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**PHAC Vaccine Confidence Webinar Series**

# **Building COVID-19 vaccine confidence before, during and after pregnancy**

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## QUICK NOTES

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- 1 This webinar is being recorded. A recording of our webinar will be made available on CANVax.ca and on CPHA's YouTube channel. Slides will be available.
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Public Health  
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Canada

# Building COVID-19 vaccine confidence before, during and after pregnancy

Strategies for health care providers



## Speakers

- Dr. Ève Dubé, PhD, medical anthropologist, Quebec National Institute of Public Health, Laval University
- Dr. Isabelle Boucoiran, M.D., M. Sc., OBGYN, Maternal-fetal medicine and reproductive infectious diseases specialist, clinical associate professor, Université de Montréal

## Moderator

- Stephanie Elliott, MPH, CPH, Public Health Agency of Canada

## Disclosures

- Dr. Ève Dubé:
  - Nothing to declare
- Dr. Isabelle Boucoiran:
  - Local investigator for clinical trials on RSV vaccine in pregnancy (GSK, Pfizer)
  - Received research funding from Altona and Ferring

## Objectives

- Discuss the challenges to vaccine confidence for individuals and families who are pregnant, considering pregnancy or lactating.
- Identify strategies for building vaccine confidence among pregnant individuals and their families, new parents, and those who intend to become pregnant.

# Vaccine hesitancy: Contributors and determinants

## Vaccine hesitancy

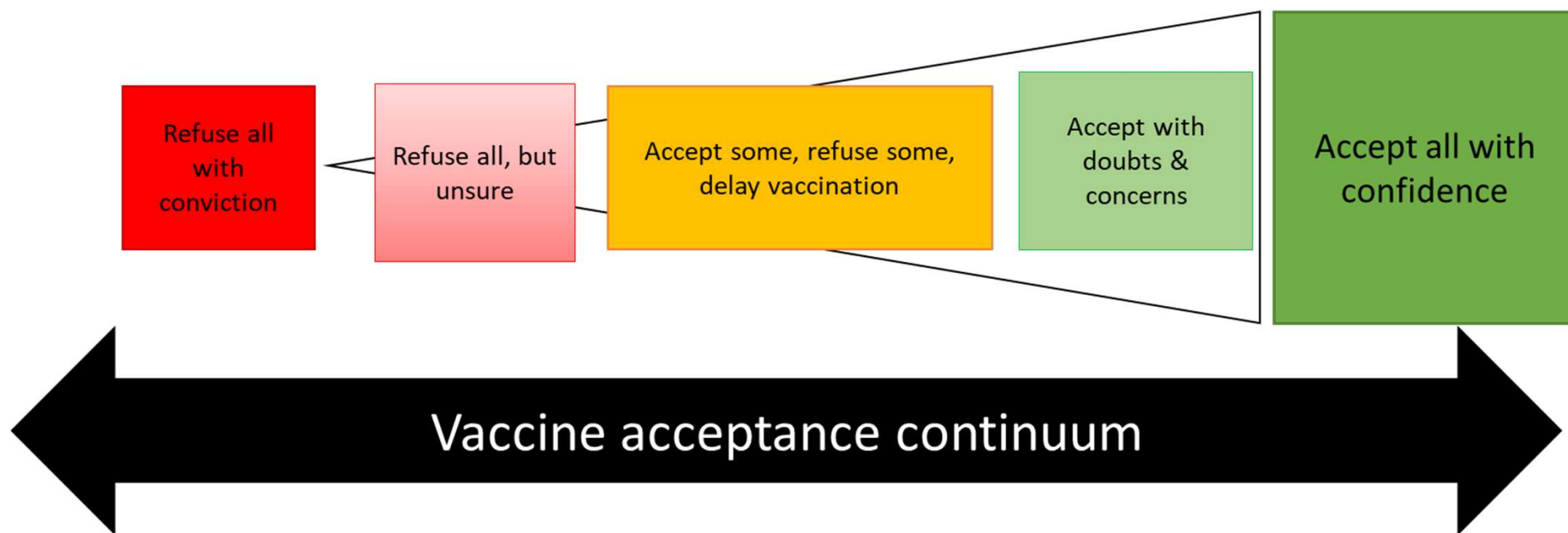
“Vaccine hesitancy refers to **delay in acceptance** or **refusal** of vaccines despite availability of vaccine services. Vaccine hesitancy is **complex** and **context specific**, varying across time, place and vaccines. It is influenced by factors such as complacency, convenience and confidence.”

