

# Calculating Isolation and Quarantine Duration



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Johns Hopkins Bloomberg School of Public Health

# How Long Should a Case Be Isolated from Others?

- ▶ Short answer:
    - ▶ Ideally, as long as they are infectious
  - ▶ Longer answer:
    - ▶ Until they fully recover
      - By the time they are diagnosed, they will already be sick
      - Must monitor their symptoms
      - Are no longer infectious after they recover
- \*\*At least 10 days after symptom onset *and* if other symptoms have resolved**

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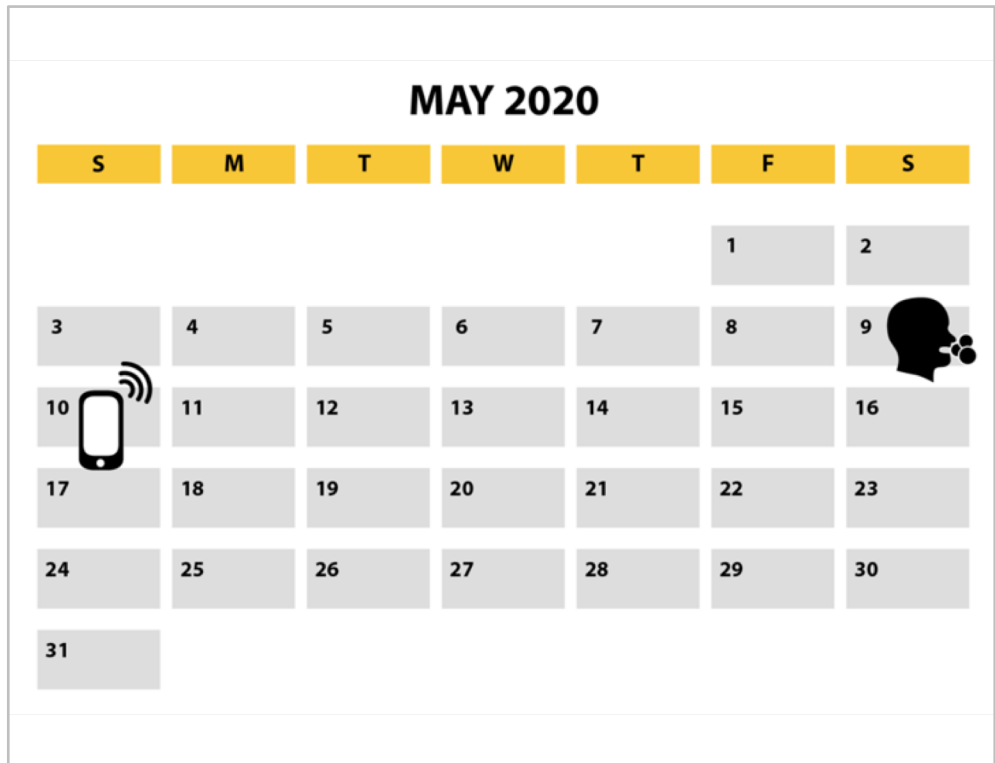
# Defining Their Infectious Period: Call the Case

