LOUISIANA DEPARTMENT OF HEALTH

Louisiana partnership helps elucidate vaccine uptake during pregnancy

Dr. Runa Bakshi

Immunization Program

Louisiana Office of Public Health

Collaborators:

- **We have no financial supports or conflicts of interest to report.**

Overview:

- Recommended vaccines during pregnancy
- Challenges and opportunities
- Current vaccination landscape during pregnancy
- Next steps

Recommended Vaccines during Pregnancy

- **Tdap**: 27-36 weeks of pregnancy
- **Flu** (if flu season): anytime; Sep-Oct
- **COVID-19**: anytime
- **RSV** (Abrysvo): 32-36 weeks; Sep-Jan

Why vaccinate during pregnancy?

- Protect newborn for the first few months of their life until they are old enough to get their own vaccines
- Prevent stillbirth and preterm delivery (COVID-19)

The Key Question

Are people being vaccinated as recommended during pregnancy?

- Challenges:
  - No pregnancy indicator in IIS
  - Technology challenges
  - Privacy concerns
  - Too cumbersome to link Vital Records births data to IIS

- Opportunity:
  - Louisiana Public Health Institute's Pregnancy Registry

REACHnet
Research Action for Health Network

Methods

Louisiana Pregnancy Registry

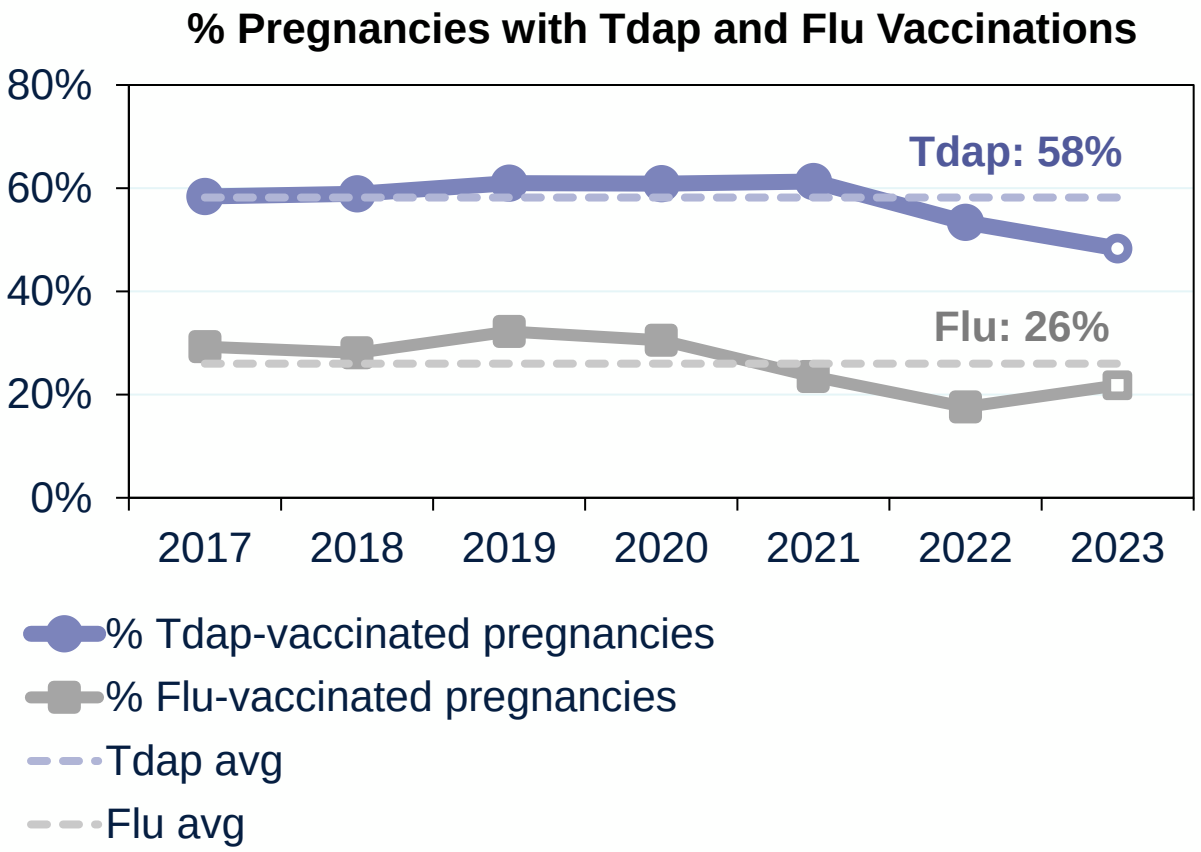
(2017-2023)

