A Rapid Community Assessment to Understand Needs Regarding the COVID-19 Vaccine for Children 11 Years of Age and Younger in Milford, CT

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BACKGROUND

Since the beginning of the COVID-19 pandemic, more than one million deaths and 82 million cases in the United States have been recorded. Selected mitigation efforts include: social distancing, masking, improving indoor air filtration, and vaccination. For the latter, mass vaccination efforts began in early 2021, resulting in 83% of the national population age 5 years and older receiving at least one dose of the COVID-19 vaccine. The rate for children age 5-11 years who have received at least one vaccine dose (authorized in October 2021) is much lower at 29%. In Milford, CT, the geographic location for this project, 46% of 5-11 year-olds received at least one dose. Although higher than the national average, the Milford Health Department hopes to increase the COVID-19 vaccine coverage of at least one dose for children 5-11 years and also children younger than 5 years once the FDA Emergency Use Authorization (EUA) is obtained. Increasing vaccine uptake is critical because higher vaccination rates have been associated with fewer hospitalizations and death. Additionally, effective programming and communications from the Milford Health Department could strengthen its relationship with the community and facilitate the implementation of future department initiatives.

OBJECTIVES

• Conduct a rapid community assessment using CDC guidelines to better understand the COVID-19 vaccine perceptions and needs among parents and caregivers of children aged 11 and younger, this includes the barriers and facilitators to vaccination as well as the decision-making process
• Develop programmatic and communications-focused recommendations to increase COVID-19 vaccine uptake among children aged 11 and younger in Milford
• Gain insight into perceptions of childhood vaccines so that findings and recommendations can potentially be transferable to vaccines other than the one for COVID-19

METHODS

QUANTITATIVE DATA

• An online survey was designed in Qualtrics using the CDC’s Rapid Community Assessment question bank. There was a total of 51 questions for the 5-11 age group and 43 questions for the under 5 age group, with some questions skipped based on whether or not their child already received the vaccine. The average completion time was 10 minutes.
• Given the nature of a quality improvement project, the Milford Health Department shared the survey with Milford Public School parents, as well as parent groups and other community parents who have a regular connection with the department.
• The survey was open from April 5 to April 13, 2022. We received 115 responses, 101 of which were valid based on the eligibility criteria and completed consent form.
• Please note that all 14 children aged under 5 years old were listed as having 0 vaccine doses. This is due to children aged under 5 years old not being eligible to receive the COVID-19 vaccine yet when this action report was developed in May 2022.

**KEY INFORMANT INTERVIEW DATA**
• Nine (9) semi-structured interviews were conducted. Each interview lasted between 30 - 60 minutes and was audio recorded. All interviews were conducted via Zoom or phone, although in person was given as an option.
• Participants were recruited based on responses of the online survey. If they indicated “Yes” or “Maybe” to being interested in a follow-up interview, they were contacted via email by a member of the team to schedule an interview time and provide more information.
• Three team members conducted the interviews using a semi-structured interview guide, which was based off of the [CDC’s Rapid Community Assessment Community Interview Guide](#). Questions covered include attitudes toward the COVID-19 vaccine for children, barriers and facilitators to vaccination, trusted sources for vaccine information, ways the Milford Health Department can increase vaccine accessibility and confidence.
• Interviews were summarized using a Rapid Assessment Procedure template. Once each interview was summarized, the team synthesized findings into one interview summary document.

**RESULTS**

**ONLINE SURVEY (TABLE 1; FIGURE 1)**
• **Trust** – Of the survey respondents who indicated that they will definitely not or probably not receive the vaccine, 57% of them have little to no trust in the healthcare provider who administers the vaccine. However, there was a high level of trust for pediatricians and primary doctors among the survey respondents. While
COVID-19 vaccine is currently distributed and available at mass clinics and pharmacies in Milford, it is only available at a limited number of pediatric or primary care offices. Respondents indicated a low level of trust for government officials. Parents’ intention to have the child receive the COVID-19 vaccine was significantly higher among parents who trusted health care providers to administer the vaccine ($\chi^2$ analysis; p<0.01).

- **Referral** – Of the survey respondents in the 5-11 years age group, 46% of them indicated that a healthcare provider (doctor, nurse or other healthcare professional) has not recommended the COVID-19 vaccine for their child.

- **Incentives** – Of the total survey respondents, 45% of them think that offering cash incentives decreases their trust in the COVID-19 vaccine.

**KEY INFORMANT INTERVIEWS**

- **Long-Term Effects** – Most interview respondents expressed concern about the “unknown long-term effects” of the COVID-19 vaccine including: potential heart problems for boys, potential fertility issues for girls, and unknowns regarding health insurance coverage.

  “The heart issues with boys in particular I think is really concerning. The biggest thing for my husband and I is the long-term - what would happen in 10, 20 years from now and I don’t think anyone can reassure you on that. That was our biggest worry.”

- **Mistrust** – While interview respondents shared positive feedback about the Milford Health Department and the wide availability of vaccines, trust among health officials overall as it relates to the pandemic has eroded due to frequent regulation changes and poor communication. Of the various health official roles, respondents expressed trust of their child’s pediatrician, with some pediatricians recommending the vaccine, some not actively recommending it due to prior COVID-19 infection in the child, and one actively advising patients not to get the COVID-19 vaccine.

  “…So all of that kind of dishonesty or what we perceive as dishonesty has just really eroded our trust in the people making these decisions.”

- **Adequate Research** – There is a greater trust around childhood vaccines because of “decades of research” and personal experience, and the perceived severity and risk of an infection for something like polio or measles is higher than for COVID-19. Other respondents also indicated a perception that COVID-19 infections are mild, although additional parents might be persuaded to get their child vaccinated if a worse variant were to develop.

  “There’s no studies done on it and it’s all been really for emergency authorization use. It’s not you know, it’s not like you have 20 or 30 years worth of history like the flu would.”

- **Availability** - Interview respondents have noted that COVID-19 vaccines are widely available and are easily accessible
“Milford was great; we went to a local high school after my kids got out of school, it was easy.... I am grateful to Milford for providing us [the vaccine] with the kids’ locally.”

LIMITATIONS

- Based on Milford’s population distribution, our data reflect an under sampling of Hispanic and Black individuals, and an oversampling of White individuals. Given that vaccination coverage by race is lower for American Indian, Asian or Pacific Islanders, Black, and White individuals, sampling strategies could have aimed to oversample all of those populations.
- A large portion of our sample (n=45) already vaccinated their eligible child. More information could be gathered about community members who are unsure about getting the vaccine for their child.
- Community members were not directly involved in the survey or interview question design and implementation, which might have had a positive impact on the representation of the data and recommendations.

RECOMMENDATIONS

1. **Collaborate with local pediatricians** on a standardized promotion of accurate COVID-19 vaccine information, provide the option to receive the vaccine at the pediatrician’s office, and implement a process for identifying and working with pediatricians who are sharing inaccurate information.
2. **Implement a communications campaign** to address the three main vaccine concerns including heart problems in boys, fertility problems, and unknown long-term effects. Materials should not be branded with the CDC or CT DPH logos, and instead should emphasize expertise from local pediatricians.
3. **Learn more about the logistical issues regarding access.** 12 online survey respondents had challenges with clinic hours and online scheduling, however our interview sample did not reflect these challenges.
4. **Develop long-term trust with the community** through health department events and other initiatives.
5. Develop a long-term understanding of the vaccine development and implementation process by hosting an educational session and other educational initiatives.

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REFERENCES


RESOURCES