- ▶ Let's assume that you call the case on May 10

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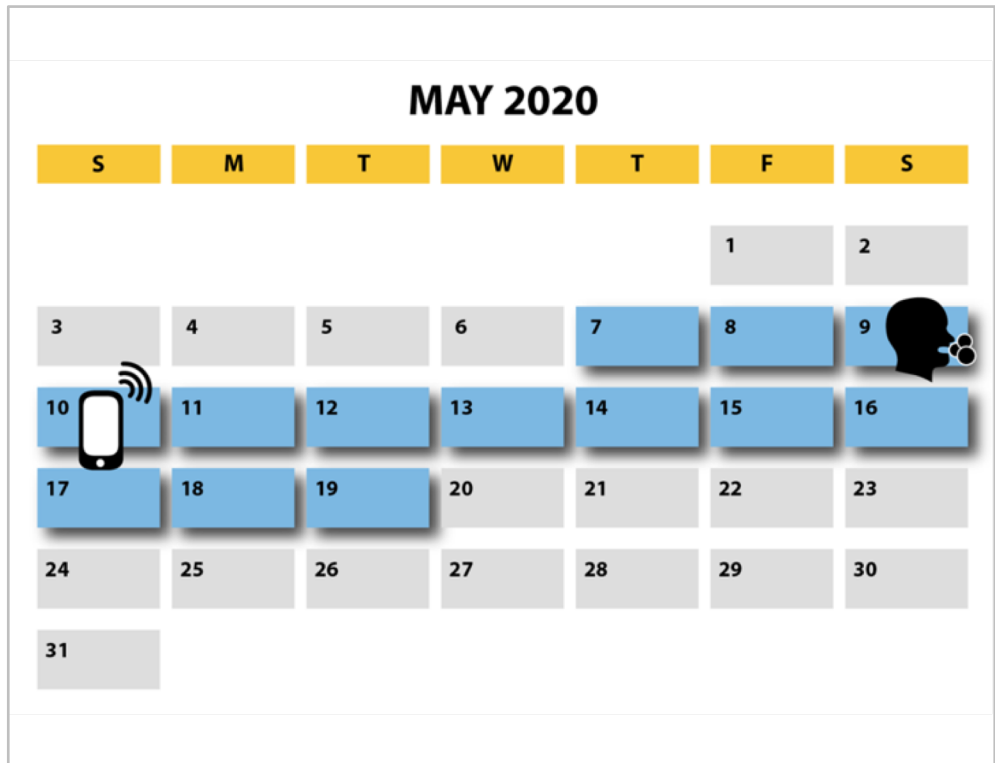
# Defining Their Infectious Period: Illness Onset

- ▶ Let's assume that you call the case on May 10
- ▶ They tell you that they became ill on May 9



# Defining Their Infectious Period: Calculate

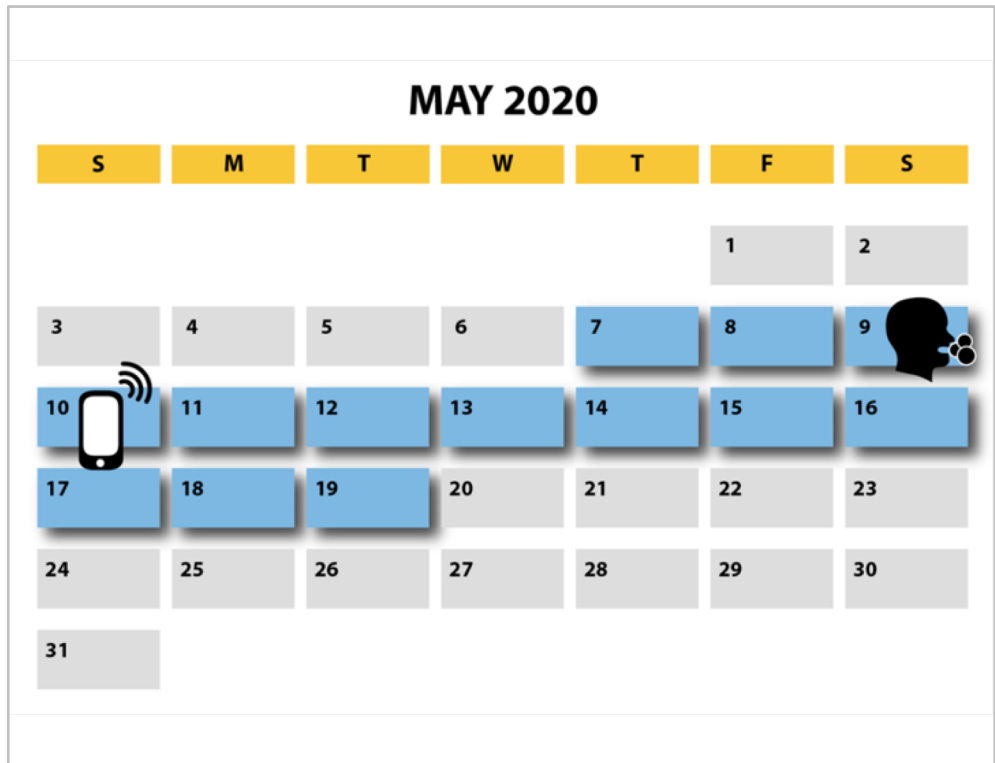
- ▶ Let's assume that you call the case on May 10
- ▶ They tell you that they became ill on May 9
- ▶ You know that they were infectious for about 2 days before they became ill, and will be for at least 10 days after their onset