Pregnancy Registry: At A Glance

- Inclusion based on pregnancy outcome (eg: live birth, stillbirth, etc.), at Ochsner or Tulane Health System after Jan 1, 2016.
- Excluded if age at pregnancy outcome was <10 or >54 years.
- Compared to all live births in the state (2018-2020):
  - Registry (2018-2020) skews slightly older;
  - Live births from non-Hispanic White birthing parents under-represented;
  - Mostly represents the population in and around the Greater New Orleans Area.

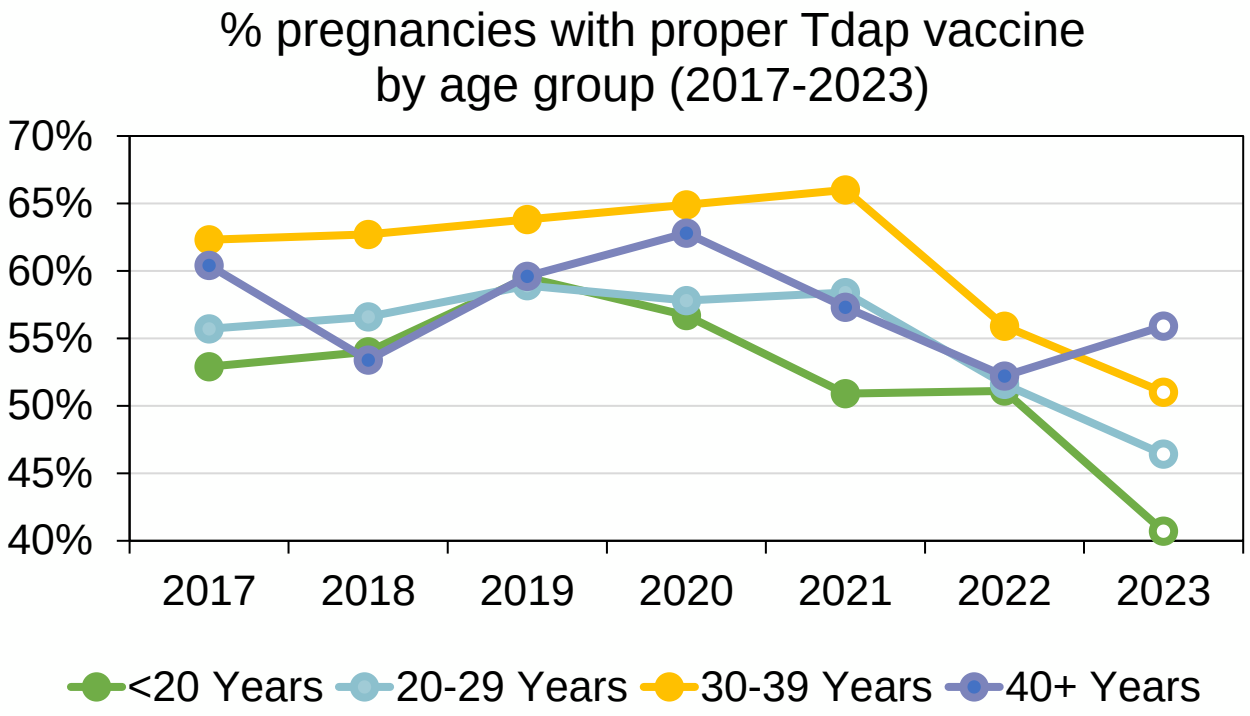
Louisiana Public Health Institute. Louisiana Pregnancy Registry: Initial Data Report. May 1, 2023.
https://irp.cdn-website.com/c3c5adcb/files/uploaded/LAPregnancyRegistryIndicator%20Report_2023.pdf

