

4-22-2022

Debunking Medical Myths: Flu Vaccine and Pregnancy

Chase Morrison

Wayne State University School of Medicine, hi2717@wayne.edu

Saranya Madan

Wayne State University School of Medicine, hj2159@wayne.edu

Erin Bybee

Wayne State University School of Medicine, hi2097@wayne.edu

Mehrnoosh Ghafouri Abbasabadi

Wayne State University School of Medicine, gg0868@wayne.edu

Madison Graifman

Wayne State University School of Medicine, hj2210@wayne.edu

See next page for additional authors

Follow this and additional works at: https://digitalcommons.wayne.edu/pat_edu_proj



Part of the [Curriculum and Instruction Commons](#), [Medical Education Commons](#), and the [Public Health Commons](#)

Recommended Citation

Morrison, Chase; Madan, Saranya; Bybee, Erin; Ghafouri Abbasabadi, Mehrnoosh; Graifman, Madison; and Hough, Isaiah, "Debunking Medical Myths: Flu Vaccine and Pregnancy" (2022). *Patient Education Projects*. 301.

https://digitalcommons.wayne.edu/pat_edu_proj/301

This Infographic is brought to you for free and open access by the Patient Education at DigitalCommons@WayneState. It has been accepted for inclusion in Patient Education Projects by an authorized administrator of DigitalCommons@WayneState.

Authors

Chase Morrison, Saranya Madan, Erin Bybee, Mehrnoosh Ghafouri Abbasabadi, Madison Graifman, and
Isaiah Hough

Flu Vaccine and Pregnancy

Group Red 40: Isaiah Hough, Madison Graifman, Saranya Madan, Chase Morrison, Mehrnoosh Ghafouri, Erin Bybee

"I'M WORRIED ABOUT THE VACCINE"

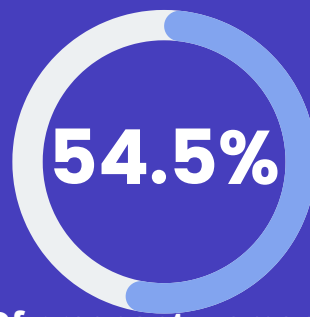
You're not alone

1. The lowest vaccination rates are among minority communities.
2. Mistrust among minorities communities is a result of past medical racism and experimentation
3. Doctors may not be aware of a mother's concern about the flu vaccine's safety.
4. There is not enough communication between soon-to-be mothers and their providers about the flu shot



"I DON'T NEED IT! IT WON'T WORK!"

- Pregnant women are at a higher risk of hospitalization from the flu.
- The best protection against the flu is the flu shot.
- A study of over 30,000 pregnant women showed that the flu vaccine reduced emergency room visits by 81% and hospitalizations by 65% (Restivo et al).

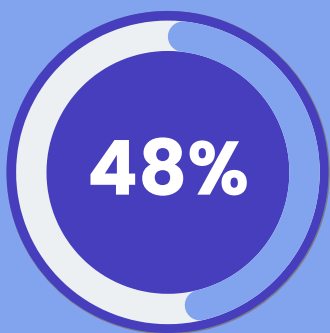


Of pregnant women receive the flu shot



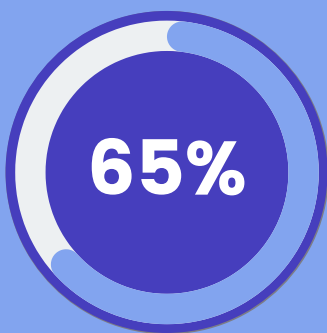
But is it safe for me and my baby?

The data shows that not only does vaccination reduce the likelihood of adverse events in the mother's health, but that it confers passive immunity to the infant with no evidence for congenital anomalies, diseases, or other concerns (UpToDate, 2021)



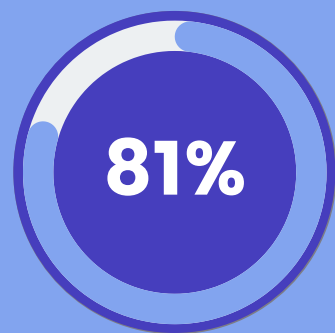
FEWER
FLU CASES IN INFANTS

Less than 6 months old
(Ho Thu Quach et al)



FEWER
HOSPITALIZATIONS

In pregnant mothers
(Restivo et al)



FEWER
ER VISITS

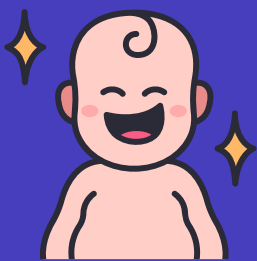
In pregnant mothers
(Restivo et al)

"IT'S NOT THE RIGHT TIME TO RECEIVE THE VACCINE"

- The flu shot can be given safely at any point during pregnancy.
- There is a slight increase in protection against the flu if the vaccine is given later in pregnancy, but this effect is modest.



"HOW IS GETTING THE VACCINE BENEFICIAL FOR MY BABY?"



- An infant born to a mother infected with influenza is at a higher risk of preterm birth, low birth weight, ICU admission, and even death
- Flu vaccines are not available for use in infants under six months old, so these babies rely on antibodies from their mother

References

• Quach, T.H.T., Mollis, N.A. & Cordero, J.F. Influenza Vaccine Efficacy and Effectiveness in Pregnant Women: Systematic Review and Meta-analysis. *Matern Child Health J* 24, 229–240 (2020). <https://doi.org/10.1007/s10995-019-02844-y>

• Restivo V, Costantino C, Bono S, et al. Influenza vaccine effectiveness among high-risk groups: A systematic literature review and meta-analysis of case-control and cohort studies. *Hum Vaccin Immunother*. 2018;14(3):724–735. doi:10.1080/21645515.2017.1321722

• Jarvis JR, Dorey RB, Warricker FDM, Alwan NA, Jones CE. The effectiveness of influenza vaccination in pregnancy in relation to child health outcomes: Systematic review and meta-analysis. *Vaccine*. 2020;38(7):1801–1813. doi:10.1016/j.vaccine.2019.12.056

• Cunningham-Wilk, et al. Optimal Timing of Influenza Vaccine during Pregnancy: A Systematic Review and Meta-Analysis. *Influenza and Other Respiratory Viruses*, vol. 13, no. 5, 2019, pp. 428–432. <https://doi.org/10.1093/iro/13.5.428>

• Nunes, M.C. and S.A. Madhi. Influenza vaccination during pregnancy for prevention of influenza confirmed illness in the infants: A systematic review and meta-analysis. *Hum Vaccin Immunother*. 2018. 14(3): p. 758–766.

• Grahskopf, L.A., et al. Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices, United States, 2021–22 Influenza Season. *MMWR Recomm Rep*. 2021. 70(No. RR-5): p. 1–28.

• Brewer, L.L., et al. Structural inequities in seasonal influenza vaccination rates. *BMC Public Health*. 2021. 21(1): p. 1165.

• Lu, P.-J., et al. Trends in racial/ethnic disparities in influenza vaccination coverage among adults during the 2007–08 through 2011–12 seasons. *Am J Infect Control*. 2014. 42(7): p. 763–9.

• Influenza Virus Vaccines (Inactivated) (IV3 and IV4): Drug Information. UpToDate. https://www.uptodate.com/contents/influenza-virus-vaccines-inactivated-iv3-and-iv4-drug-information?search=influenza+vaccine+safety+pregnancy&topicRef=442&source=see_link#960926