

Calculating Isolation and Quarantine Duration



Copyright © 2020 Johns Hopkins University and Emily Gurley. Except where otherwise noted, this work is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0](https://creativecommons.org/licenses/by-nc-sa/4.0/) license.

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**

MAY 2020

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Defining Their Infectious Period: Call the Case

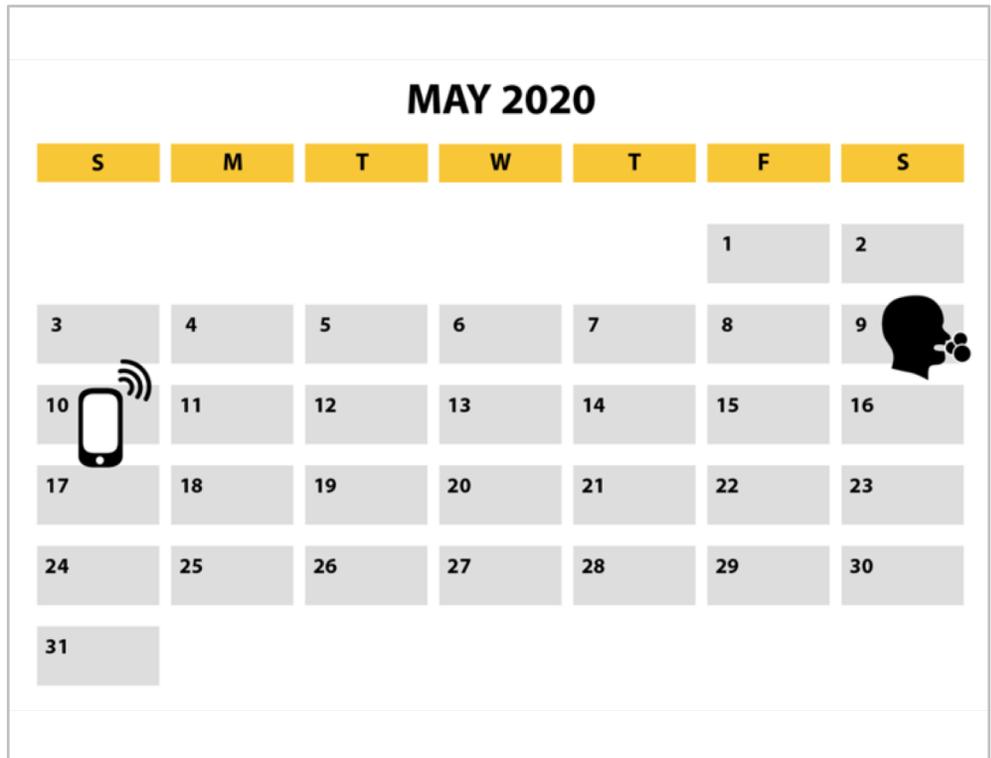
- ▶ Let's assume that you call the case on May 10

MAY 2020

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10 	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

