

Report for Putnam County COVID-19 Vaccine Survey of Parents of Children Aged 5-11

Putnam County Department of Health

On November 3, 2021, following Emergency Use Authorization (EUA) by the United States Food and Drug Administration (FDA) and the recommendation of the CDC Advisory Committee on Immunization Practices (ACIP), New York State approved use of the pediatric dose of the Pfizer BioNtech COVID-19 vaccination to children aged 5-11. In order to assess local attitudes and barriers to COVID-19 vaccination in this population, the Putnam County Department of Health (PCDOH) launched a self-administered online community survey. Survey participation was promoted through flyers in pediatricians’ offices, the Department’s website and social media platforms, cross promotion by schools and other local community partners, and a news release to local media outlets. The survey was available from October 25, 2021, through November 3, 2021, in both Spanish and English.

The following report contains summary charts and statistics produced directly from the survey software (© 2021 Alchemer) and additional demographic and cross tab analysis performed outside of Alchemer with data exports in Excel.

Survey Response and Eligibility

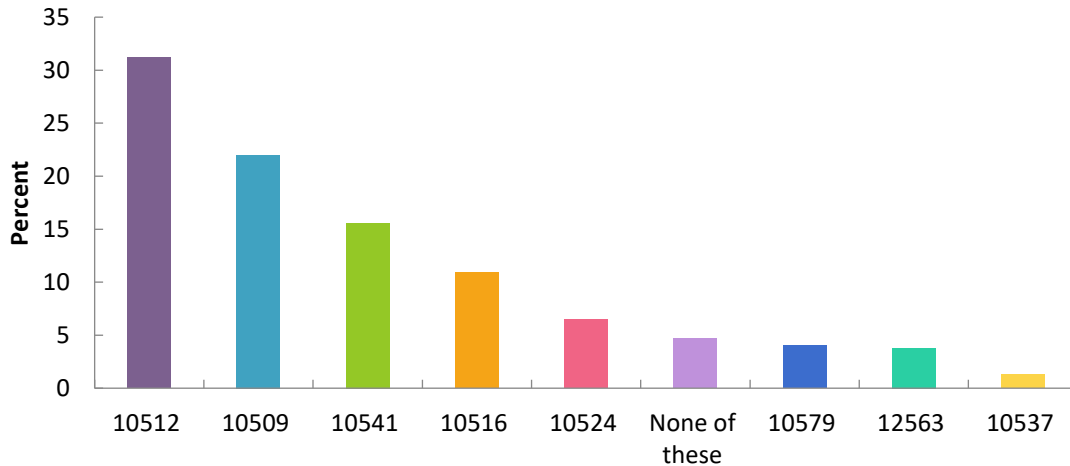
Eligibility was determined by the first two questions in the survey: “Are you the parent or guardian of a child or children who reside in Putnam County and are between 5-11 years of age?” and “Has another parent or guardian of your child or children already responded to this survey?” All respondents who answered “No” to the first question or “Yes” to the second question were excluded. Surveys with no responses beyond the eligibility questions were also excluded. Total number of children of respondents is the total of the self-reported count of children between 5 and 11 of all eligible respondents. Response totals will vary by question because a response was not required for all questions.

English Version		
Total Responses	Total Responses After Exclusion	Total Children of Respondents
789	728	1150
Spanish Version		
Total Responses	Total Responses After Exclusion	Total Children of Respondents
4	2	4
English and Spanish Versions Combined		
Total Responses	Total Responses after Exclusion	Total Children of Respondents
793	730	1154

Demographics

Respondents were asked the following series of demographic questions and distribution was assessed for representativeness of the county as a whole.

What zip code does your child or children live in?



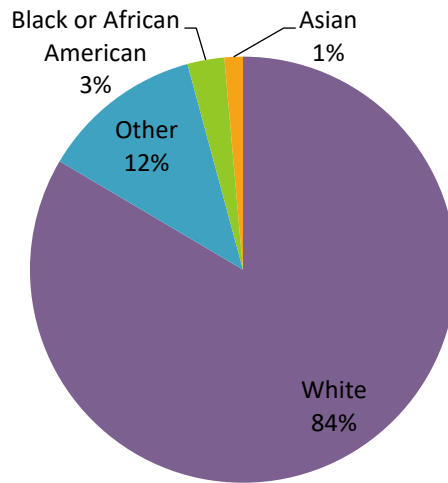
Respondent distribution by zip code compared to overall Putnam County population distribution by zip code