-WHO's SAGE Working Group definition, 2014

[\(MacDonald, N. E. & SAGE Working Group on Vaccine Hesitancy, 2015\)](#)



## Vaccine attitudes exist on a continuum and are influenced by a variety of factors



(MacDonald et al., 2021; Yaqub et al., 2014)

## 5Cs of vaccine decision-making



(Betsch et al., 2018)

# Vaccine attitudes are shaped by social, cultural, interpersonal and intrapersonal factors

## Broader societal environment

- Policy, government, historical factors, injustice
- Mistrust due to current, historical, collective and cultural trauma and abuse
  - Racism, colonialism, historic medical abuses/ experimentation

## Culture and community

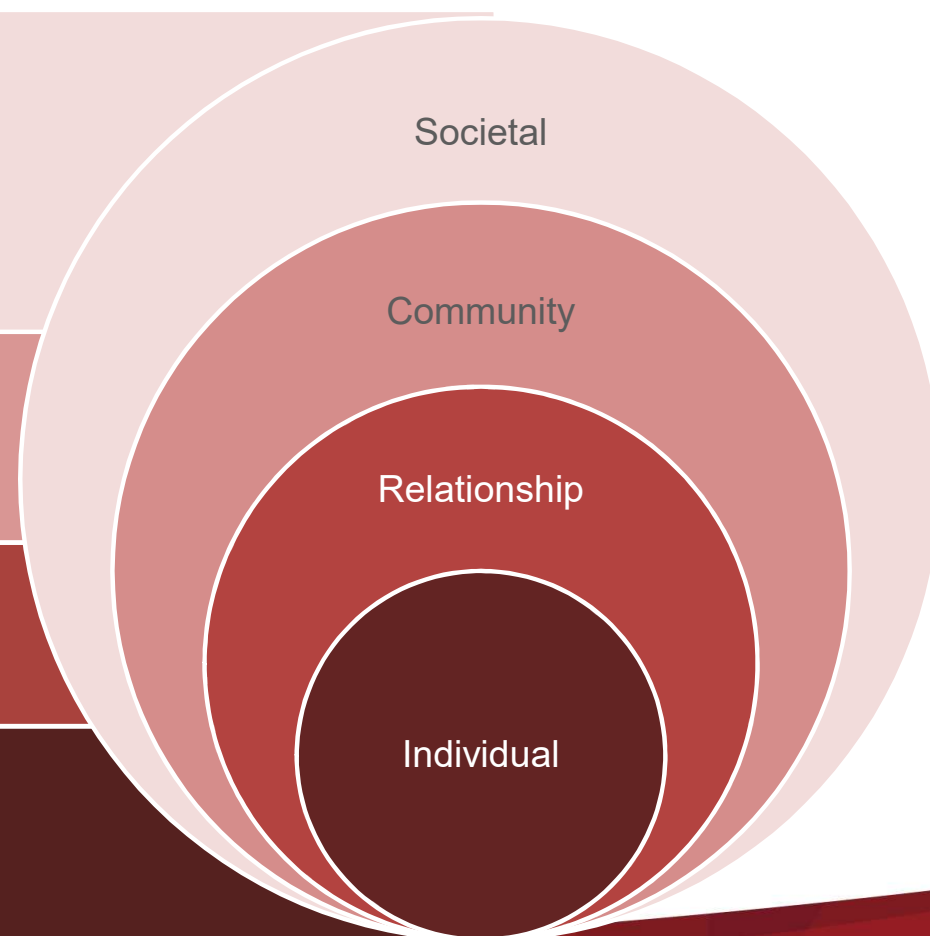
- Sense of belonging, in-group thinking, cultural norms
  - Perpetuated by social media echo chambers, regional and community clustering of vaccine hesitant populations