# Defining Their Infectious Period

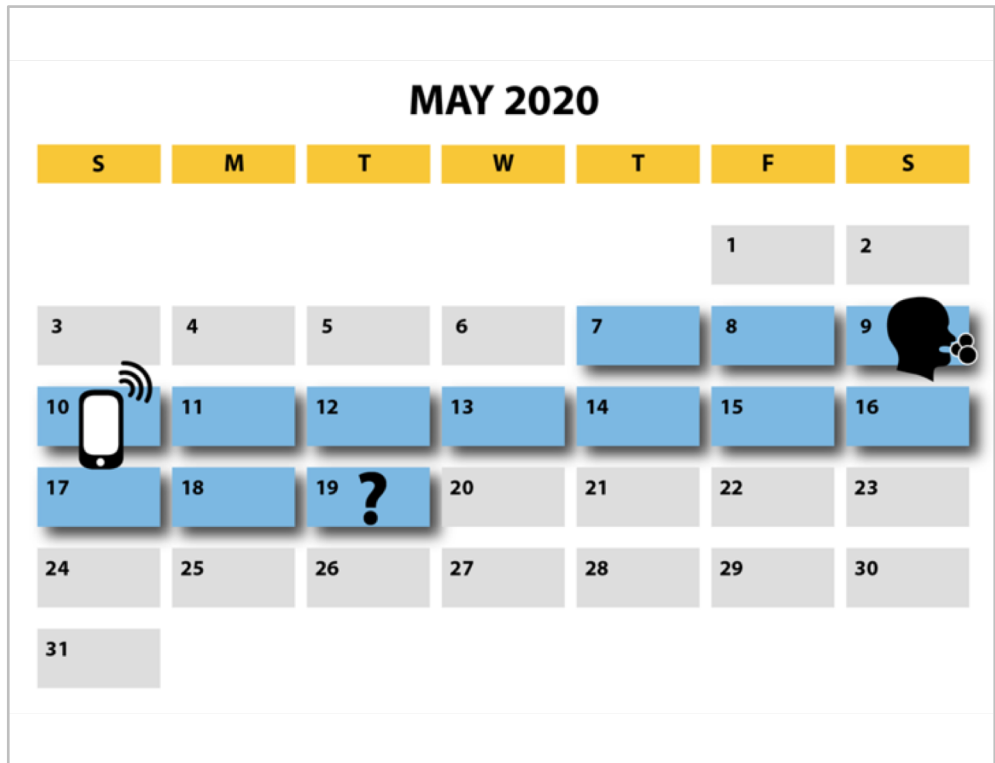
- ▶ Let's assume that you call the case on May 10
- ▶ They tell you that they became ill on May 9
- ▶ You know that they were infectious for about 2 days before they became ill, and will be for at least 10 days after their onset