zip code	County		English Survey Respondents		English and Spanish Survey Respondents	
	Popn*	% Popn	# responses	% responses	# responses	% responses
Brewster 10509	19,421	19.9%	158	22.0%	158	21.9%
Carmel 10512	24,630	25.2%	224	31.2%	225	31.3%
Cold Spring 10516	5,462	5.6%	78	10.9%	78	10.8%
Garrison 10524	4,447	4.6%	47	6.5%	47	6.5%
Lake Peekskill 10537	2,270	2.3%	9	1.3%	9	1.3%
Mahopac 10541	24,420	25.0%	112	15.6%	112	15.6%
Putnam Valley 10579	8,633	8.8%	29	4.0%	29	4.0%
Patterson 12563	7,586	7.8%	27	3.8%	27	3.8%
None of these	799	0.8%	34	4.7%	35	4.9%
Total	97,668	100.0%	718	100.0%	720	100.0%

*2020 Census zip code population estimates

Residents of the zip codes 10516 (Cold Spring), 10524 (Garrison), and 10512 (Carmel) were over-represented in the survey while residents of the 10537 (Lake Peekskill), 10541 (Mahopac), 10579 (Putnam Valley), and 12563 (Patterson) zip codes were under-represented. The 35 respondents who answered “none of these” could be responding from households within Putnam County in one of several zip codes that extend into Putnam from other counties or could live in households outside Putnam and answered question 1 (meant to exclude households out of Putnam) inappropriately.

What race does your child or children identify with?



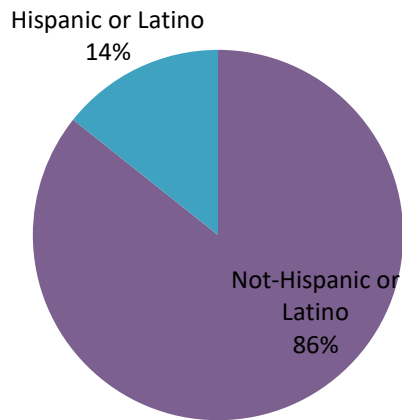
Respondent distribution by race compared to overall Putnam County population distribution by race

Race	County		English Respondents		English and Spanish Respondents	
	Popn*	% popn	# responses	% responses	# responses	% responses
White	84960	86.4%	595	83.5%	596	83.4%
Black	3352	3.4%	20	2.8%	21	2.9%
Asian	2293	2.3%	10	1.4%	10	1.4%
Other	7715	7.8%	88	12.3%	88	12.3%
Total	98320	100.0%	713	100.0%	715	100.0%

*American Community Survey 2019 population estimates

Distribution by race in survey respondents was similar to the distribution in the county as a whole, with White, Black, and Asian respondents relatively under-represented, and respondents selecting "other" race relatively over-represented. A third of respondents selecting other race who provided a free text response wrote in mixed race. Differences in proportions may be attributable to differences in methodology of race categorization between our survey and the census.

What ethnicity does your child or children identify with?



Ethnicity	County		English Respondents		English and Spanish Respondents	
	Popn*	% popn	# responses	% responses	# responses	% responses
Hispanic	16,126	16.4%	100	14.3%	102	14.6%
Not Hispanic	82,194	83.6%	599	85.7%	599	85.4%
Total	98,320	100%	699	100.00	701	100%

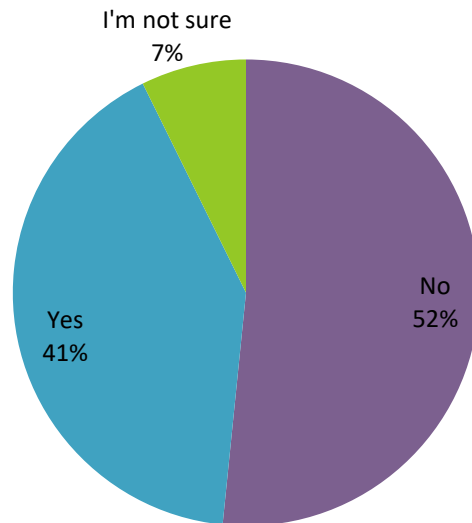
*American Community Survey 2019 population estimates

Distribution by ethnicity in survey respondents was similar to the distribution in the county as a whole, with residents of Hispanic ethnicity relatively under-represented, and non-Hispanic residents were relatively over-represented.

