

# COVID-19 and Pregnancy - The Latest Updates

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# Learning Objectives

- ▶ After participating in this presentation, the physician will be able to:
  - Advise patients regarding most recent guidelines in pregnancy and postpartum regarding COVID-19
  - Be familiar with resources on latest information for pregnant patients

# Disclosures

- ▶ I have no financial disclosures

# COVID-19 Background

- ▶ End of 2019, a novel coronavirus was identified in Wuhan - epidemic then ensued in China
- ▶ By February 2020, the WHO coined it COVID-19 and was designated a pandemic
- ▶ Spectrum of illness ranges from mild to critical in China
  - ▶ Mild disease (no or mild pneumonia) - 81% of cases
  - ▶ Severe disease (dyspnea, hypoxia or > 50% lung involvement) - 14%
  - ▶ Critical disease (respiratory failure, shock or multiorgan dysfunction) - 5%
  - ▶ Fatality rate was 2.3%

# COVID-19 Background

- ▶ Incubation period is generally within 14 days following exposure, most cases occurring on day 4-5
- ▶ Most Common Initial Symptoms
  - ▶ Cough
  - ▶ Myalgias
  - ▶ Headache
  - ▶ Smell or taste abnormalities
  - ▶ Pneumonia - most frequent serious manifestation - fever, cough, dyspnea

# COVID-19 Background

- ▶ Severe Course
  - ▶ Respiratory Failure
  - ▶ Cardiac and Cardiovascular complications
    - ▶ Arrhythmias, Myocardial Injury, Heart Failure, Shock
  - ▶ Thromboembolic complications
    - ▶ VTE and PR
  - ▶ Neurologic complications
    - ▶ Encephalopathy
  - ▶ Inflammatory complications
    - ▶ Persistent Fevers, Elevated Markers

# COVID-19 Background

- ▶ Comorbidities Associated with Severe Illness
  - ▶ Cardiovascular disease
  - ▶ Diabetes mellitus
  - ▶ COPD and other lung diseases
  - ▶ Cancer
  - ▶ Chronic Kidney disease
  - ▶ Solid organ or hematopoietic stem cell transplantation
  - ▶ Obesity
  - ▶ Smoking

# COVID-19

- ▶ Pregnant patients with symptomatic COVID-19 are at increased risk of severe illness compared to non pregnant individuals
- ▶ Absolute risk is low for severe illness but increased risk of
  - ▶ ICU admission (3 fold increase)
  - ▶ Need for mechanical ventilation and ECMO (2.4 fold increase)
  - ▶ Death (1.7 fold increase)



# COVID-19

- ▶ Severe/ Critical Illness
  - ▶ Increased adverse perinatal outcomes, HTN disorders of pregnancy
  - ▶ Increasing maternal age increase risk of moderate to severe or critical illness
- ▶ Mild/Moderate Illness
  - ▶ no increased risk of adverse perinatal outcomes
- ▶ Black and Hispanic women have disproportionate COVID-19 infection and death rates

# Postpartum with COVID-19

- ▶ Early and close contact between mother and infant has benefits
  - ▶ Breastfeeding, mother-infant bonding, promotion of family centered care
- ▶ Rooming in should be shared decision making
  - ▶ Mother masking
  - ▶ Hand hygiene
  - ▶ Isolette in the room if possible

# Breastfeeding with COVID-19

- ▶ COVID-19 infection is not a contraindication
- ▶ Proper hand hygiene prior to pumping
- ▶ Masking while direct breastfeeding
- ▶ Support the patient's informed decision “recognizing the patient is uniquely qualified to decide whether exclusive breastfeeding, mixed feeding or formula feeding is optimal”

# Vaccination

- ▶ ACOG, SMFM and ASRM recommends all eligible persons, including pregnant, and lactating individuals, receive COVID-19 vaccine or vaccine series
- ▶ We should lead by example as physicians by being vaccinated and encouraging eligible patients be vaccinated as well
- ▶ Vaccination does not require a conversation with a clinician prior to administration