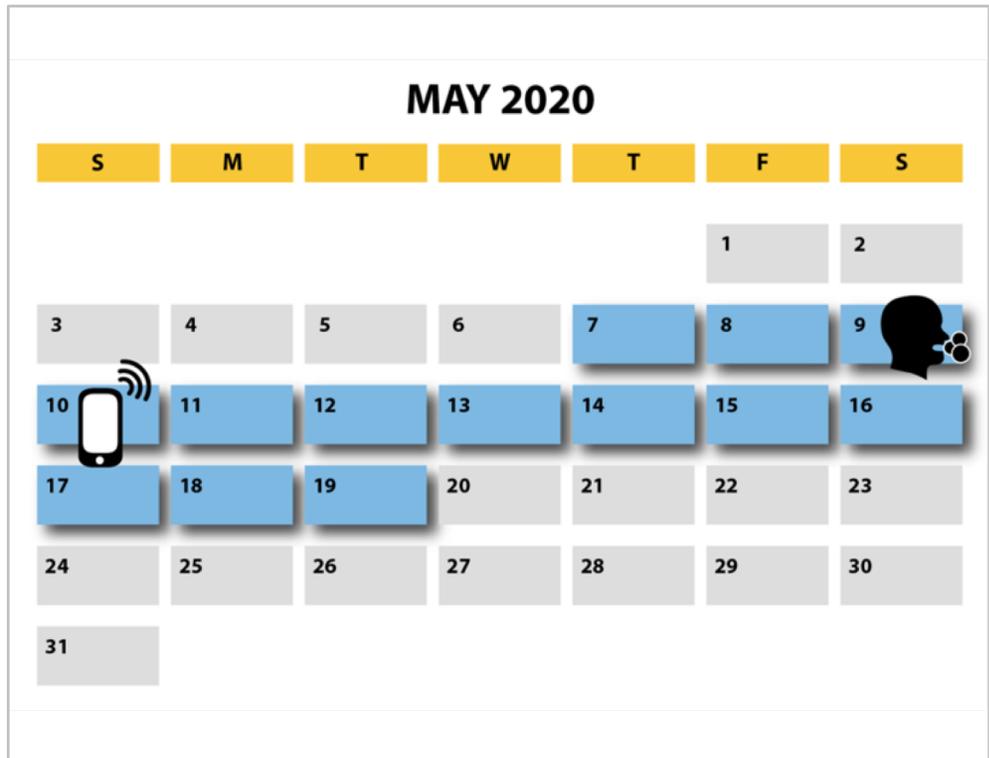
Defining Their Infectious Period: Illness Onset

- ▶ 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

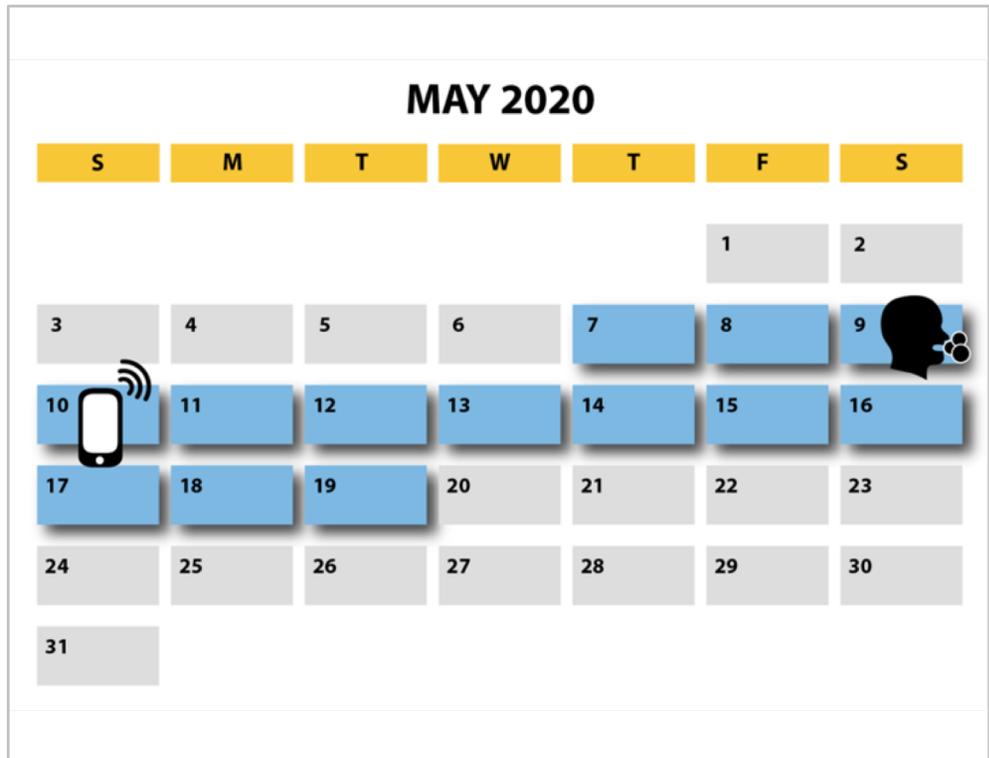
- ▶ Let's assume that you call the case on May 10
- ▶ They tell you that they became ill on May 9
- ▶ You know that they were infectious for about 2 days before they became ill, and will be for at least 10 days after their onset