Attitudes and Perceptions Regarding COVID-19 Vaccination in Children

Respondents were asked the following questions to assess willingness to have children vaccinated and reasons for unwillingness to vaccinate.

When the Pfizer COVID-19 vaccine becomes available for children 5-11 years old or older, will you be interested in getting your child or children vaccinated?



There were 730 total responses to this question across both surveys (2 Spanish, 728 English). 41% of respondents stated they were interested in having their children vaccinated, 52% were not interested and 7% were unsure.

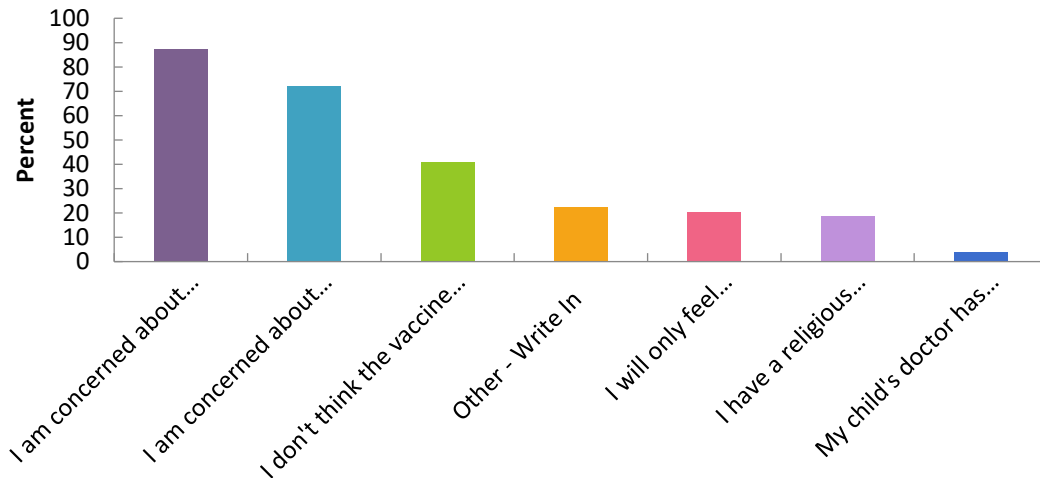
To look for differences compared to the overall survey population, a crosstab analysis by zip code, race, and ethnicity was completed for responses of “No” and “I’m not sure”. Numbers within demographic groups are small, and so inferences should be made with caution.

Crosstab analysis revealed differences based on geography within the county. A substantially higher proportion of respondents in zip codes Mahopac 10541 (82/108 or 76%), Patterson 12563 (18/27 or 67%) and in Brewster 10509 (102/159 or 64%) answered “No”. A substantially lower proportion answered “No” in Cold Spring 10516 (8/78 or 10%), Garrison 10524 (6/41 or 15%) and Putnam Valley 10579 (7/29 or 24%). These results may be predictive of a wide variation in vaccination rates in 5–11-year old’s in different parts of the county.

Differences by race and ethnicity were less pronounced, however there was a higher proportion of respondents who classified their race as “Other” who answered “No” (57/89 or 64%). The proportion answering “No” in other minorities groups (Black, Asian, and Hispanic) was lower or similar to that in White respondents, however the sample size was very small.

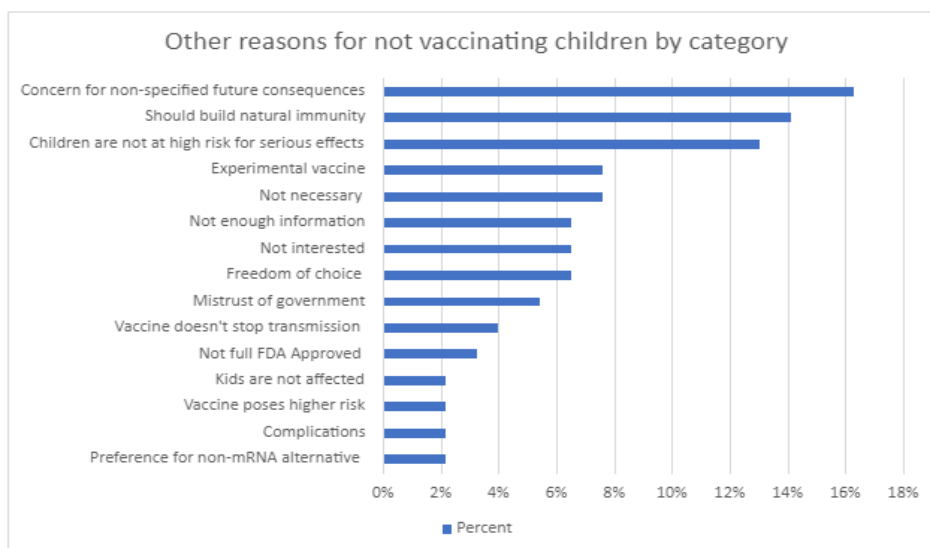
To further explore reasons for vaccination refusal or hesitancy amongst parents, the following question was presented to respondents who answered “No” or “I’m not sure.”