# Vaccination

- ▶ Pfizer - mRNA vaccine
  - ▶ Use in individuals 12 years and older - 2 dose regimen, 21 days apart
- ▶ Moderna - mRNA vaccine
  - ▶ Use in individuals 18 years and older - 2 dose regimen, 28 days apart
- ▶ Johnson and Johnson - Adenovirus
  - ▶ Use in individuals 18 years and older - 1 dose regimen

# Vaccination

- ▶ “Claims linking COVID-19 vaccines to infertility are unfounded and have no scientific evidence supporting them”
- ▶ Expected side effects should be discussed
- ▶ Can be administered simultaneously with other vaccinations

# Vaccination

## ▶ V-Safe

- ▶ Smartphone based tool utilizes text messages and web surveys to provide personalized health check ins after vaccination
- ▶ V-Safe Pregnancy Registry
  - ▶ 139,562 - v-safe after vaccination health checker pregnant patients reported as of July 26
  - ▶ 5,104 - v-safe COVID-19 Vaccine pregnancy registry patients enrolled
- ▶ Discrepancy due to the roll out of the registry, time to identify the patients that registered as pregnant, not everyone meets criteria for the registry

# Oklahoma Vaccination Rate

	<b>RECEIVED AT LEAST ONE DOSE</b>	<b>FULLY VACCINATED</b>
<b>ALL PEOPLE</b>	1,890,094 47.8% of total pop.	1,590,417 40.2% of total pop.
<b>PEOPLE 12-17</b>	87,518 27.3% of 12-17 pop.	59,312 18.5% of 12-17 pop.
<b>PEOPLE 18+</b>	1,802,398 60.0% of 18+ pop.	1,531,054 51.0% of 18+ pop.
<b>PEOPLE 65+</b>	543,953 85.6% of 65+ pop.	482,022 75.9% of 65+ pop.