Defining Their Infectious Period

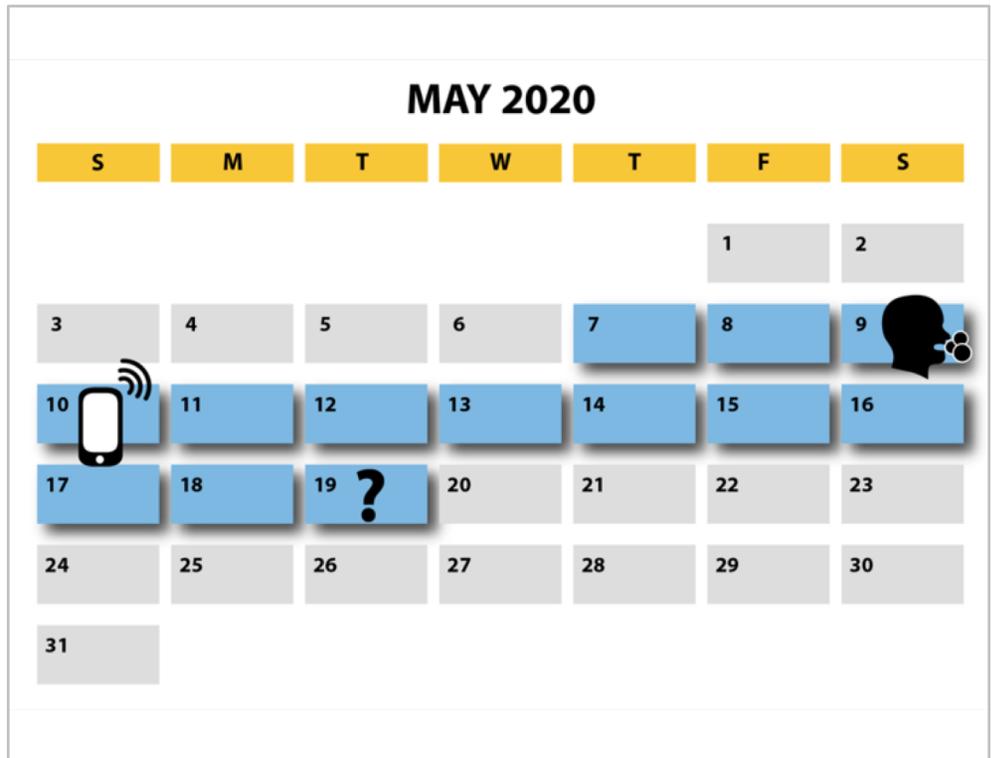
- ▶ Let's assume that you call the case on May 10
- ▶ They tell you that they became ill on May 9
- ▶ You know that they were infectious for about 2 days before they became ill, and will be for at least 10 days after their onset

