COVID-19 Vaccination Hesitancy and Impact Among LGBTQ+ Pennsylvanians:

Results of an online community survey



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Background

Existing health disparities related to barriers to care and minority stress indicated that the LGBTQ+ population would be at higher risk for COVID-19. As the COVID-19 pandemic continues and vaccination availability continues to increase, it is essential to address the known barriers to care affecting the LGBTQ+ community, to ensure not only vaccine availability, but also direct attention to other barriers such as vaccine hesitancy. According to the 2020 Pennsylvania LGBTQ+ Health Needs Assessment, only 44.8% of LGBTQ+ Pennsylvanians had received a flu vaccination within the past year.⁷ Having previously received a flu vaccine has been identified as a possible indicator of who will receive the COVID-19 vaccine in other reports.^{1, 3} More than one in three LGBTQ+ Pennsylvanians feared seeking healthcare services because of past or potential negative reactions from healthcare providers. Initial research suggested that medical mistrust and barriers to care may also contribute to vaccine hesitancy in this population.^{1, 4, 6} A survey on COVID-19 vaccine hesitancy by Out Boulder indicated 17% of LGBTQ+ respondents did not plan to get the COVID-19 vaccine or were unsure if they planned to get the vaccine.⁴

LGBTQ+ people face health challenges that vary across the diverse race, ethnic, and cultural identities of LGBTQ+ people.⁵ This survey of LGBTQ+ Pennsylvanians provides a cross-sectional snapshot of respondents' experiences and opinions. Factors including historical medical mistrust within a community, concerns about the relative newness of the available COVID-19 vaccines, little available information about long-term effects, concerns about cost, and others are likely to impact vaccine administration throughout the United States.^{1, 6}

Pennsylvania utilized a multi-phase plan to distribute COVID-19 vaccines.² This plan applied to most residents of Pennsylvania; Philadelphia County followed a separate vaccination distribution plan. Phase 1A of the statewide plan, beginning on December 14, 2021, included persons 65 and older, long-term care facility residents, health care personnel, and persons 16 to 64 with high-risk health conditions, including HIV. Phase 1B, which included additional care providing professions, correctional officers, food and agricultural workers, U.S. postal workers, manufacturing workers, educators, clergy, public transit workers, and childcare professionals opened on April 5th. Phase 1C opened a week later on April 12th expanding vaccine access to additional essential workers, including those in the legal sector, financial sector, transportation, and food service, and others. Phase 2, opened on April 13, included all residents of Pennsylvania 16 and older. According to data collected by the Kaiser Family Foundation, as of April 26, 2021, 9,007,319 Pennsylvanians (more than 42% of Pennsylvanians) had received 1 or more doses of a COVID-19 vaccine.⁸ As of the release of this report, neither the CDC nor the Pennsylvania Department of Health had included questions on sexual orientation or gender identity (SOGI) in tracking the COVID-19 vaccine distribution.

To address the gap in data available on the experiences of LGBTQ+ people with regards to Pennsylvania's COVID-19 vaccine distribution, researchers at Bradbury-Sullivan LGBT Community Center and the Graduate School of Social Work and Social Research at Bryn Mawr College, initiated an IRB-approved study of vaccine access and vaccine hesitancy among LGBTQ+ Pennsylvanians. The goal of the research is to assess the extent to which LGBTQ+ communities in Pennsylvania are receiving vaccination for COVID-19, investigate vaccine hesitancy, and provide a survey model that can be adapted in other locations.

Methodology

The online survey was administered using Qualtrics and contained a total of 20 questions. Not all questions were presented to all potential respondents based on self-reported vaccination status. Respondents who indicated that they had received one or two doses of a COVID-19 vaccine were not given a subset of questions on vaccine hesitancy. Survey respondents were asked about their knowledge, behavior, and attitude towards the COVID-19 vaccines, as well as their adherence to precautions including wearing a face mask, practicing social distancing, and abstaining from sex with partners outside of their households. All respondents were asked basic demographic questions and questions about current COVID-19 safety habits. Data collection took place from March 4, 2021 until April 5, 2021. Data collection resulted in 1,659 respondents. The convenience style sample was achieved with support from LGBTQ+-focused community-based organizations across Pennsylvania. Partner organizations distributed the survey link to community members through email newsletters and social media platforms, such as Instagram and Facebook. A total of 1,545 respondents were included in analysis after excluding those that did not agree to participate, were not 18 or older, were not a Pennsylvania resident, or did not identify as LGBTQ+. No responses were excluded based on zip code. This project was approved by the Institutional Review Board at Bryn Mawr College, through the Graduate School of Social Work and Social Research.