## Relationships

- Opinions of family and friends
- Relationship with a trusted healthcare provider

## Individual

- Psychological antecedents: Conspiratorial thinking, reactance, cognitive biases, individualistic world views, needle fear
- Age, personal sense of identity, gender, ethnicity



## COVID-19 may change the face of vaccine hesitancy

- Awareness of and attention to vaccine development & regulatory process.
- Questions about vaccines may become more specific, i.e., vaccine platform, mechanism of action, brand, the size of clinical trials etc.
  - May or may not have the context to understand the meaning of the answer to these questions.
- Vaccination behavior may become even more identity-linked or political.
- Increased understanding of the potential impact of vaccine preventable disease.
- Changing recommendations and decreases in vaccine effectiveness against infection in response to variants and waning immunity may undermine confidence among those who were initially accepting of COVID-19 vaccines.

([MacDonald et al., 2021](#); [Lewandowsky et al., 2021](#))

## Pregnancy context for vaccine decision-making



Pressure to ensure optimal fetal development



Array of contradictory information



Expectation to practice self-regulation and body monitoring: i.e., no smoking, intake of vitamins, optimal body weight gain, avoiding certain foods, avoiding stress



Judgement and stigmatization (by health care providers and social network) if behaviors are not in line with recommendations



Culture of avoiding medications



High perceived risk for fetus

(Myers, 2016; Yuen & Tarrant, 2014; Wilson et al., 2015; MacDougall & Halperin, 2016; Swamy & Heine, 2015; Moniz & Beigi, 2014)

## Vaccine hesitancy during pregnancy

- Comprehensive data on vaccine uptake among pregnant individuals in Canada is lacking.
- Several US studies have demonstrated that the primary concerns about COVID-19 vaccine in pregnancy is safety for themselves and their pregnancy and risk to the fetus or neonate.
- Other concerns cited in studies include:
  - vaccine side effects
  - concern that the vaccine would cause infertility
  - doubts about vaccine effectiveness
  - belief that they did not need the vaccine
  - beliefs that they were at a low risk of contracting or becoming severely ill from COVID-19



([Levy et al., 2021](#); [Battarbee et al., 2021](#); [Sutton et al., 2021](#); [Townsel et al., 2021](#))



## Vaccine hesitancy key takeaways

- Vaccine hesitancy is a continuum not a binary.
- Those who are vaccine hesitant are a heterogenous group.
- Vaccine hesitancy is multifactorial – 5C framework can support understanding of contributing factors.
- Pregnancy poses specific challenges to vaccine confidence.
- Primary concern is vaccine safety.

## Polling question

Which is **not** one of the 5Cs of vaccine decision-making?