Vaccinations during Pregnancy (2017-2023)



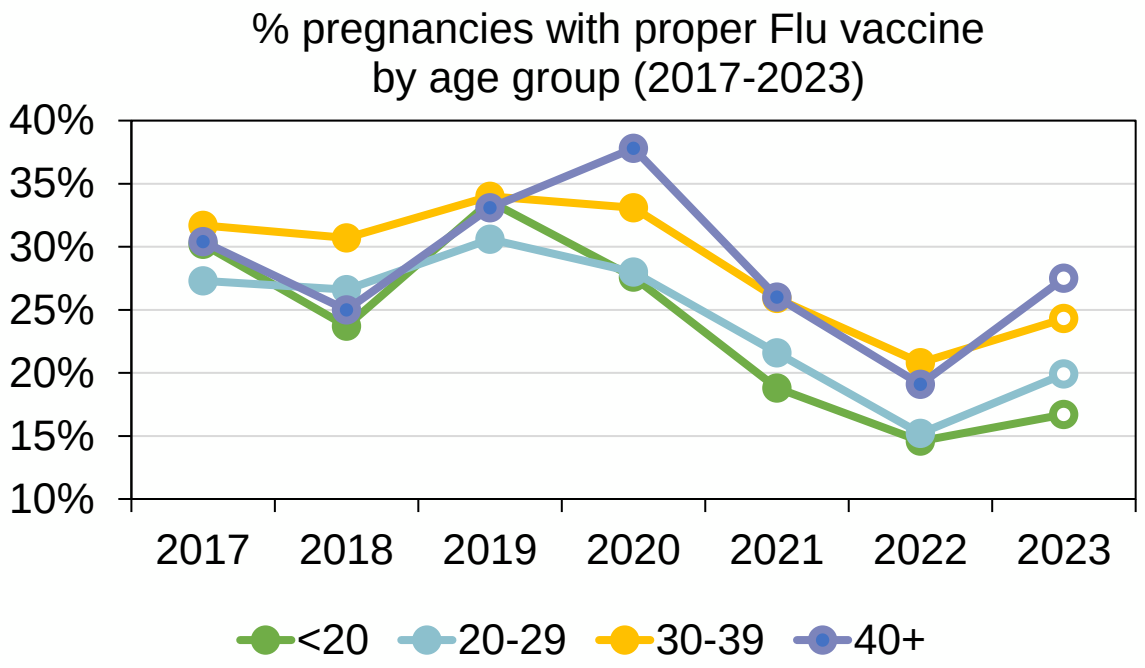
- Overall coverage rates for Tdap and flu during pregnancy were 58% and 26% respectively.
- 98% of Tdap vaccines were administered during the 3rd trimester of pregnancy.
- **Decreasing trend since Covid-19**
- Flu recovering in 2023? (*incomplete data at time of analysis*)

