



The Harvard Center for Population and Development Studies

Working Paper Series

Plague of US missing COVID-19 data for race/ethnicity: Debacle continues with vaccination data

N. Krieger, PhD¹, P. Waterman, MPH², J. T. Chen, ScD³, C. Testa, BS⁴,
M. Santillana, PhD⁵, and W. P. Hanage, PhD⁶

February 8, 2021

HCPDS Working Paper Volume 21, Number 1

The views expressed in this paper are those of the author(s) and do not necessarily reflect those of the Harvard Center for Population and Development Studies.

Affiliations

1. Nancy Krieger, Professor of Social Epidemiology and American Cancer Society, Clinical Research Professor, Department of Social and Behavioral Sciences, Harvard T.H. Chan School of Public Health, 677 Huntington Avenue, Boston, MA 02115
email: nkrieger@hsph.harvard.edu
2. Pamela D. Waterman, Project Director, Department of Social and Behavioral Sciences, Harvard T.H. Chan School of Public Health, Boston, MA
email: <mailto:pwaterma@hsph.harvard.edu>
3. Jarvis T. Chen, Lecturer on Social and Behavioral Sciences, Department of Social and Behavioral Sciences, Harvard T.H. Chan School of Public Health, Boston, MA
email: <mailto:jarvis@hsph.harvard.edu>
4. Christian Testa, Statistical Data Analyst, Department of Social and Behavioral Sciences, Harvard T.H. Chan School of Public Health, Boston, MA
email: ctesta@hsph.harvard.edu
5. Mauricio Santillana, Director, Machine Intelligence Lab, Boston Children's Hospital, Assistant Professor, Department of Pediatrics, Harvard Medical School, Assistant Professor, Department of Epidemiology, Harvard T.H. Chan School of Public Health, Faculty, Computational Health Informatics Program, Boston Children's Hospital, Associate, Harvard Institute for Applied Computational Science, Boston, MA
email: msantill@g.harvard.edu
6. William P. Hanage, Associate Professor of Epidemiology, Department of Epidemiology, Center for Communicable Disease Dynamics, Harvard T.H. Chan School of Public Health, Boston, MA
email: whanage@hsph.harvard.edu

Corresponding Author

Nancy Krieger, PhD

Professor of Social Epidemiology

American Cancer Society Clinical Research Professor, Department of Social and Behavioral Sciences;
Harvard T.H. Chan School of Public Health
677 Huntington Avenue, Boston, MA 02115

Email: nkrieger@hsph.harvard.edu

Phone: 617-432-1571

Author contributions: NK conceptualized and drafted the work; all authors contributed to interpreting the data, revising the draft for important intellectual content, approved the final version for submission, and agree to be accountable for all aspects of the work.

COI: None of the authors have any conflict of interest and no external funding supported this work.

IRB: The research is exempt from IRB review (no human subjects)

Word Count: 400 words

References: 5

Figures: 1

Submitted: February 5, 2021

Abstract

The new Feb 2 MMWR report – which documented that fully 48.1% of persons vaccinated against COVID-19 in the 1st month of rollout (December 14, 2020-January 14, 2021) were missing data on race/ethnicity (whereas only 0.1% and 3% were missing data respectively on age and sex) – was tellingly published on “Groundhog Day,” and evokes the phrase’s other contemporary meaning of an endlessly repeating time-loop (per the 1993 comic film of that title). We also update the data on COVID-19 cases missing data on race/ethnicity: for the most recent period (Dec 2, 2020-Feb 3, 2021), it stands at 33%, only a modest decline since the 43% missing we reported in the HCPDS Working Paper for Aug 28-Sept 16, 2020.

In the US, February 2 is “Groundhog Day,” when the famous Punxsutawney, Pennsylvania groundhog’s sighting or not of its shadow predicts how long winter will last. The phrase also now evokes an endless time-loop, following a 1993 comic film in which an egotistical cynical weather reporter assigned to film the groundhog gets stuck in a time glitch, endlessly repeating the day. He only escapes by learning the errors of his ways, redeemed by critical self-reflection leading to self-improvement and finally authentic love for another person.¹

On February 2, 2021, readers of the US Centers for Disease Control Morbidity and Mortality report² could be forgiven for thinking we likewise had entered a repeating time-loop. Why? Because among the 12.9 million persons who initiated vaccination against COVID-19 during the first month of the US vaccine rollout (December 14, 2020-January 14, 2021), fully 48.1% of persons lacked data on race/ethnicity, whereas only 0.1% and 3.0% were missing data respectively on age and sex² – this despite the reporting form prominently indicating data on race and ethnicity are required (Figure 1). These data are essential to ensure that the vaccine rollout meets stated standards and maintains equity in vaccine access, and vaccine confidence.