May 9 + 10 days = May 19



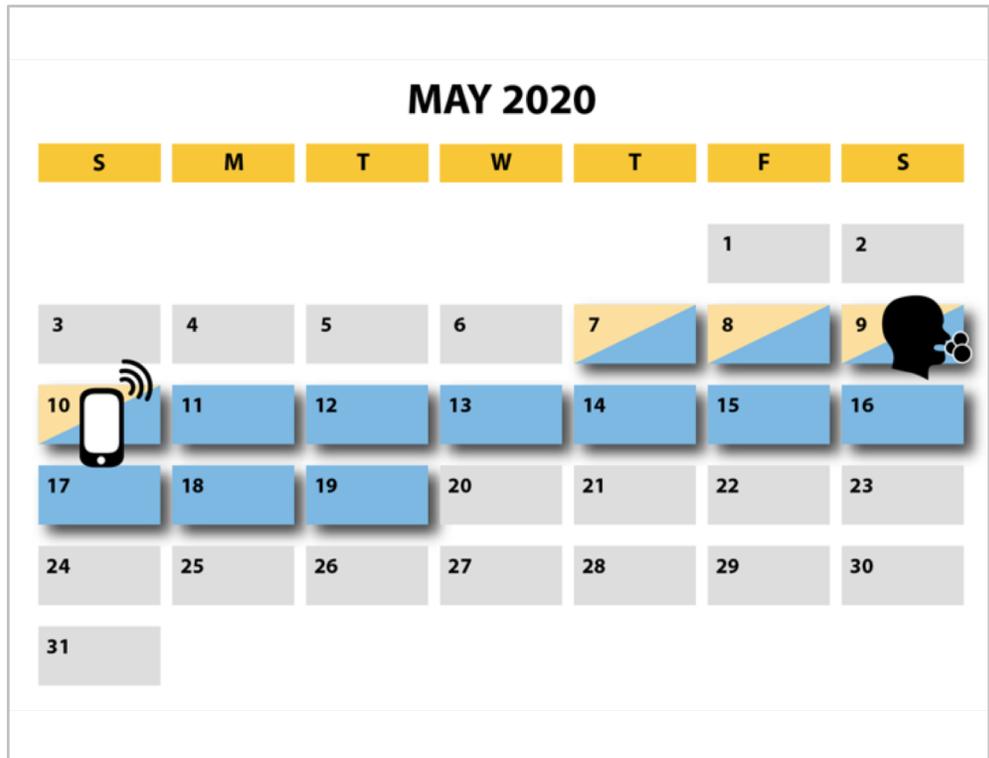
Defining Their Infectious Period: Follow-Up

- ▶ 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?

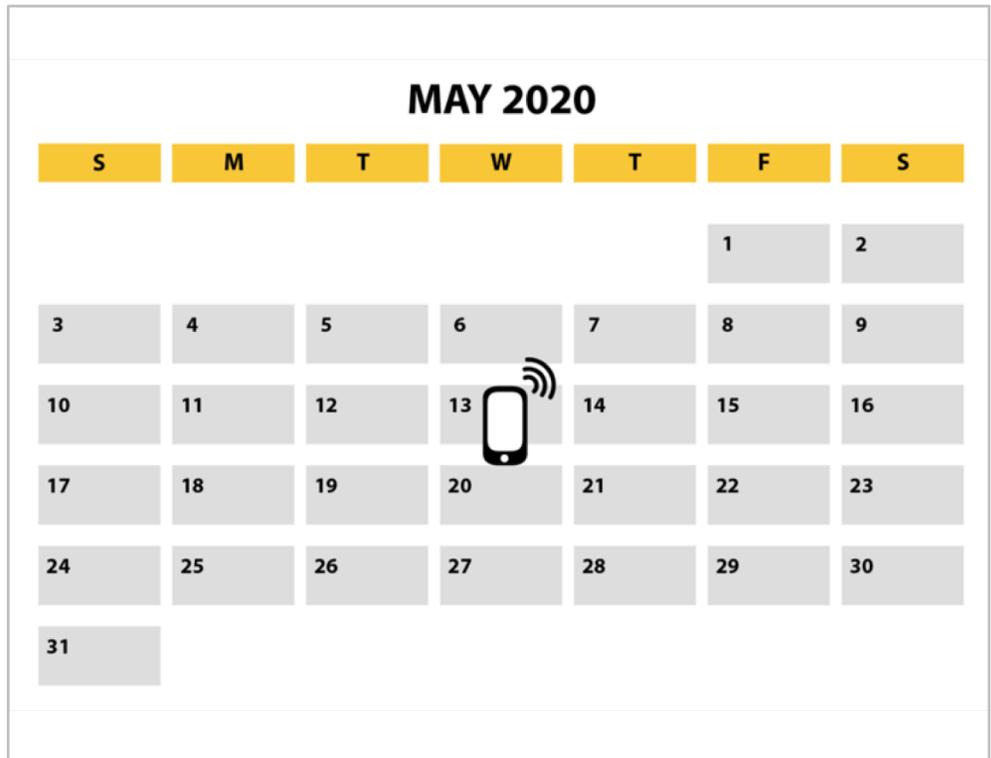
- ▶ Short answer:
 - ▶ Ideally, as long as they could be infectious
 - ▶ Longer answer:
 - ▶ 14 days following the last contact with someone who is infectious
 - Almost everyone who is infected will develop illness within 14 days
 - ▶ Last contact may have been days ago
 - ▶ Contact may be ongoing
-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