When the Pfizer COVID-19 vaccine becomes available for children 5-11 years old, I would not be interested, or am unsure if I’d be interested, in getting my child or children vaccinated because... [Check all that apply]



There were a total of 431 respondents (429 English, 2 Spanish) and 1,147 responses across both surveys. Proportions are the number of responses per option divided by the total number of respondents. The top concern amongst parents was long term negative health consequences (87%) followed by side effects (72%) and lack of efficacy (41%). A smaller proportion of respondents stated concern over lack of full FDA approval (21%), religious objections (19%), or recommendations from doctors that it is contraindicated in their child due to another health condition (4%).

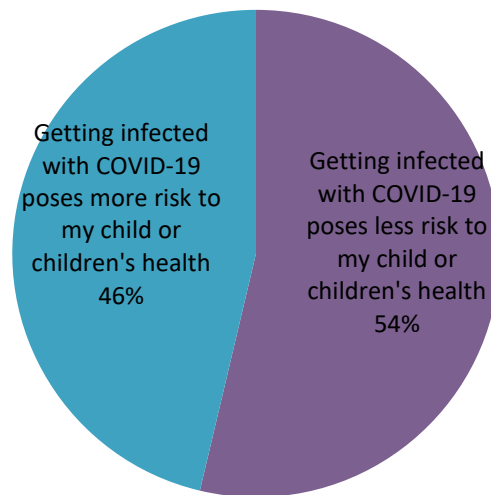
Other reasons included in free text responses were grouped by category and are displayed in the chart below.



The highest proportion of respondents providing free text reasons for not getting vaccinated (15/92 or 16%) expressed concern about non-specified/unknown future negative consequences of vaccination. Comments across categories commonly mentioned that children develop a natural immunity, children are not at high risk for serious effects from COVID-19, or that the vaccine is part of an experimental study.

To further explore the role of risk perception in parental decision-making regarding vaccination in children aged 5-11 the following question was asked of all respondents:

Please mark the statement that best describes how you feel about the risk associated with COVID-19 infection compared to the risk associated with COVID-19 vaccination to your child or children's health:

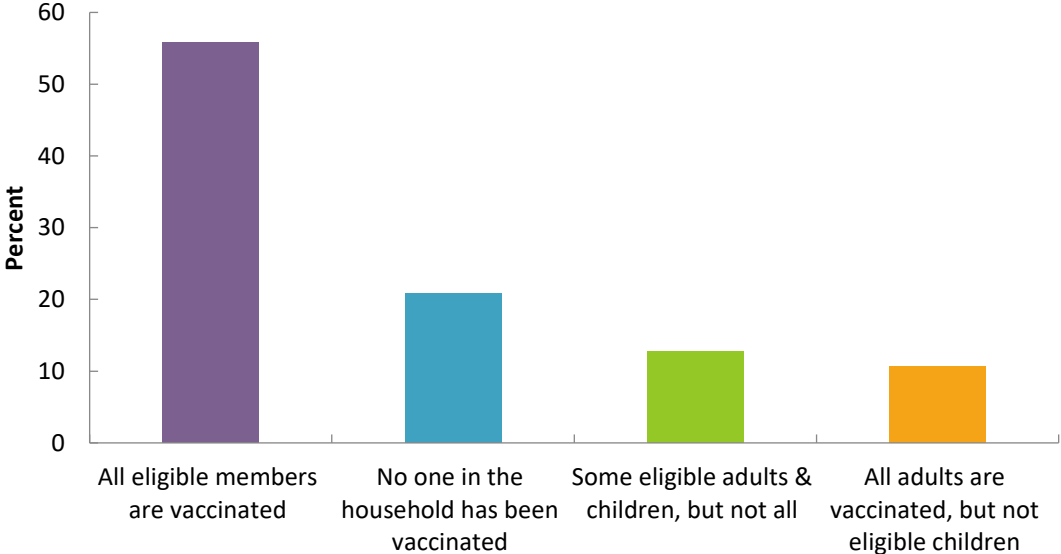


There were a total of 710 respondents (708 English, 2 Spanish) with a small majority (54%) perceiving greater risk to their children's health from vaccination than COVID-19 disease.

