# State-Level Analysis of Living Arrangements of Grandparents and Grandchildren and Excess Mortality Early in the COVID-19 Pandemic 

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## Introduction

- The population of the United States is aging
- Compared to proportions in general population:
- Underrepresentation of all racial and ethnic groups other than nonHispanic White
- Overrepresentation of non-Hispanic White group
- He, Goodkind, and Kowal 2016; Carr 2019; Ellis and Simmons 2014
- Trends in grandparent/grandchild co-residence vary by racial and ethnic group and by geographic location in the United States
- Roberts et al. 2018; Ellis and Simmons 2014


## Data and Methods

- Data
- 2019 and 2021 American Community Survey, 1-year estimates
- Centers for Disease Control and Prevention COVID-19 Excess Deaths Associated with COVID-19
- Methods
- State-level OLS regression models
- Dependent variables (percentage-point change from 2019 to 2021):
- Grandparents living with grandchildren
- Grandparents responsible for grandchildren
- Grandparents responsible for grandchildren for <1 year
- Independent variable: percent excess mortality from week ending on April 4, 2020 through the week ending on June 31, 2021
- Separate models by race and Hispanic origin


## Summary of Descriptive Statistics

- LOWER IN 2021 COMPARED TO 2005:
$\downarrow \%$ of grandparents living with grandchildren <18 for all racial/ethnic groups except non-Hispanic White
$\downarrow \%$ of coresident grandparents responsible for their grandchildren <18 for all racial/ethnic groups
$\downarrow \%$ of grandparents responsible for coresident grandchildren <18 for less than 1 year for all racial/ethnic groups except non-Hispanic Asian grandparents


## OLS Regression Results

| Dependent Variable (all are the percentage-point change from 2019 to 2021). | Results |
| :---: | :---: |
| Grandparents living with grandchildren | - Percent excess mortality was not significant for any group. <br> - Negative association for percentage of households in poverty for all coresident grandparents and Non-Hispanic Black grandparents (marginally significant). |
| Grandparents responsible for grandchildren | - Negative association for percent excess mortality for Hispanic grandparents. <br> - Positive association for percentage of households in poverty and percent employed in essential occupations (marginally significant) for Hispanic grandparents. |
| Grandparents responsible for grandchildren for less than 1 year | - Positive association for percent excess mortality for Hispanic grandparents. <br> - Positive association for households in poverty for Hispanic grandparents. |

Significant at $p<0.05$ unless otherwise stated; marginally significant $p<0.10$.
Source: U.S. Census Bureau, 2019 and 2021 American Community Survey, 1-year estimates; Centers for Disease Control and Prevention, COVID-19 Excess Deaths Associated with COVID-19.

## Thank you!

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Percentage of Adults Aged $\mathbf{3 0}$ and Over Living with Grandchildren Under 18 by
Race and Hispanic Origin: 2005-2021


Source: U.S. Census Bureau, 2005-2019 and 2021 American Community Survey, 1-year estimates.
Note: As a result of disruptions to data collection stemming from the COVID-19 pandemic, the standard 2020 American Community Survey (ACS) 1-year estimates were not released.

Percentage of Grandparents Who Are Responsible for Their Coresident
Grandchildren Under 18 by Race and Hispanic Origin: 2005-2021


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Note: As a result of disruptions to data collection stemming from the COVID-19 pandemic, the standard 2020 American Community Survey (ACS) 1-year estimates were not released.

## Percentage of Coresident Grandparents Responsible for Their Grandchildren Under <br> 18 for Less than One Year by Race and Hispanic Origin: 2005-2021



10

5

0

| 2004 | 2006 | 2008 | 2010 | 2012 | 2014 | 2016 | 2018 | 2020 | 2022 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

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Source: U.S. Census Bureau, 2005-2019 and 2021 American Community Survey, 1-year estimates.
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[^0]:    United States ${ }^{\circledR}$
    Source: U.S. Census Bureau, 2005-2019 and 2021 American Community Survey, 1-year estimates.