**May 9 + 10 days = May 19**



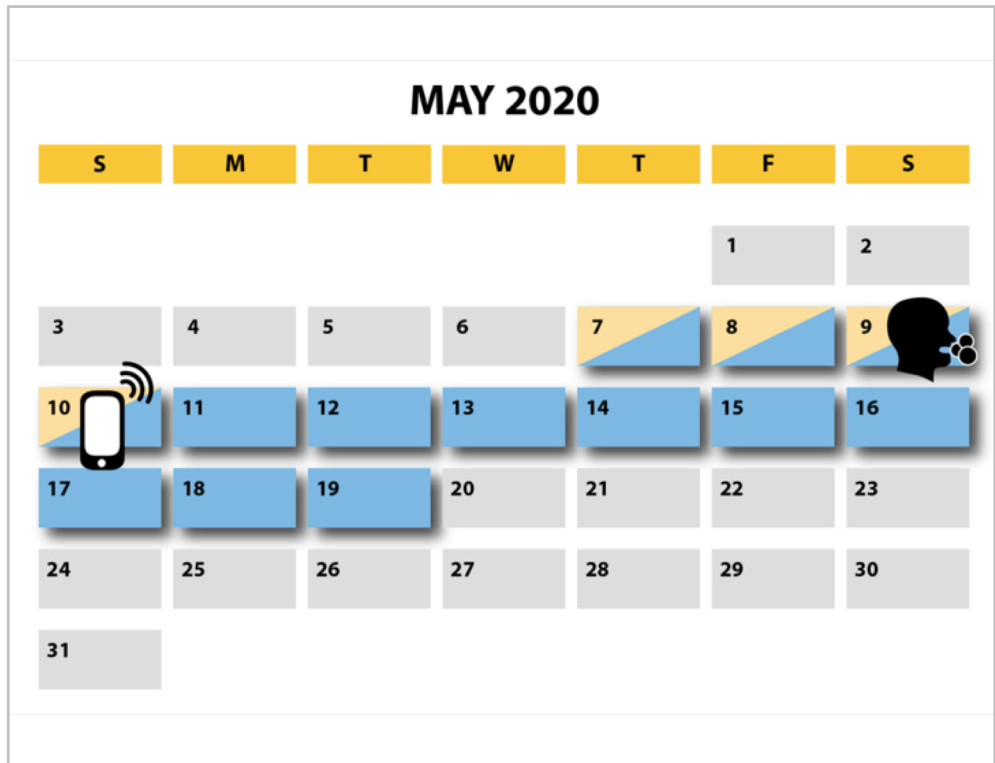
# Defining Their Infectious Period: Follow-Up

- ▶ The case will need ongoing follow-up to really know when they can stop isolating from others
  - ▶ Need to know when symptoms resolve (without medication)



# Identifying Contacts in Their Infectious Period

- ▶ Let's assume they do fully recover by May 19
- ▶ Now that you know their infectious period, you can help them identify their contacts
- ▶ You call them on May 10
  - ▶ You will ask about contacts they had from May 7 through May 10





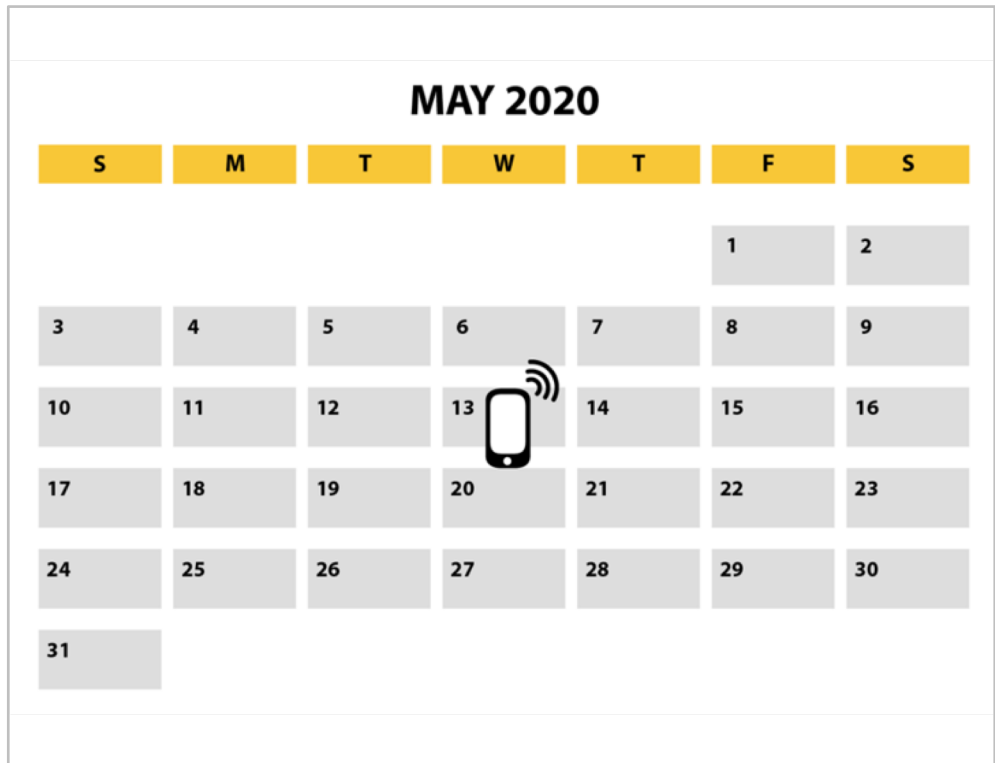
# How Long Should a Contact Stay in Quarantine?