MAY 2020

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

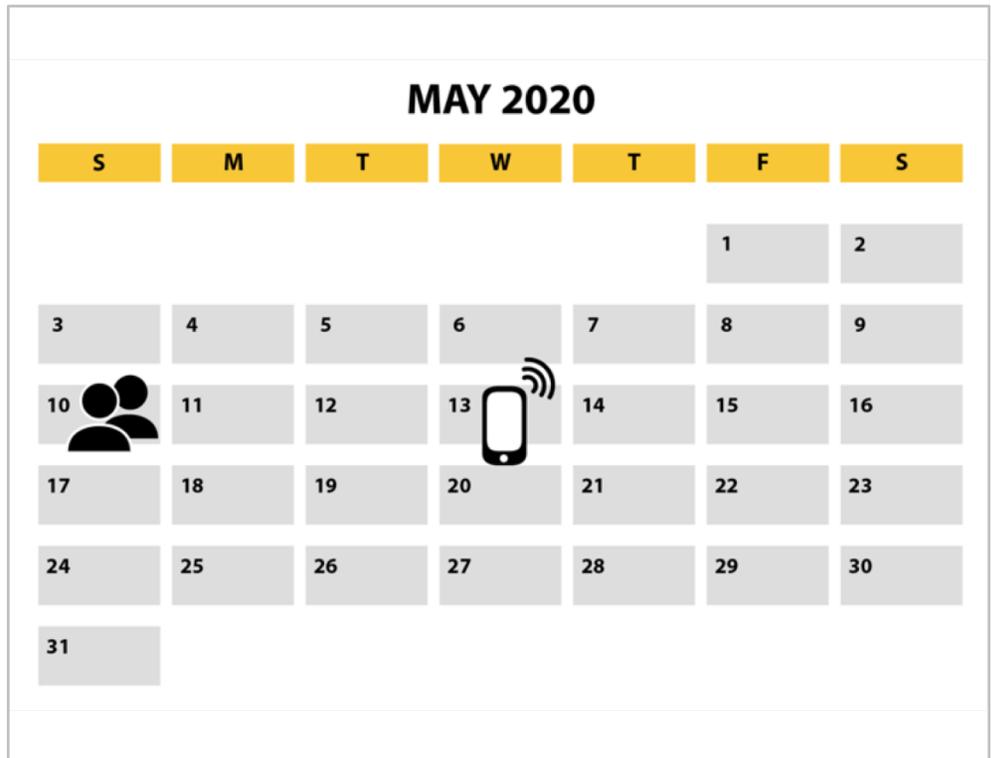
How Long Should a Contact Stay in Quarantine?: Call the Contact