Tdap during Pregnancy by Age Group



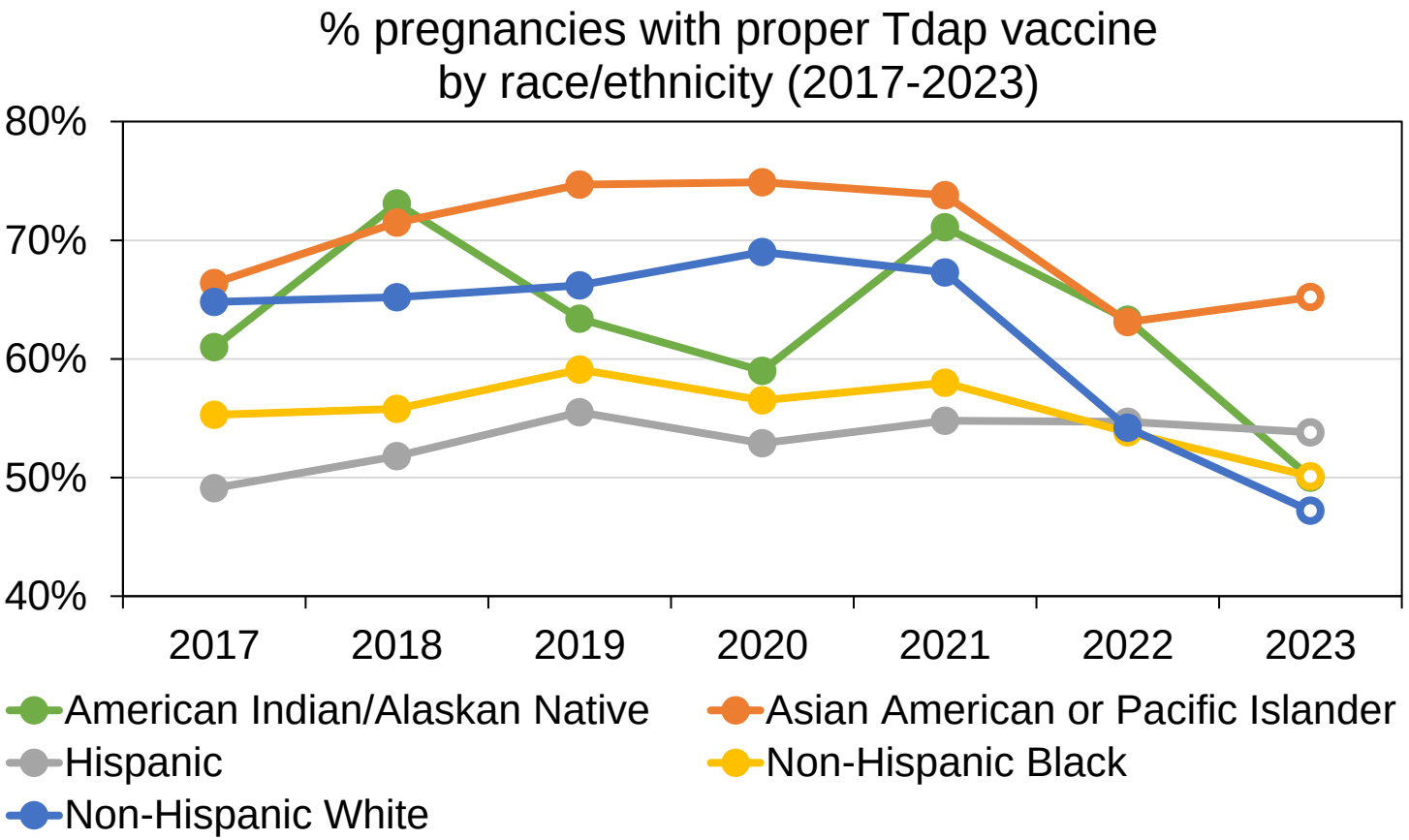
- Tdap vaccination rates were the **higher among older age groups** (30+ years) than younger age groups.
- Decreasing trends affecting all age groups but **40+ years age cohort possibly recovering in 2023.**