- ▶ Short answer:
    - ▶ Ideally, as long as they could be infectious
  - ▶ Longer answer:
    - ▶ 14 days following the last contact with someone who is infectious
      - Almost everyone who is infected will develop illness within 14 days
    - ▶ Last contact may have been days ago
    - ▶ Contact may be ongoing
- \*\*If they have developed symptoms, should be considered a case**

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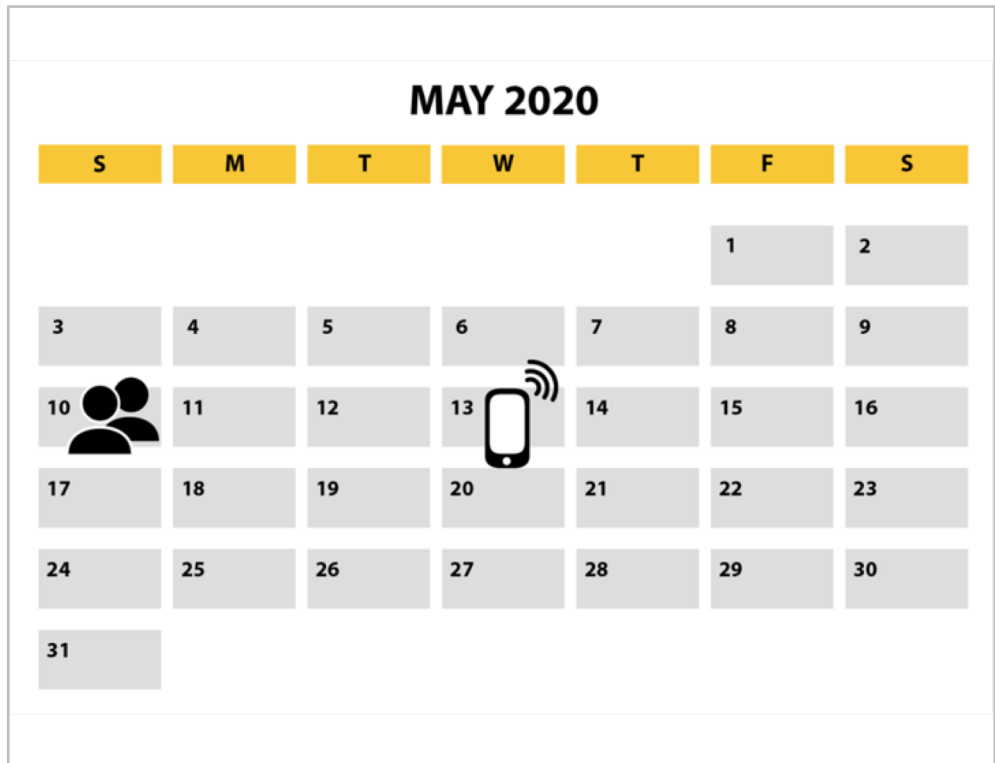
# How Long Should a Contact Stay in Quarantine?: Call the Contact