1. Complacency
2. Coercion
3. Confidence
4. Collective Responsibility





# Strategies for building vaccine confidence

## Why is building vaccine confidence a skill that health care providers need?



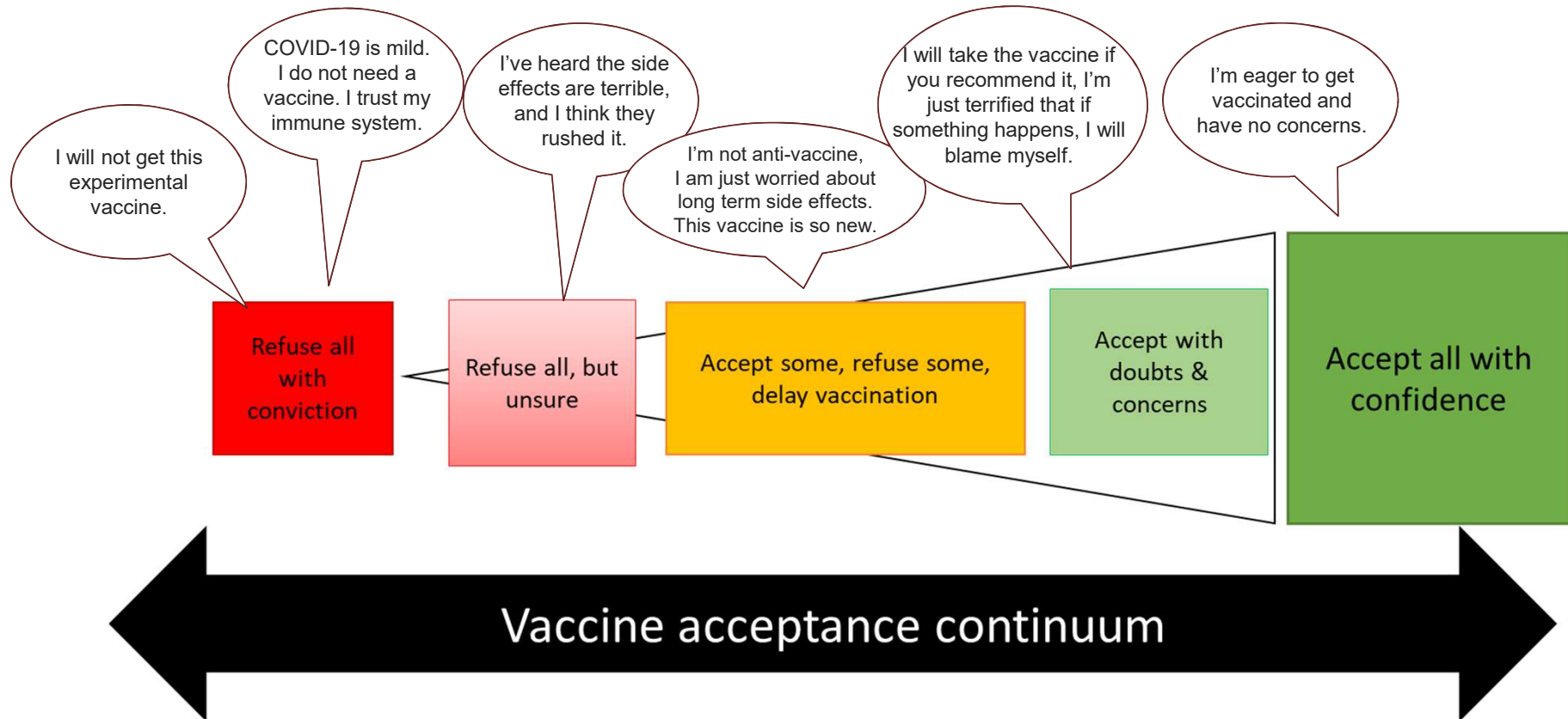
- Health care providers, especially maternity care providers, are well equipped to have these conversations
  - Bridges of trust
  - Experience with informed choice discussions, common during pregnancy
- Vaccines are recommended before, during, and after pregnancy
- Vaccine confidence for future childhood immunizations can be built or undermined during pregnancy

## Overall strategy for building vaccine confidence

- Listen actively, identify where the individual is on the vaccine acceptance continuum.
- Identify and acknowledge concerns.
- Identify common goals and values, explore how vaccination could be a way to achieve them.
- Tailor discussion to the specific individual, their circumstances, and their concerns.
- Integrate personal context with any facts and statistics.
- Address misinformation.
- Use a culturally appropriate approach, acknowledging the patient's unique context, values, and beliefs.



## Where is the individual on the vaccine acceptance continuum?



(MacDonald et al., 2021; Yaqub et al., 2014)

## Once identified, tailor conversation to where the individual is on the acceptance continuum

### Accepting



- If there are no concerns: provide a comfortable, positive vaccination experience.
- Advise the person of possible local reactions.
- Set an appointment for follow up vaccinations, as appropriate, and send a reminder close to the date.