Flu Shot during Pregnancy by Age Group



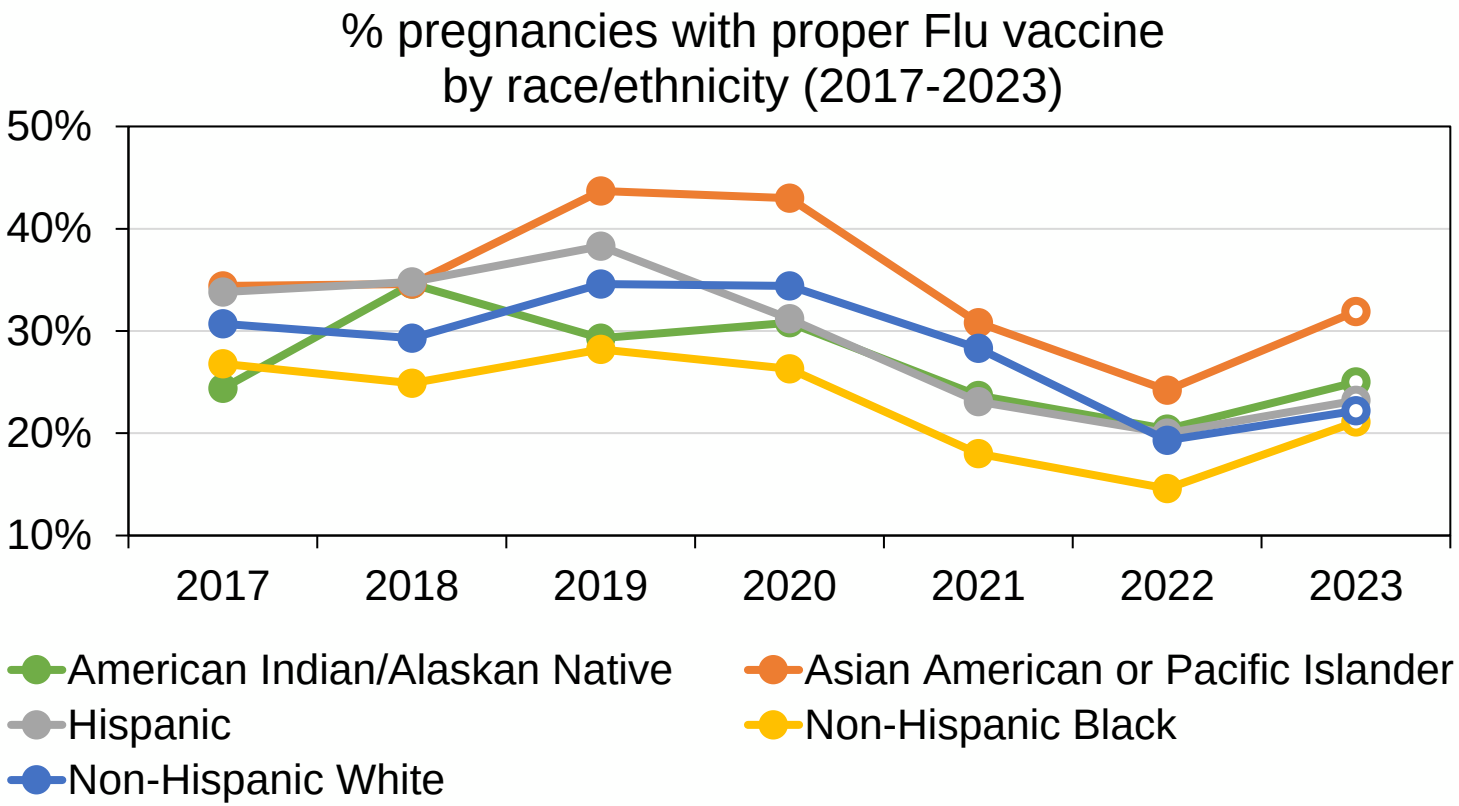
- Flu vaccination rates were the **higher among older age groups** (30+ years) than younger age groups.
- Decreasing trend since 2020, affecting all age groups but **possibly recovering in 2023.**