- ▶ Let's assume you make a call to a contact on May 13



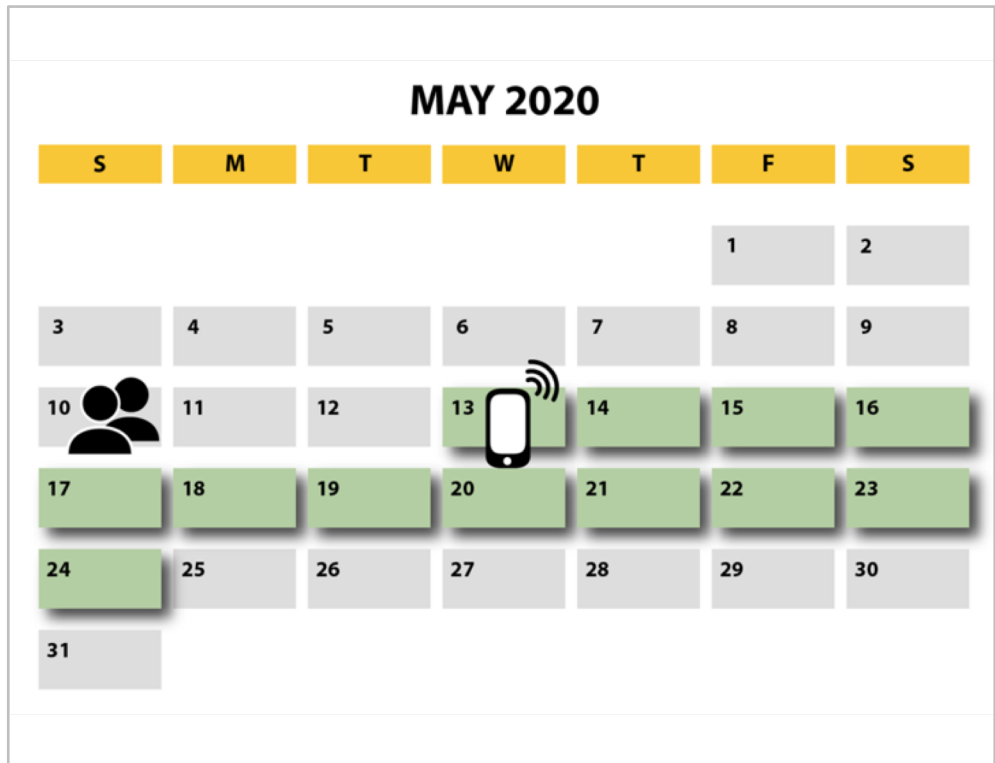
# How Long Should a Contact Stay in Quarantine?: Last Contact with Case

- ▶ Let's assume you make a call to a contact on May 13
- ▶ Based on the call, you understand that their last contact with the case was on May 10



# How Long Should a Contact Stay in Quarantine?: Calculate

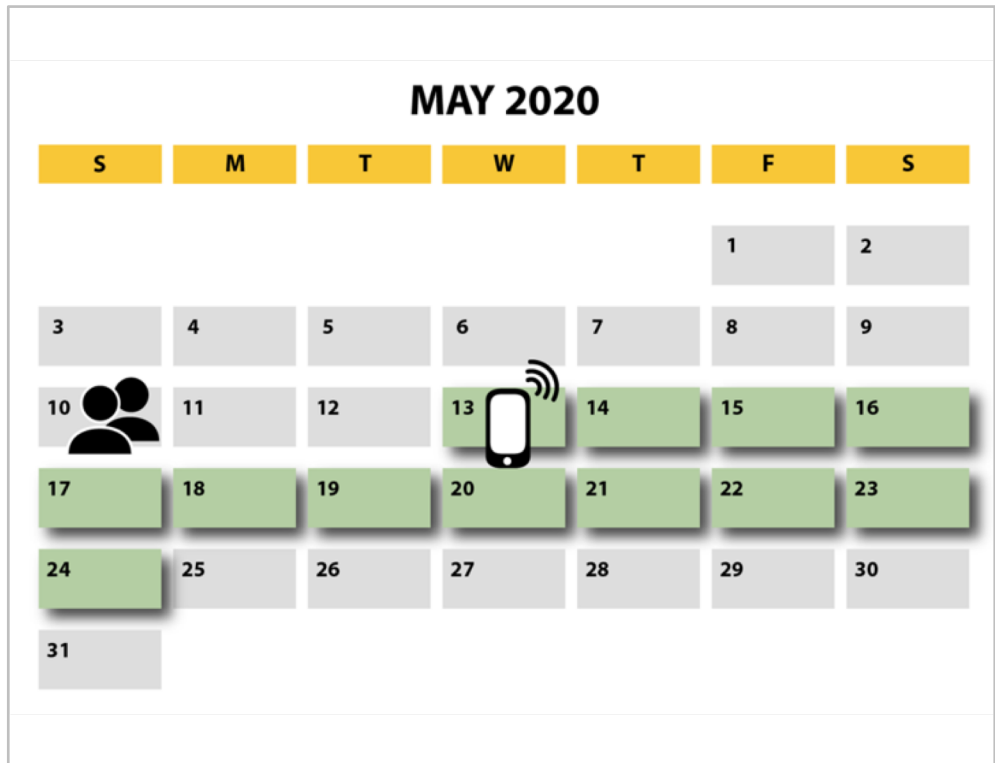
- ▶ Let's assume you make a call to a contact on May 13
- ▶ Based on the call, you understand that their last contact with the case was on May 10
- ▶ So, they should receive instructions to quarantine for 14 days since that last exposure