Summary of Findings

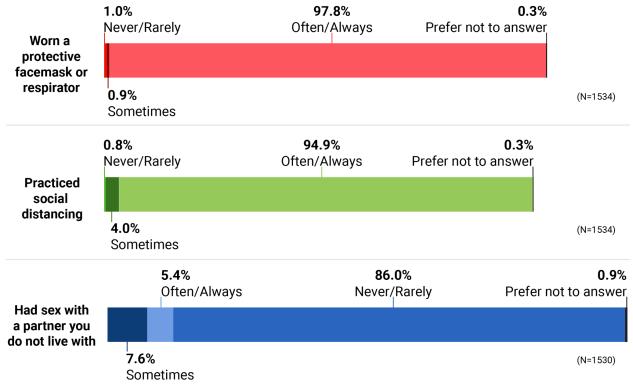
The data suggest that the majority of LGBTQ+ Pennsylvanians are adhering to public health guidelines around COVID-19. 97.8% of LGBTQ+ Pennsylvanians often or always wear a mask. 94.9% of LGBTQ+ Pennsylvanians often or always practice social-distancing. However, 14% of LGBTQ+ Pennsylvanians have engaged in sex with someone they don't live with during the COVID-19 pandemic. The data also suggests that most LGBTQ+ Pennsylvanians want to be vaccinated against COVID-19. 54.0% have received at least one dose of a vaccine. Of those who have not, 85.3% would get a vaccine as soon as it was available to them. However, barriers to care are limiting LGBTQ+ Pennsylvanians' ability to do so. Of those who have yet to be vaccinated, 40.8% do not know where to go to receive a vaccine, and 46.0% have not contacted anyone about making a vaccine appointment. Other barriers include a misunderstanding of costs associated with the vaccine, transportation to vaccination sites, accessibility of vaccination sites, and the need to take off work, along with concerns about the vaccination testing and approval process.

Top 3 Concerns of Vaccine Hesitant LGBTQ+ Pennsylvanians (N = 92)

- 1. I have concerns about safety **58.7%**
- 2. I feel that other people need the vaccine more than me 38.0%
- 3. I have concerns about effectiveness 35.9%

LGBTQ+ Pennsylvanians who were undecided or unwilling to get a COVID-19 vaccine were more likely to be concerned with safety and efficacy than those who were not hesitant about vaccination. Among LGBTQ+ Pennsylvanians not hesitant about getting a COVID-19 vaccine, the most frequently reported concern was feeling that others needed the vaccine more than them. Concern for others was the most reported reason that might prevent this group from vaccination.

Safety Actions Taken (past 30 days)



Between Group Disparities

Of Black LGBTQ+ Pennsylvanians, 57.5% had **not** been vaccinated compared to 45.8% of all LGBTQ+ Pennsylvanians. Of Black LGBTQ+ Pennsylvanians who had not been vaccinated, 41.3% did not know where to get a vaccine. However, 67.4% of Black LGBTQ+ Pennsylvanians who have not yet received at least one dose of the vaccine would get the vaccine as soon as it is available to them. Black LGBTQ+ Pennsylvanians are accessing COVID-19 vaccinations at a lower rate than the larger LGBTQ+ community and display more hesitancy than other LGBTQ+ Pennsylvanians.

Transgender and non-binary Pennsylvanians reported less certainty about where to get a COVID-19 vaccine. Only 56.3% of transgender and non-binary respondents reported knowing where to get a vaccine, compared to 58.9% of all LGBTQ+ Pennsylvanians.

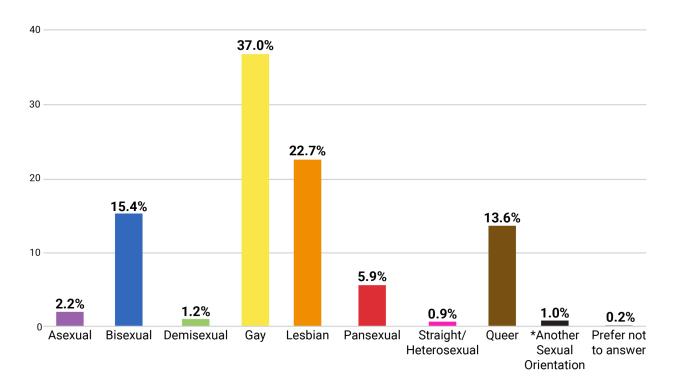
Respondents who reported being HIV+ were more likely to have received one or more doses of a vaccine (68.5%), compared to all LGBTQ+ Pennsylvanians (54.0%), Black respondents (42.5%), and transgender and non-binary respondents (45.3%). HIV+ LGBTQ+ Pennsylvanians also reported strong willingness to receive the vaccine if they had not already (82.1%). The majority of HIV+ LGBTQ+ Pennsylvania reported knowing where to get a vaccine (71.4%).

Living in a rural county may be a factor in whether or not LGBTQ+ Pennsylvanians have received a vaccine or are vaccine hesitant. 39.5% of rural LGBTQ+ Pennsylvanians have not received a vaccination, compared to 46.4% of suburban or urban respondents. However, 10.4%

of rural LGBTQ+ Pennsylvanians who had not yet received a dose of a COVID-19 vaccine reported that they would get a vaccine if one were available to them today. Only 7.1% of suburban and urban respondents who had not received a dose of a COVID-19 vaccine were willing to get a vaccine if one was available. Rural and non-rural LGBTQ+ Pennsylvanians may have different needs regarding vaccination access and education.