A crosstab analysis was completed to better understand the role of risk perception in intention to vaccinate. Not surprisingly, these responses were highly concordant with 86% of respondents who think that COVID-19 poses more risk than vaccination saying they are interested in having their children vaccinated, and 88% of respondents who think that vaccination poses greater risk than COVID-19 saying they are not interested in having their children vaccinated.

To further explore if vaccine decision making for other members of the household is predictive of intention to vaccinate children, we asked the following question:

What is the COVID-19 vaccination status of others in the household?



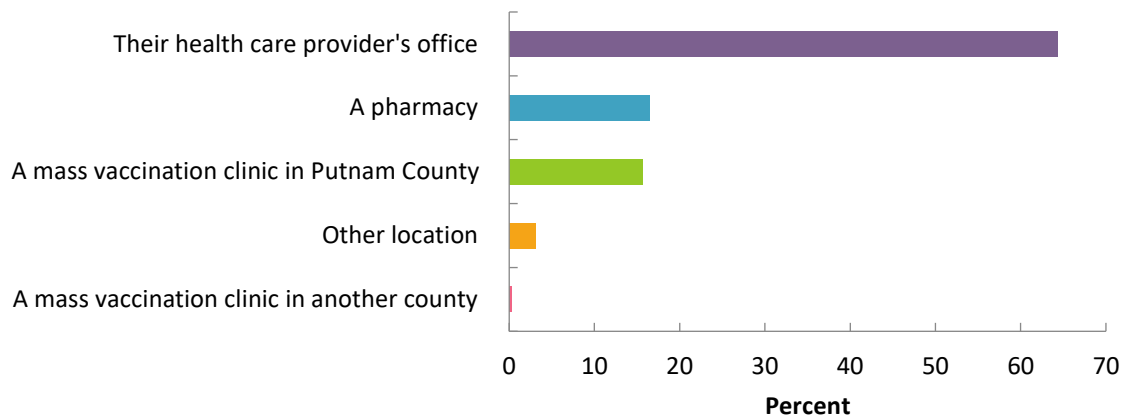
There were a total of 704 respondents (702 English, 2 Spanish), with a small majority of respondent households (56%) having all eligible members vaccinated.

A crosstab analysis by intention to vaccinate was completed to look for association between these two variables. Not surprisingly, these responses were highly concordant with 72% of respondents from households where all eligible members are vaccinated saying they are interested in having their children vaccinated, and 100% of respondents from households where no one is vaccinated saying they are not interested in having their children vaccinated. A high proportion of respondents from households where all adults but no eligible children have been vaccinated, and where some but not all eligible adults and children had been vaccinated also had no interest in vaccinating 5–11-year old’s (82% and 93% respectively). Past decision making on vaccination is likely to be predictive of decision making for newly eligible children.

Access to COVID-19 Vaccination for Children

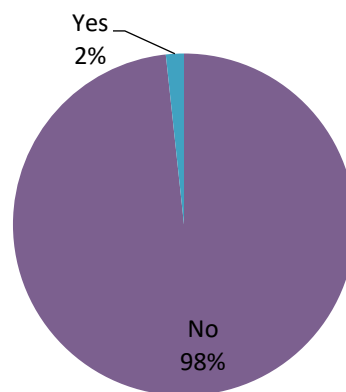
Respondents were asked the following questions to assess factors affecting resident ability to access vaccination for their children.

Which of the following places would be most convenient for your child or children to get vaccinated for COVID-19?



