supporting schools
Staffed (less vacancies and leaves of absence)	2140	+	1424	=	3564		633
Total allocated	2324	+	1667	=	3991		693

~1.2% of site based staff have had a Leave of Absence request recommended so far

**Classroom teachers** includes gen ed, ESS, ELD, and specials/electives teachers

**Non-classroom teaching staff** include all other staff that works in a specific school site, such as counselors, TAs, paraprofessionals, custodians, and cafeteria workers.

# Sub Requests and Fill Rates by Date

Over the last two weeks, schools **requested 51 subs each day** to cover in-person classes, with **just under half filled** by the sub pool.

In general, **absences and fill rates remain stable** from Oct-Nov to Dec-Jan based on data from prior years.

Date	Total Absences	Subs Requested	Requests Filled	Request Not Filled	Sub Fill Rate
9-Nov	148	39	24	15	62%
10-Nov	156	41	24	17	59%
11-Nov	109	24	14	10	58%
12-Nov	180	47	22	25	47%
13-Nov	206	50	25	25	50%
16-Nov	210	86	26	60	30%
17-Nov	189	76	25	51	33%
18-Nov	133	17	13	4	76%
19-Nov	199	83	36	47	43%
<b>Average</b>	<b>170</b>	<b>51</b>	<b>23</b>	<b>28</b>	<b>45%</b>