Influenza and Tdap Vaccination Coverage among Pregnant Women: Preliminary Estimates for the 2022-23 Season

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Outline

• Preliminary estimates of influenza and Tdap vaccination coverage for the 2022-23 influenza season
  – Internet panel survey

• Influenza vaccination coverage during the 2022-23 influenza season
  – Vaccine Safety Datalink

• Conclusions and limitations
Internet Panel Survey

Internet panel survey

- Opt-in internet panel survey conducted between March 28 and April 16, 2023, among women aged 18-49 years who reported being pregnant anytime since August 1, 2022
- Sampled women were weighted to represent the national population of pregnant women in the U.S.
- Analysis of flu vaccination coverage was limited to 1,838 women pregnant anytime during October 2022-January 2023
  - Flu vaccination received before or during pregnancy since July 1, 2022 to the time of the survey
- Analysis of Tdap vaccination coverage was limited to 786 women pregnant anytime since August 1, 2022, who had a live birth by their survey date
  - Tdap vaccination received during most recent pregnancy
Influenza vaccination coverage* among pregnant women by race and ethnicity, 2019-20 through 2022-23† influenza seasons

Race and Ethnicity

- Total
- White, non-Hispanic
- Black, non-Hispanic
- Hispanic
- Other, non-Hispanic

*Women pregnant anytime between Oct to January who were vaccinated before/during pregnancy since July 1 were counted as vaccinated.

†The estimate for 2022-23 season is preliminary. Estimates by race and ethnicity for the 2022-23 flu season are not shown.

Tdap vaccination coverage* among pregnant women by race and ethnicity, 2019-20 through 2022-23† influenza seasons

Race and Ethnicity

- Overall
- White, non-Hispanic
- Black, non-Hispanic
- Hispanic
- Other, non-Hispanic

*Women who reported a pregnancy since August 1 of each season who had a live birth by the time of the survey and were vaccinated during most recent pregnancy were counted as vaccinated.

†The estimate for 2022-23 season is preliminary. Estimates by race and ethnicity for the 2022-23 flu season are not shown.
Vaccine Safety Datalink

Vaccine Safety Datalink (VSD)

- Eight participating integrated healthcare organizations in six states
- More than 11.6 million insured persons
  - Approximately 2.7 million women aged 18-49 years
- Influenza vaccination coverage during 2022-23 flu season
  - Includes women pregnant during the current flu season (August to March) who have received a flu vaccine prior to, during, or after current pregnancy
Monthly cumulative influenza vaccination coverage by influenza season, VSD, 2019-20 through 2022-23

Cumulative influenza vaccination coverage by season and race and ethnicity, VSD, 2019-20 through 2022-23
Flu vaccination coverage from the Internet panel survey for 2022-23 season is preliminary.

Conclusions

- Preliminary findings from the Internet panel survey shows a slight decrease in influenza vaccination coverage and an increase in Tdap vaccination coverage
  - Non-Hispanic black pregnant women have lowest vaccination coverage
- Vaccine Safety Datalink is used to monitor in-season vaccination coverage
  - Estimates are usually higher for overall coverage as well as larger disparities by race and ethnicity
  - Drop in coverage this season and persistent disparities by race and ethnicity
Limitations of Internet panel survey

- Vaccination receipt is self-reported and not validated with medical records
  - Published studies of validity of self-report of adult influenza vaccination have shown mixed results, with net bias ranging from 1-29 percentage points
- Due to small sample size, we were not able to assess vaccination coverage separately among some racial and ethnic groups such as American Indian/Alaska Native persons
- Bias might remain after weighting adjustment
  - Internet panel surveys included volunteers who self-selected entry into the panel and participation in the survey and excluded those with no internet access or who chose not to join the panel

Limitations of Vaccine Safety Datalink

- Findings are not generalizable to all pregnant women in the U.S
- Vaccination status may be misclassified in the VSD
  - Coverage would be an underestimation if pregnant women receive vaccinations outside the participating delivery systems or registries
Thank you!

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For more information, contact CDC
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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.