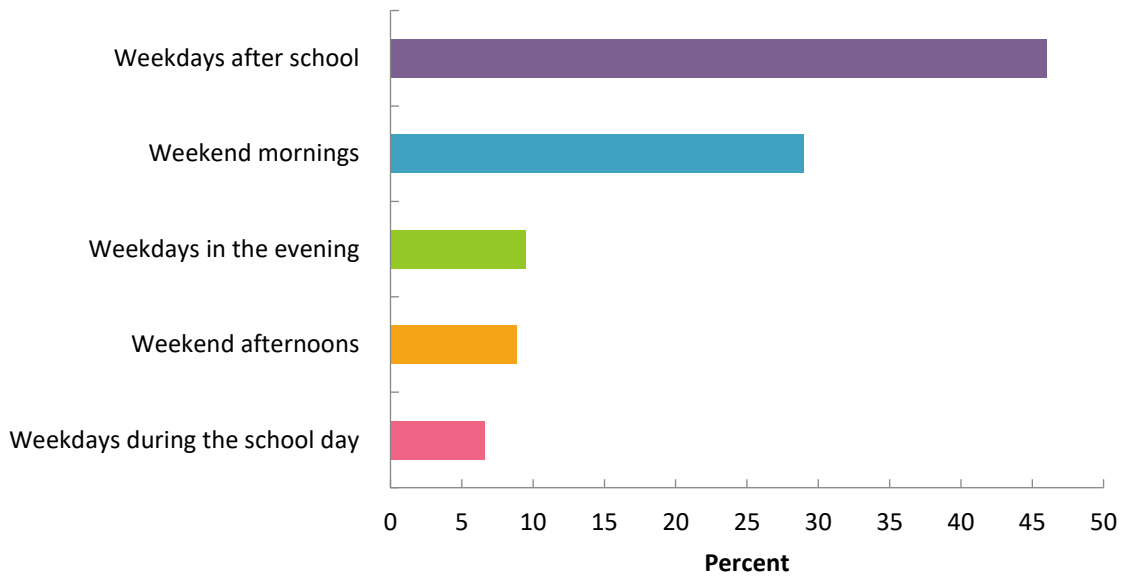
There were a total of 352 responses to this question across both surveys (351 English, 1 Spanish). The great majority of respondents (64%) stated a preference for having their children vaccinated in their healthcare providers office. A similar proportion stated a preference for having children vaccinated at a pharmacy (17%) or a mass vaccination clinic in Putnam County (16%). Of the nine respondents that provided a free text "other" response, six said "school."

Do you require public transportation to get your child or children to a vaccination site?



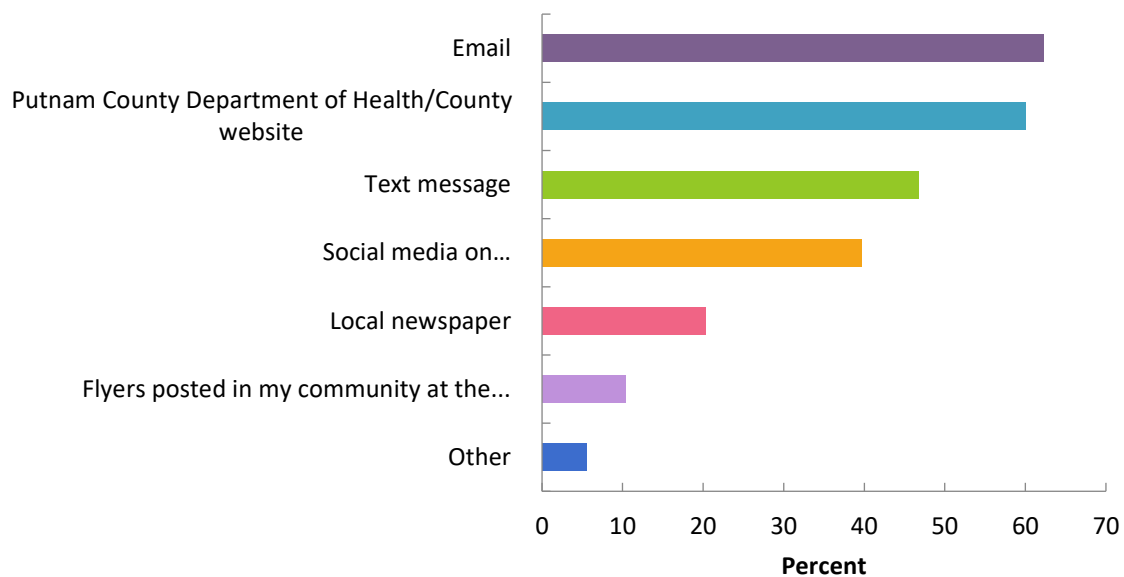
There were a total of 346 responses to this question across both surveys (345 English, 1 Spanish). Over 98% do not require public transportation to get children to a vaccination clinic.