### Hesitating



- Listen and identify the person's concerns
  - Let the person finish
- Don't minimize concerns
  - "Oh there's nothing to worry about, vaccination is very safe"
- Use plain language, avoid scientific jargon.
- Focus on concerns relevant to the individual.
- Have your own positive vaccination stories.

**MOTIVATIONAL INTERVIEWING** is particularly helpful for this group

### Refusing



- Keep it brief, but try to keep the door open.
- Aim to build trust, not to convince or voice judgement.
- Avoid confrontation or 'fact tennis'.
- Inform about consequences / risks of vaccine refusal.
- Be clear and consistent. Repeat your recommendation.

(NIH, 2020; Lewandowsky et al., 2021)

## Be aware of the issues

- Maintain up to date knowledge about the evidence on:
  - COVID-19 disease in pregnancy
  - Vaccine effectiveness and safety during pregnancy
  - Recommendations for their use
- Emotions impact decision making
  - Conversations should activate the “right” emotions
  - Put statistics in context, personalize the information—What does this mean for *their* lives?
- Cognitive biases impact how we think about vaccines and risk
- The same information presented different ways can be interpreted differently
  - 1 in 10 vs. 10%
  - People often have difficulty interpreting probabilities
- Be familiar with common misconceptions about vaccines, circulating mis/dis-information

([Scientific American, 2008](#); [The Decision Lab, 2020](#); [Presseau et al., 2021](#); [NIH, 2020](#))



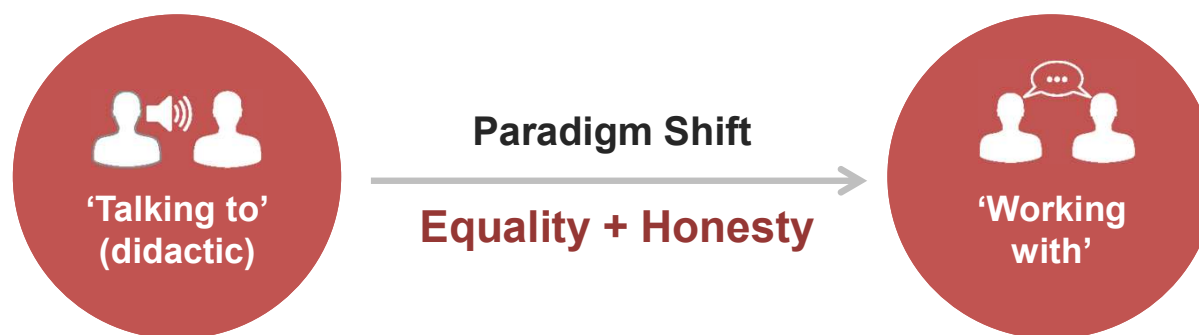
## Addressing mis/dis-information

- 65% of vaccine dis-information shared on social media is from just 12 sources/individuals
- Just being exposed to vaccine mis-information increases vaccine hesitancy
- The first thing people learn about something is often the information that sticks
  - Get ahead of mis-information by "pre-bunking"
- Ask individuals about the sources of their information, how they determine if the source is trustworthy
- Avoid repeating myths
- Explain how we know the information is incorrect, and what the correct information is instead

([Lewandowsky et al., 2020](#); [NPR, 2021](#); [Betsch et al., 2012](#); [Lewandowsky et al., 2021](#))

## Motivational interviewing

- A communication approach developed by Miller and Rollnick to elicit and strengthen **motivation for change**.
- Designed to support an individual's motivation for and movement toward a specific goal by eliciting and exploring the **person's own arguments for change**
- **4 key elements:** partnership, acceptance, compassion, and evocation.



