

The background is a solid teal color with a slightly textured appearance. There are several thin, white, curved lines scattered across the background, some in the top-left and bottom-right corners, and some in the center. The text is centered and reads:

Household  
transmission  
CDC Supported Study

# Household transmission

## What was known

Before this study

Transmission of SARS-CoV-2 (COVID-19) occurs within households;

however, transmission estimates vary widely and

the data on transmission from children was limited.



# Household transmission study

Enrolled during April–September 2020.

On October 30, 2020, this report was  
posted online as an MMWR Early Release

Weekly / November 6, 2020 / 69(44);1631–  
1634

# Household transmission study

To assess household transmission, a case-ascertained study was conducted in Nashville, Tennessee, and Marshfield, Wisconsin, commencing in April 2020.

nasal swabs only or nasal swabs and saliva samples, daily for 14 days. For this analysis, specimens from the first 7 days were tested for SARS-CoV-2 using CDC RT-PCR protocols.

A total of 191 enrolled household contacts of 101 index patients reported having no symptoms on the day of the associated index patient's illness onset,

Approximately 75% of secondary infections were identified within 5 days of the index patient's illness onset,



# Household transmission study - Age

the secondary infection rate from index  
patients aged <12 years was 53%

from index patients aged 12–17 years was  
38%

# Household transmission - new data

Findings from this prospective household study with intensive daily observation for  $\geq 7$  consecutive days indicate that transmission of SARS-CoV-2 among household members was frequent from either children or adults.



# Household spread

Secondary infections occurred rapidly, with approximately 75% of infections identified within 5 days of the index patient's illness onset.

Secondary infection rates were high across all racial/ethnic groups. Substantial transmission occurred whether the index patient was an adult or a child.

# Household infection study

Patients kept at home. No rapid isolation of patients in facilities outside households

Same control measures were adopted: mask use in the home.



# Household transmission

## Implications of study

Persons should self-isolate immediately and before COVID-19 or influenza is determined

1. at the onset of COVID-like symptoms,
2. at the time of testing as a result of a high risk exposure, or
3. at time of a positive test result

whichever comes first.

# Household transmission

Implications - cont.

All household members, including the index case, should wear masks within shared spaces in the household.

All should wear masks in the household for all respiratory illnesses even after self quarantine of index sick person.