# How Long Should a Contact Stay in Quarantine?: 14 Days Since Last Exposure

- ▶ Let's assume you make a call to a contact on May 13
- ▶ Based on the call, you understand that their last contact with the case was on May 10
- ▶ So, they should receive instructions to quarantine for 14 days since that last exposure

**May 10 + 14 days = May 24**



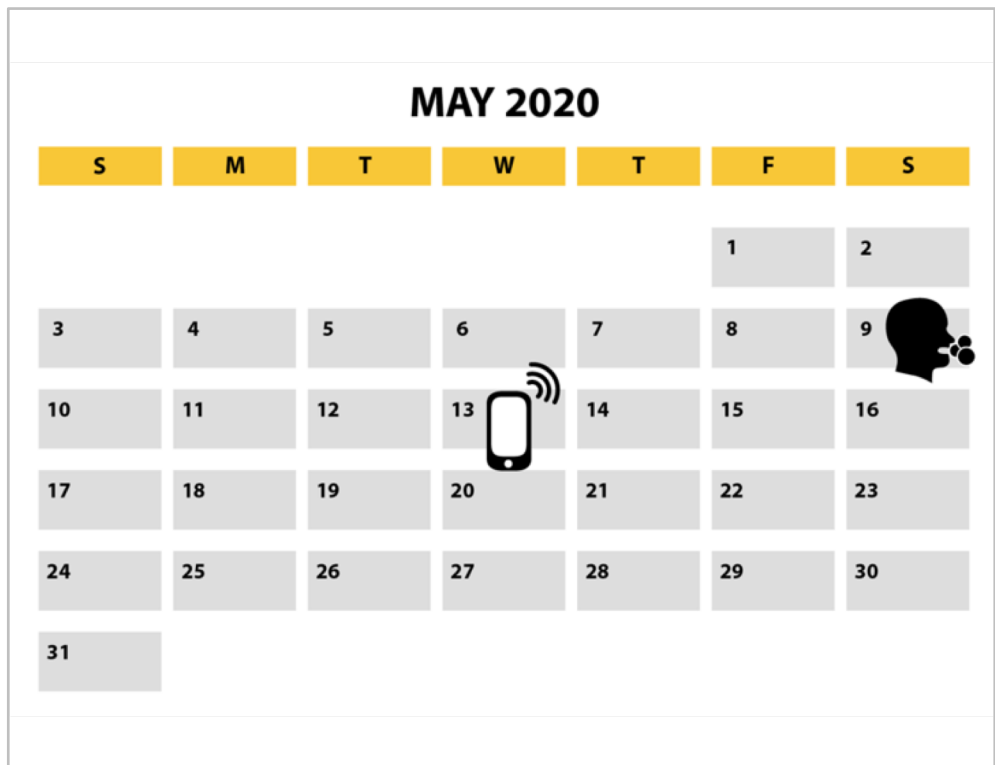
# Contacts Who Live With Cases May Need to Quarantine Longer