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



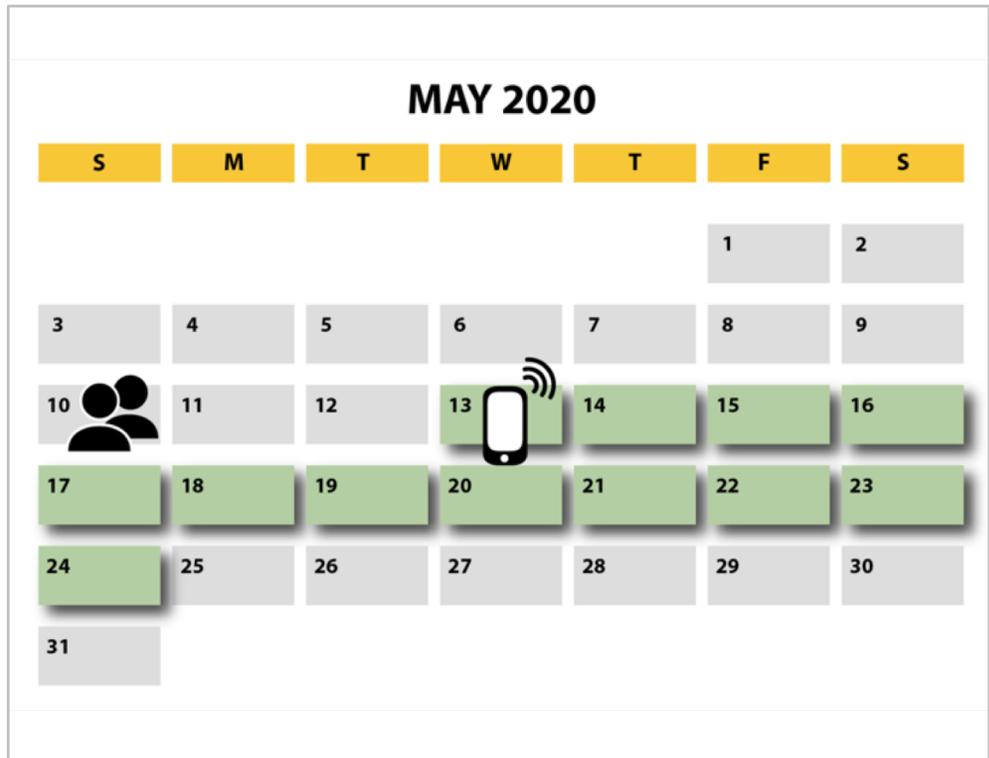
How Long Should a Contact Stay in Quarantine?: Last Contact with Case

- ▶ 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

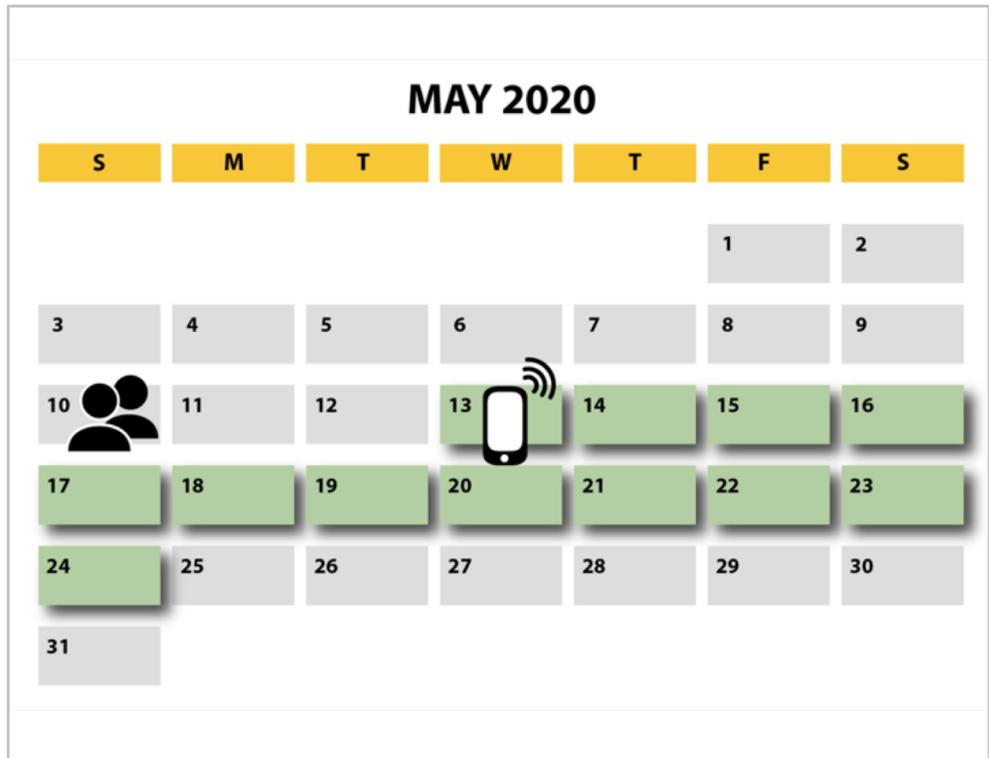
- ▶ Let's assume you make a call to a contact on May 13
- ▶ Based on the call, you understand that their last contact with the case was on May 10
- ▶ So, they should receive instructions to quarantine for 14 days since that last exposure