(Gagneur, A., 2020)



## Motivational interviewing skills

Skill	Objective	Example
Open questions	To evoke responses and avoid doubts	"What do you know about the risks of COVID-19 during pregnancy?"
Affirmation	To encourage the individual and highlight their strengths	"You're really invested in doing what's best for your baby"
Reflective listening/summaries	To allow the individual to add nuance to and correct what they have just said <ul style="list-style-type: none"> <li>• Simple reflection: what the individual says</li> <li>• Complex reflection: what the individual means</li> </ul>	"I'm hearing that you're just not worried about getting very sick with COVID-19, and you think that the risks of vaccination outweigh the benefits. Does that sound right?"  "It sounds like you're really worried about your baby"
Elicit-share-elicit	How to give information/advice: <ul style="list-style-type: none"> <li>• <b>ELICIT</b> = ask what the parent/caregiver knows and ask permission to complete their knowledge</li> <li>• <b>SHARE</b> = provide the information /advice on the subject</li> <li>• <b>ELICIT</b> = verify what the parent/caregiver has understood and what they will do with this information</li> </ul>	"Tell me what you understand the risks of vaccination to be"  "Can I share what I know about the risks?"  "What questions do you have about this? How does this new information make you feel about the vaccine?"

(Gagneur, A., 2020)



### Key takeaways on strategies for building vaccine confidence

- Mis-information is a significant contributor to vaccine hesitancy –debunking mis-information is an important component of addressing vaccine hesitancy.
- Health care providers are well positioned to build vaccine confidence during pregnancy.
- Conversations should be tailored to the individual, their concerns, and their place on the continuum of vaccine acceptance.
- Motivational interviewing is a useful tool for addressing vaccine hesitancy.

## Polling question

What is the objective of the first "elicit" in the "elicit-inform-elicit" strategy of motivational interviewing?

1. Elicit what the individual plans to do with the information they have learned from your discussion
2. Elicit a positive emotion
3. Elicit a sense of fear of COVID-19
4. Elicit what the individual knows, and ask permission to add to that knowledge



## Case scenarios

## Scenario 1: Rosaline



- 38 years old, 12 weeks pregnant
- Haitian background
- She & husband not vaccinated for COVID-19
- BMI 36.5 kg/m<sup>2</sup>
- Plans to accept influenza and pertussis vaccines
- Doesn't trust pharmaceutical companies, thinks COVID-19 vaccines were developed too fast

## **Suggestions for discussion with Rosaline**

- ✓ Listen actively and identify where she is on the acceptance continuum.
- ✓ Ask follow up questions.
- ✓ Acknowledge her concerns and their validity.
- ✓ Help her identify her personal level of risk from COVID-19.
- ✓ Discuss the safety of the vaccine during pregnancy.
- ✓ Ask her how she is feeling about the discussion, new information.
- ✓ Follow up at the next visit.

## Scenario 2: Elise



- 28 years old, 24 weeks pregnant
- Stays at home, toddler in daycare part time
- Current pregnancy unplanned but welcome
- New relationship, partner not father of previous child, nervous about pregnancy
- Does not want to be vaccinated for COVID-19 or influenza
- Feels she is not at risk as she stays at home and doesn't see anyone

## Suggestions for discussion with Elise

- ✓ Listen actively and identify where she is on the acceptance continuum.
- ✓ Ask follow up questions.
- ✓ Help her identify her personal level of risk from COVID-19.
- ✓ Solicit and discuss any concerns about the safety of the vaccine during pregnancy.
- ✓ Ask her how she is feeling about the discussion, new information.
- ✓ Follow up at the next visit.



## Scenario 3: Jaya



- 33 years old, 21 weeks pregnant
- Single parent
- Received 2 doses of vaccine prior to pregnancy
- Doesn't want a third dose during pregnancy
  - Planning to get one after to provide antibodies through her breastmilk
- When prompted, reveals her first baby had growth restriction
  - Heard COVID-19 vaccine could impact placenta

## **Suggestions for discussion with Jaya**

- ✓ Listen actively and identify where she is on the acceptance continuum.
- ✓ Acknowledge her concerns for the well-being of her baby.
- ✓ Address the mis/disinformation associated with the concern.
- ✓ Help her identify her personal level of risk from COVID-19.
- ✓ Discuss the safety of the vaccine during pregnancy.
- ✓ Ask her how she is feeling about the discussion, new information.
- ✓ Follow up at the next visit.