- ▶ The contact must quarantine themselves immediately, and for 14 days following the recovery of the case
  - ▶ So, quarantine will be longer than 14 days for some contacts

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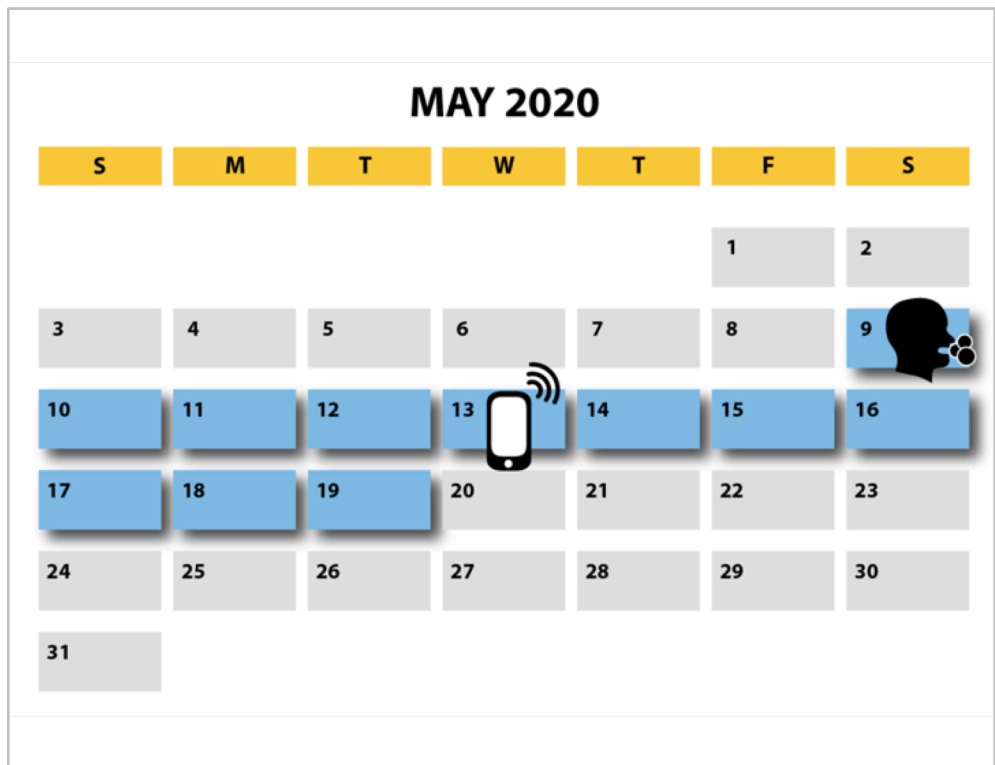
# Contacts Who Live With Cases May Need to Quarantine Longer: Illness Onset

- ▶ The contact must quarantine themselves immediately, and for 14 days following the recovery of the case
  - ▶ So, quarantine will be longer than 14 days for some contacts
- ▶ Let's assume we call the case on May 13, and the person they live with became ill on May 9



# Contacts Who Live With Cases May Need to Quarantine Longer: Calculate

- ▶ The contact must quarantine themselves immediately, and for 14 days following the recovery of the case
  - ▶ So, quarantine will be longer than 14 days for some contacts
- ▶ Let's assume we call the case on May 13, and the person they live with became ill on May 9
- ▶ Let's also assume that the case will be fully recovered by May 19 (10 days)





# Contacts Who Live With Cases May Need to Quarantine Longer: 14 Days After Their Last Infectious Contact

- ▶ The contact must quarantine themselves immediately, and for 14 days following the recovery of the case
  - ▶ So, quarantine will be longer than 14 days for some contacts
- ▶ Let's assume we call the case on May 13, and the person they live with became ill on May 9
- ▶ Let's also assume that the case will be fully recovered by May 19 (10 days)
- ▶ Therefore, 14 days after their last infectious contact would be June 2