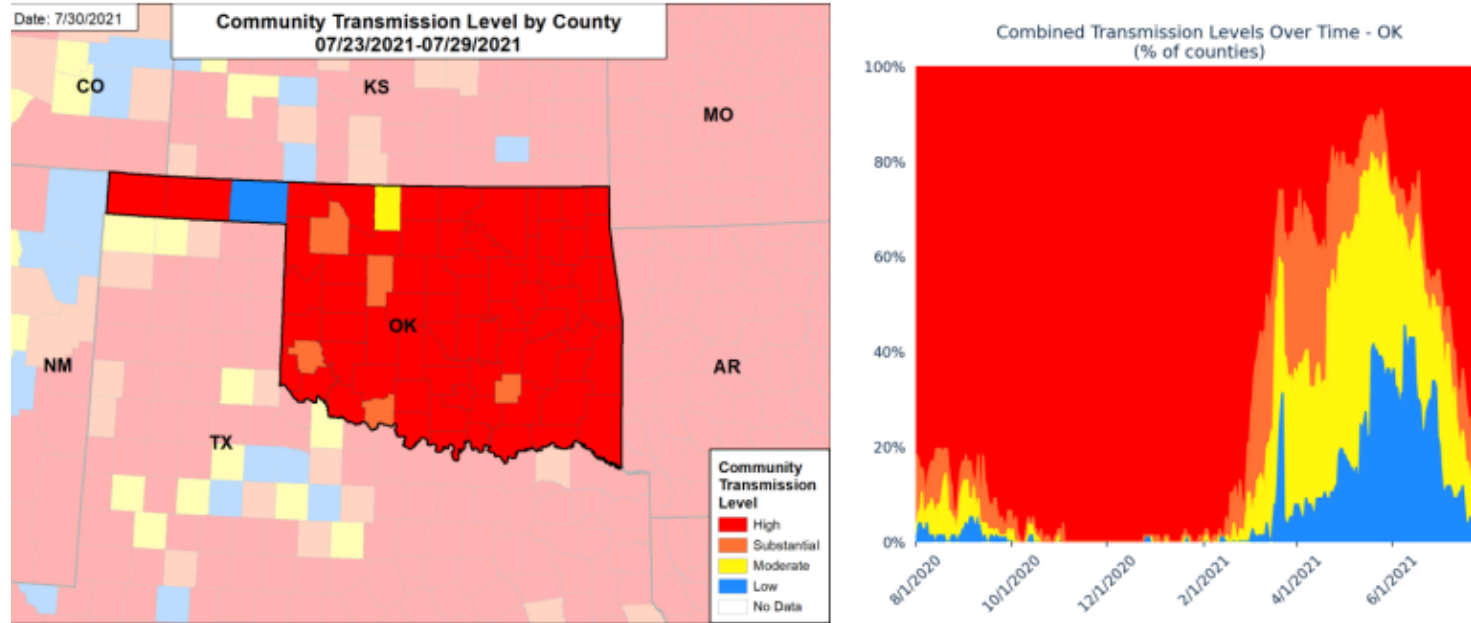
# Oklahoma County Vaccination Rates

	Received at Least One Dose	Fully Vaccinated
All People	448,715 (56.3%)	372,264 (46.7%)
Population over 18	419,194 (70.5%)	352,592 (59.3%)
Population over 65	104,542 (92.6%)	92,069 (82.3%)

# OKLAHOMA

STATE PROFILE REPORT | 07.30.2021

## COMMUNITY TRANSMISSION BY COUNTY AND METRO AREA



### COUNTIES AND METRO AREAS BY COMBINED TRANSMISSION LEVEL

CATEGORY	LOW TRANSMISSION BLUE	MODERATE TRANSMISSION YELLOW	SUBSTANTIAL TRANSMISSION ORANGE	HIGH TRANSMISSION RED
# OF COUNTIES (CHANGE)	1 (↓3)	1 (↓5)	5 (0)	70 (↑8)
# OF METRO AREAS (CHANGE)	0 (0)	0 (↓1)	1 (↓2)	21 (↑3)

**All Blue Counties:** Beaver

**All Yellow Counties:** Alfalfa

**All Orange Counties:** Woodward, Blaine, Greer, Cotton, Coal

**All Orange CBSAs:** Woodward

**All Red Counties:** Tulsa, Oklahoma, Cleveland, Comanche, Creek, Muskogee, Rogers, Ottawa, Carter, Washington, Wagoner, Canadian, Le Flore, Pottawatomie, Delaware, Pittsburg, Bryan, Cherokee, Payne, Mayes, McClain, Adair, Sequoyah, Stephens, Okmulgee, Craig, Lincoln, Osage, Garfield, Garvin, Kay, Pushmataha, Pontotoc, Logan, Grady, Marshall, McIntosh, Johnston, Pawnee, Haskell, Custer, Choctaw, Caddo, McCurtain, Beckham, Jackson, Texas, Latimer, Noble, Love, Okfuskee, Seminole, Murray, Nowata, Woods, Washita, Kiowa, Kingfisher, Jefferson, Atoka, Tillman, Major, Hughes, Ellis, Roger Mills, Grant, Dewey, Harper, Cimarron, Harmon

**All Red CBSAs:** Tulsa, Oklahoma City, Lawton, Muskogee, Ardmore, Miami, Bartlesville, Shawnee, McAlester, Durant, Tahlequah, Stillwater, Fort Smith, Duncan, Enid, Ponca City, Ada, Weatherford, Elk City, Altus, Guymon

# Counseling regarding prevention

- ▶ Discuss Vaccination during pregnancy and postpartum
- ▶ Routine Hand Hygiene
- ▶ Wearing a Mask, even if vaccinated in areas of substantial or high transmission area

# Questions?

- ▶ Contact me

- ▶ [Katie.Shepherd@integrisok.com](mailto:Katie.Shepherd@integrisok.com)

# Resources

- ▶ ACOG
  - ▶ Novel Coronavirus 2019 Practice Advisory
- ▶ SMFM
  - ▶ Provider Considerations for Engaging in COVID-19 Vaccine Counseling with Pregnant and Lactating Patients
- ▶ CDC
  - ▶ COVID-19 Resource Page
- ▶ Up To Date