What days and times would be most convenient for your child or children to get vaccinated for COVID-19?



There were a total of 349 responses to this question across both surveys (348 English, 1 Spanish). The highest proportion of respondents (46%) stated a preference for weekdays after school. Amongst those planning to have their children vaccinated, the second most common preference was for weekend mornings (29%).

How would you like to find out about opportunities for your child or children to get vaccinated for COVID-19? (check all that apply)



There were a total of 346 respondents to this question across both surveys (345 English, 1 Spanish). The highest proportion of respondents preferred to get information via email (62%) and on the PCDOH website (60%). Text message (47%) and social media (40%) were also common preferences. Facebook was the most preferred social media platform, mentioned by 96% of respondents who chose social media. Half of the 10 respondents that preferred information posted in the community specified grocery stores as a location for posting. Of the 17 respondents who wrote in other preferred methods of communication, 65% mentioned doctor's offices.

Discussion

Our survey shows greater interest in COVID vaccination for children aged 5-11 in Putnam County residents than that seen in national surveys. For example, the October 2021 Kaiser Family Foundation COVID-19 Vaccine Monitor Survey found 27% of parents of 5–11-year-olds were eager to get a vaccine for their child, while our survey found 41% of parents interested in getting their 5–11-year-old children vaccinated (Hamel, et al., 2021). Closer examination reveals that the countywide result masks wide variation in interest in vaccination based on geography within the county. In contrast, there is little geographic variability in the proportion of respondents who are uncertain about vaccinating 5–11-year-old children. Based on these results, vaccine providers should anticipate greater resistance to vaccination promotion efforts in zip codes with low interest in vaccination. Education and outreach should continue in all parts of the county to address the concerns among those who are uncertain about vaccination.

Respondents reluctant to vaccinate their child or children most often cited concern about long term or unknown future negative consequences and immediate side effects. There were also strong indications of skepticism that the vaccine is effective and necessary. This finding was reinforced by a high number of write in comments stating a preference for natural immunity over vaccine induced immunity and the strong association between intent to vaccinate and risk perception for natural infection vs vaccination. Challenges in overcoming firmly rooted anti-vaccine beliefs are well recognized. None-the-less, with approximately 7% of respondents unsure about vaccination, continued outreach and education efforts to overcome concerns about vaccination grounded in misinformation are still indicated. Given the great majority of respondents stating a preference for receiving vaccines in healthcare providers offices, providers are most likely in the strongest position to be successful in this endeavor. Putnam County vaccine providers should be prepared to address a wide variety of concerns with their patients.

The most preferred location and time for receiving vaccines were weekdays after school at their healthcare providers offices. The participation of county health care providers in the New York State COVID-19 vaccination program will be key to achieving high vaccination rates in Putnam County children ages 5-11. With over 30% of respondents stating a preference for vaccination at mass vaccination clinics or pharmacies, the PCDOH and local pharmacies will also continue to play an important part in vaccination efforts in this population.

Finally, survey results indicate that Putnam County vaccination providers should continue to use multiple modalities to communicate vaccination information to the population at large. Email and the PCDOH

website are the two primary ways that respondents would like to find out about opportunities for their child or children to get vaccinated.

There are limitations that should be considered in the interpretation of this survey:

- As there was no incentive provided for survey participation, there is likely a strong response bias towards individuals with strong feelings about COVID-19 vaccination. The survey may have failed to capture parents who do not have strong feelings, or have not considered, vaccination for their children.
- The survey is not demographically representative of the Putnam County Population as a whole. Over-represented groups include residents of zip codes with a higher proportion of respondents with high interest in vaccinating their children (Cold Spring and Garrison) while underrepresented groups include residents of zip codes with low interest (Mahopac and Patterson). Overall survey results are likely skewed toward residents with greater support for vaccination.

References

Hamel, L., Lopes, L., Sparks, G., Kirzinger, A., Kearney, A., & Stokes, M. (2021). *KFF COVID-19 Vaccine Monitor: October 2021*. KFF. Retrieved from <https://www.kff.org/coronavirus-covid-19/poll-finding/kff-covid-19-vaccine-monitor-october-2021/>