## Overview of Telephone Interviewing for National Health Interview Survey, April – December 2020

Natalie Olson U.S. Census Bureau FedCASIC Workshops April 6, 2022



<sup>\*</sup> This research and the views expressed are those of the author and are not any official position of the U.S. Census Bureau or National Center for Health Statistics.

#### About the NHIS

- The National Health Interview Survey (NHIS) is a health survey sponsored by the National Center for Health Statistics, part of the Centers for Disease Control and Prevention
- It is an in-person household survey
- The survey sample is address-based



## Initial Contact by Phone

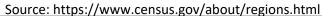
- NHIS moved to phone-only interviewing in late March 2020 and began making Personal Visits again later in the year
- Agency directive through June, then phased back to inperson depending on the conditions of the area
- Of NHIS households where contact was made with a Sample Unit member in April-December 2020, the initial contact was by phone for 79.7% of these cases
  - 99.8% in Quarter 2 (April June)
  - 80.4% in Quarter 3 (July September)
  - 43.6% in Quarter 4 (October December)

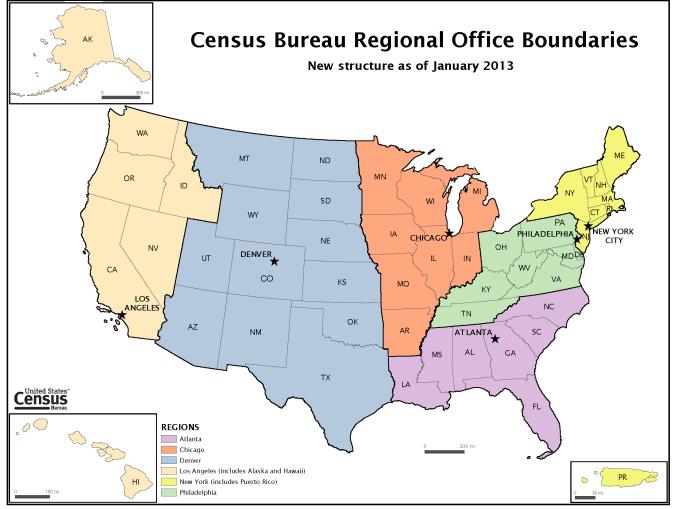


# Phone contacts resulting in completed interviews

- According to contact history data, 68.9% of completed interviews and sufficient partials in April-December 2020 were with no Personal Visits made
  - Less than 1% for the same period in 2019
- In April-December 2020, households with no phone numbers:
  - Made up ~70% of non-completed interviews
  - Were mostly recorded as no one home, repeated calls or other refusals
  - Resulted in outcomes of completed interviews/sufficient partials <1% of the time</li>

## Regional Offices





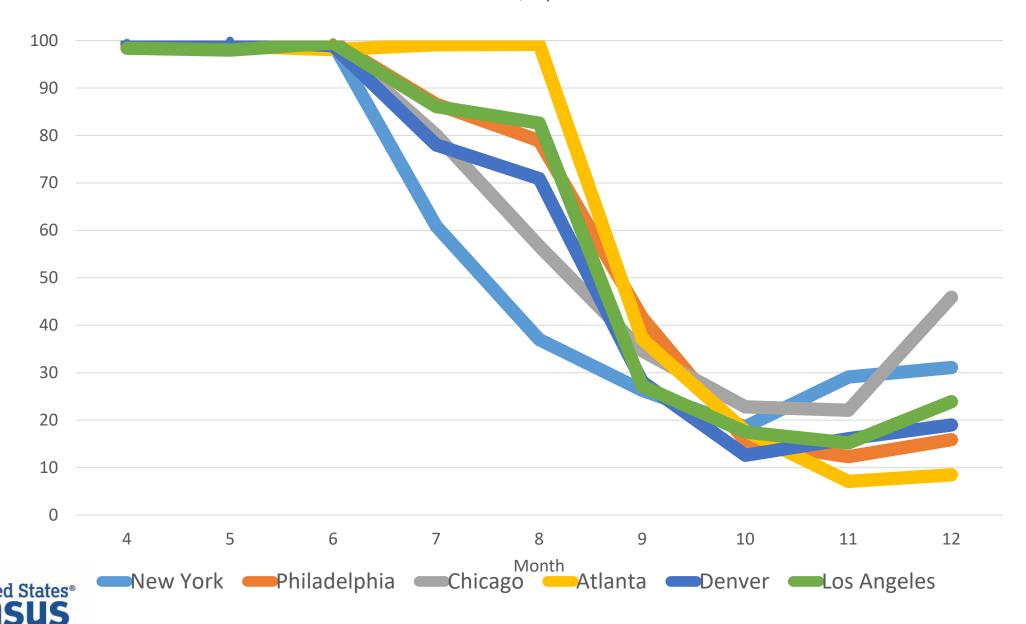


Differences by Quarter and Regional Office – Complete Interviews/Sufficient Partials over the Phone

	Q2	Q3	Q4
Overall	Nearly all	66	19
NY		<u>45</u>	26
Philadelphia		72	. 15
Chicago		64	31
Atlanta		80	<u>11</u>
Denver		62	16
LA		70	19



#### % of Interviews with No Personal Visits, April-December 2020



## Phone types (Cell/Home/Work)

- Phone numbers are collected in the NHIS
  - For each phone number, the phone type is recorded
- Respondents were much more likely to provide cell phone numbers
- 72% of all phone numbers were recorded as cell phone numbers
  - 18% home phone numbers
  - 9% work phone numbers



## Phone numbers provided by vendor

- The NHIS sample is purchased from a vendor
- This vendor provided phone numbers for some sample units starting in April
  - Average of 60% of addresses per month
  - NHIS not able to use databases available to other Census surveys because the survey data is protected by CIPSEA



#### Methods

- The phone numbers from the vendor were matched to the NHIS datasets by the case control numbers
- Merged dataset was analyzed to determine the frequency of a "match" – where the phone number from the vendor matched a phone number provided during the interview



## Phone numbers provided by vendor (cont.)

- Home phone numbers were much more likely to match the numbers provided by the vendor
  - 58% of home phone numbers collected in instrument matched those provided by the vendor, vs only 12% of cell phone numbers that were collected



## Phone numbers provided by vendor (cont.)

- 21.9% Match rate for sample units with phone numbers provided by the vendor
- 27.5% Match rate for all completed interviews/sufficient partials
- 41.0% Match rate for all completed interviews/sufficient partials that had numbers provided from vendor



## Notes and Strategies Used by FRs

- Issues encountered:
  - Overall: Phone numbers were provided by the vendor for specific addresses, and were therefore more often matched with home phone numbers. Since the NHIS is address-based rather than interested in interviewing specific people, getting the ideal phone number (i.e. cell phone number) for a person living at the address was challenging.



## Notes and Strategies Used by FRs

- Issues encountered:
  - Wrong numbers, disconnected numbers
  - Full voicemail inboxes
  - Respondents seemed hesitant, worried about scams, or immediately hung up
  - Confusion with 2020 Census



## Notes and Strategies Used by FRs

- Strategies used:
  - Many trying 5+ different phone numbers
  - LexisNexis/FastData
  - Online search, Tax office, White Pages
  - Verifying sample units with apartment management offices



## Thank you! Any questions?

Natalie Olson National Health Interview Survey Team ADDP-SO, U.S. Census Bureau

natalie.l.olson@census.gov