## Key takeaways from scenarios

- Vaccine hesitancy is complex and highly variable between individuals and vaccines.
- Ask open-ended follow-up questions to understand their place on the acceptance continuum and their specific concerns.
- Conversations should be tailored to the individual and their circumstances.
- Conversations may occur over multiple visits.
- Build trust with the individual through respectful, culturally appropriate communication.

## Question & answer period

C15  
R(2)

# Subscribe for NACI publications and updates to the Canadian Immunization Guide

The screenshot shows the top navigation bar of the NACI website, including the Government of Canada logo and a search bar. Below the navigation is a breadcrumb trail: Canada.ca > Health > Healthy living > Vaccines and immunization. The main heading is "National Advisory Committee on Immunization (NACI): Statements and publications". A menu contains several options: "Statements and publications" (highlighted), "About us", "Meetings", "Workplan", "Methods and process", and "Related links". Below the menu, there is introductory text about NACI's role and a paragraph explaining that new statements are those published within the past five years. At the bottom of this section, there are two buttons: "Subscribe for updates" and "Canadian Immunization Guide". A red arrow points from the left towards the "Subscribe for updates" button.

**Tip:** Search “NACI updates” or “NACI subscribe” in your favourite search engine

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If other category, please specify:

<https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci.html>

## Slide 37

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**C(15)** We could also add a slide highlighting the vaccine hesitancy primer for HCPs  
<https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals>

Charbonneau, Danielle (PHAC/ASPC), 2022-02-23

**R(2)** Good idea

Robinson, Kerry (PHAC/ASPC), 2022-03-03

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COVID-19 for health professionals: Training and webinars

[www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/training.html](http://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/training.html)



National Collaborating Centre for Infectious Diseases

[nccid.ca/phac-webinars-on-covid-19-vaccines](http://nccid.ca/phac-webinars-on-covid-19-vaccines)



Canadian Vaccination Evidence Resource and Exchange Centre

<https://canvax.ca/canvax-presents-phac-webinar-series-covid-19-vaccines>



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# THANK YOU FOR JOINING US!

*Copies of the presentation and video will be made available on [canvax.ca](http://canvax.ca)*



**Supplemental slides as needed**

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## Vaccine hesitancy during pregnancy

- US study by Levy et al. surveyed 662 pregnant women from Dec 12, 2020 – Jan 14, 2021
  - Among the women who declined vaccination (N=277), the most common primary concerns were: **risk to the fetus or neonate** (45.8%), followed by **vaccine side effects** (17.7%).
- US study by Battarbee et al. conducted a cross-sectional survey among 915 pregnant women from Aug 9-Dec 10 2020
  - Women who were not willing to get a vaccine during pregnancy most frequently cited concerns about **vaccine safety for their pregnancy** (82%, 95% CI: 78–85%).
  - Other reasons included:
    - **concerns about vaccine safety for themselves** (68%, 95% CI: 63–72%)
    - **vaccine effectiveness** (52%, 95% CI: 47–56%)
    - **belief that they did not need the vaccine** (22%, 95% CI: 18–26%).

([Levy et al., 2021](#); [Battarbee et al., 2021](#))

## Vaccine hesitancy during pregnancy (cont'd)

- US study by Sutton et al. administered an anonymous online survey to 1012 women at an institution (including patients, providers, and staff) from Jan 7-Jan 29, 2021.
  - Among pregnant respondents, specific reasons for declination typically related to:
    - **concerns for the vaccine causing them or their fetus harm**
    - **causing infertility**
    - beliefs that they were at a **low risk of contracting or becoming severely ill from COVID-19.**
- US study by Townsel et al. conducted a cross-sectional, opt-in online survey of the entire employee workforce at an academic medical center from February 1-15, 2021.
  - The highest rates of concern were observed for **safety and effectiveness of the vaccine**, which were highest among pregnant participants and participants trying to conceive

([Sutton et al., 2021](#); [Townsel et al., 2021](#))