We have been here before. In early April 2020, US journalists, advocates, and scientists raised alarm at gross gaps in data on race/ethnicity for COVID-19 cases and deaths, impeding the ability to document health inequities and guide interventions.³ While the percent of COVID-19 deaths missing racial/ethnic data finally now is low (<1%), not so for cases: despite reporting mandates, these data were missing for 43% of COVID-19 cases reported between August 28 and September 16 2020,⁴ and for 33% reported between December 2, 2020 and February 3, 2021.

We are back to square one. Journalists, advocates, and scientists are again decrying the extensive missing data on race/ethnicity for vaccination records, while affluent white persons with good computer access to book appointments are flocking to vaccination sites set up to serve communities of color hard hit by COVID.⁵

At a time of heightened awareness about racial injustice and white supremacy, it is astonishing racial/ethnic data for vaccination are missing. The first month of vaccination occurred in the last month of the Trump Administration. To get out of this pernicious time-loop, self-reflection, learning from past errors, and a commitment to equity is essential. The new Biden-Harris Administration must ensure these required data are reported.

REFERENCES


1. White D. Groundhog day 2021: What did Punxsutawney Phil predict and what does it mean? The Sun, February 2, 2021. <https://www.thesun.co.uk/news/13913352/groundhog-day-2021-what-punxsutawney-phil-predict/> ; accessed February 4, 2021.
2. Painter EM, Ussery EN, Patel A, et al. Demographic Characteristics of Persons Vaccinated During the First Month of the COVID-19 Vaccination Program — United States, December 14, 2020–January 14, 2021. *MMWR Morb Mortal Wkly Rep* 2021; 70:174–177. DOI: <http://dx.doi.org/10.15585/mmwr.mm7005e1>
3. Krieger N, Gonsalves G, Bassett MT, Hanage w, Krumholz HM. [The fierce urgency of now: closing glaring gaps in US surveillance data on COVID-19](#). *Health Affairs Blog*, April 14, 2020. <https://www.healthaffairs.org/doi/10.1377/hblog20200414.238084/full/>
4. Krieger N, Testa C, Hanage WP, Chen JT. US racial and ethnic data for COVID-19 cases: still missing in action. *Lancet* 2020 Nov 7; 396(10261):e81. doi: 10.1016/S0140-6736(20)32220-0. Epub 2020 Oct 22
5. Pan D, Freyer FJ. At Roxbury vaccination site meant to expand access, few people of color line up for shots. *Boston Globe*, February 2, 2021. <https://www.bostonglobe.com/2021/02/03/nation/vaccination-site-roxbury-whom/> ; accessed February 4, 2021.

Figure 1. US Centers for Disease Control and Prevention. Immunization Information System Data Requirement Form. COVID-19 Vaccine Administration. 12/11/20. CS321629-C.
<https://www.cdc.gov/vaccines/covid-19/reporting/downloads/IIS-data-requirement-form.pdf> ;
 accessed February 4, 2021.

Immunization Information System Data Requirement Form

COVID-19 Vaccine Administration



This form can be used in the rare instances when you are unable to access your jurisdiction's IIS due to technical issues or lack of internet access. When possible, information should always be captured electronically to avoid the least number of possible mistakes when transcribing.

However, this form may be printed to capture information manually. Vaccination providers are required to report vaccination administration information within 72 hours of administration. This information should be entered as soon you are able to access your jurisdiction's IIS or VAMS.

Recipient Information

ID _____

First Name _____

Middle Name (optional) _____

Last Name _____

Date of Birth _____

Sex Male Female Unknown

Primary insurance holder _____

Group/Individual ID number _____

Insurance Information (Optional) _____

Insurer _____

Address

Street 1 _____

Street 2 _____

City _____

County _____

State _____

Zip Code _____

Race *(select all that apply)*

<input type="checkbox"/> American Indian/Alaskan Native	<input type="checkbox"/> White
<input type="checkbox"/> Asian	<input type="checkbox"/> Other Race
<input type="checkbox"/> Native Hawaiian or Pacific Islander	<input type="checkbox"/> Unknown
<input type="checkbox"/> Black/African American	<input type="checkbox"/> Unable to report

Ethnicity *(select all that apply)*

<input type="checkbox"/> Hispanic or Latino
<input type="checkbox"/> Not Hispanic or Latino
<input type="checkbox"/> Unknown
<input type="checkbox"/> Unable to report

Vaccine Information

Type	Product	Date Administered	Manufacturer	Lot Number	Expiration Date <small>mmd/yyyy</small>	# Wasted

Administration Site	Administration Route
LA (Left arm)	
RA (Left arm)	C28161 (Intramuscular)
LE (lower extremity) Left Right	

Dose Number		Missed Appointment Y/N	
Comorbidity Y/N			

Refused Vaccination Y/N	If Yes, Reason

Vaccinator	Received EUA Fact Sheet for Recipients Y/N

12/11/20 CS321629-C
1