Demographics

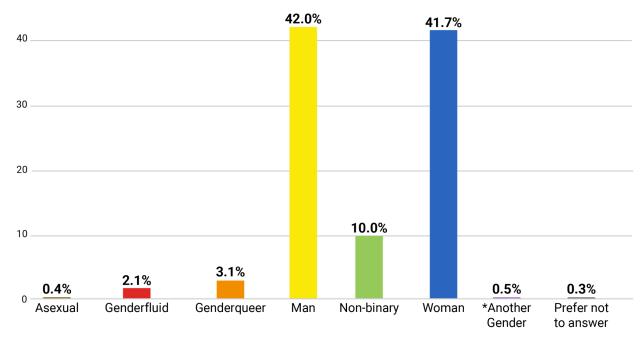
Data was collected on respondents' sexual orientation, gender identity, race and ethnicity, and age. Respondents were also asked to provide the zip code in which they currently live.



Sexual Orientation (N = 1536)

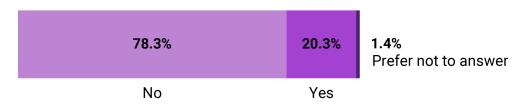
*"Another" allowed respondents to write in their own response.

Gender Identity (N = 1534)



*"Another" allowed respondents to write in their own response.

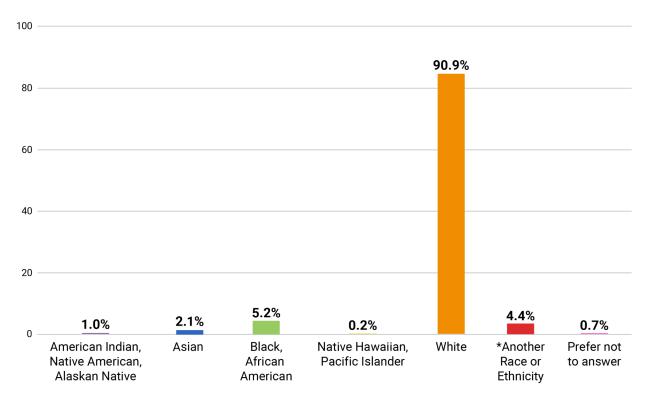
Do you identify as Transgender or Non-Binary? (N = 1521)



Age Range (N = 1543)

Respondents range in age from 18 to 81 years old. The online survey was only open to participants 18 and older.

Race and Ethnicity (N = 1532)



*"Another" allowed respondents to write in their own response.

Geographic Distribution (N = 1536)

Respondents were asked for the zip code in which they lived. Respondents were from 413 Pennsylvania zip codes and 56 of Pennsylvania's 67 counties. Counties without respondents were Cameron, Clarion, Elk, Forest, Jefferson, Juniata, Potter, Sullivan, Susquehanna, Warren, and Wyoming counties.

Future Considerations

A limitation to conducting this research was that the survey was administered online only. Additionally, survey promotion, occurring primarily through the assistance of partner organizations, was not funded and no paid promotion occurred. Paid promotion may have resulted in a larger respondent pool or increased diversity, if this promotion had been targeted to underrepresented groups (geographic areas, respondents of color, etc.) An additional limitation is the quick pace of change in the national vaccine distribution effort. For example, a single-dose vaccine was approved for use during the data collection period.

A review of respondents' text responses to questions about sexual orientation and gender identity indicate that at least some respondents would have preferred being able to select all options that applied rather than selecting only one choice.

Respondents were asked about racial and ethnic identity; however Hispanic (or Latina, Latino, or Latinx) appears to have not been included in the Qualtrics survey. Multiple respondents included Hispanic or Latina/o/x identity in text response under "another racial or ethnic identity". For this reason, the reported percentage of Hispanic and Latina/o/x respondents may be an underestimate.

Despite these limitations, the online community survey did reach diverse LGBTQ+ respondents across the state, collecting important information on the impact of COVID-19 vaccination for LGBTQ+ Pennsylvanians. From this information, the authors propose the following recommendations:

Recommendations

- Vaccines should be offered at LGBTQ+-affirming community-based sites to address the barriers to care that may inhibit LGBTQ+ Pennsylvanians from seeking vaccinations from more traditional healthcare providers.
- Trusted messenger strategies should be utilized to provide tailored information to LGBTQ+ Pennsylvanians about where vaccines are available and how to make an appointment. Such outreach campaigns should also address misinformation about costs and side effects of the vaccines.
- Public health professionals and healthcare providers should partner with LGBTQ+ community-based organizations to utilize an intersectional approach to addressing vaccine hesitancy that acknowledges and responds to the unique concerns of Black LGBTQ+ Pennsylvanians.
- Pennsylvania Department of Health and the CDC should prioritize sexual orientation and gender identity data collection for COVID-19 vaccine tracking

Data Collection Partners

Alder Health Services Bradbury-Sullivan LGBT Community Center Hugh Lane Wellness Foundation LGBT Center of Greater Reading LGBT Center of Central PA Mosaic Medical Rainbow Rose Center William Way LGBT Community Center

Suggested Citation

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