Tdap during Pregnancy by Race/Ethnicity



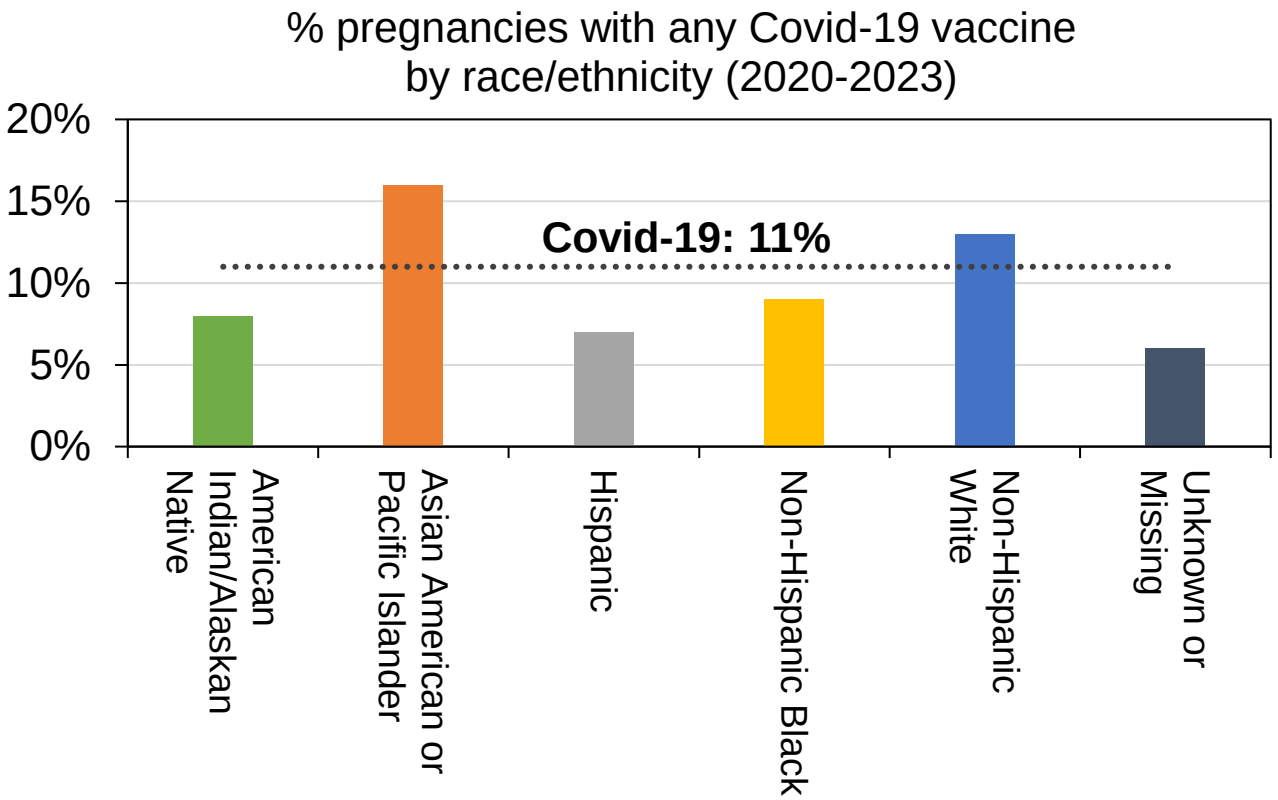
- **Racial disparities** in vaccination rates observed.
- Post-Covid decreasing trend observed mainly for **AI/AN and non-Hispanic White** populations.

Flu Shot during Pregnancy by Race/Ethnicity



- **Racial disparities** in vaccination rates observed.
- Decreasing trend since 2020, observed for all racial groups but **possibly recovering in 2023**.

Covid-19 Vaccine during Pregnancy (2020-2023)



- **Very low uptake** of any Covid-19 vaccine among the pregnant people.
- **Uptake increases with age group.**
  - <20 years: 2%
  - 22-34 years: 10%
  - 35-55 years: 17%
- **Racial disparities** in vaccination rates observed.

Next Steps

- Analyze RSV vaccination data once available
- Dive deeper to understand life course vaccination over multiple pregnancies
  - Link Vital Records births data to IIS and search for birthing parent in IIS
  - Data Lake with Master Person Index (MPI) that links VR and IIS data
- Work directly with hospitals to get patient identifiers and ascertain if all vaccinations are in the EMR.
  - If some vaccines are missing from EMR, possible data sharing with REACHnet.
- Identify ways to record pregnancy status in IIS associated with each vaccine administration
  - *Potential AIRA/CDC/multi-site workgroup?*

THANK YOU

Dr. Arundhati "Runa" Bakshi

Louisiana Department of Health

Data Analytics Program Manager | *Runa.Bakshi@la.gov*

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Questions?