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

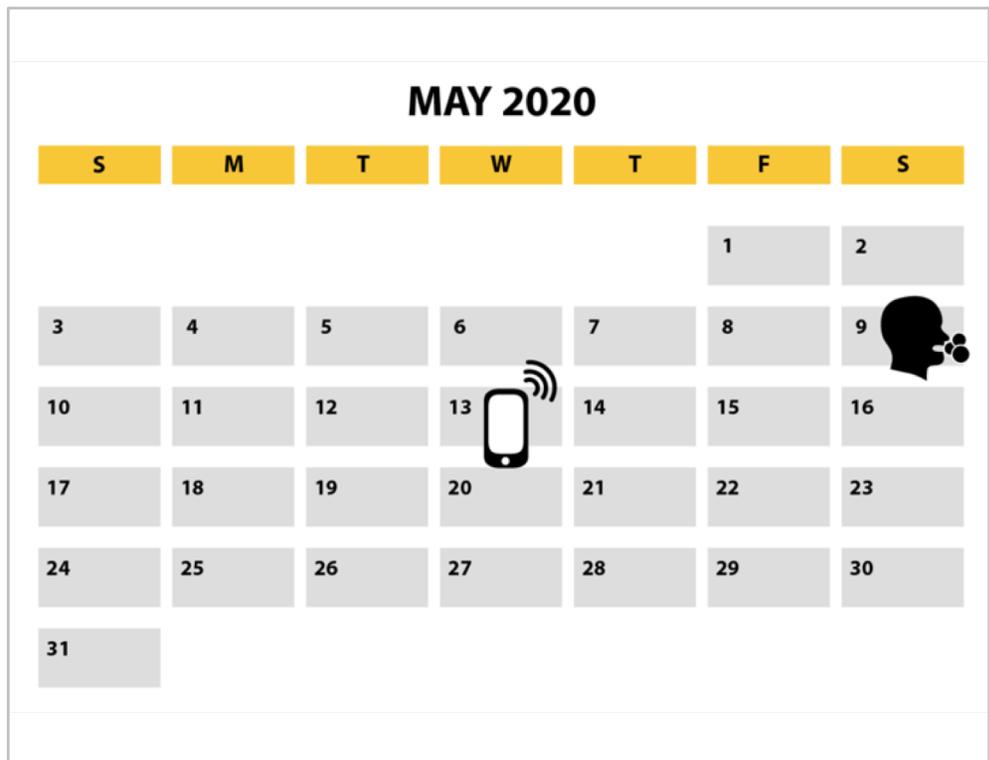
- ▶ The contact must quarantine themselves immediately, and for 14 days following the recovery of the case
 - ▶ So, quarantine will be longer than 14 days for some contacts

MAY 2020

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

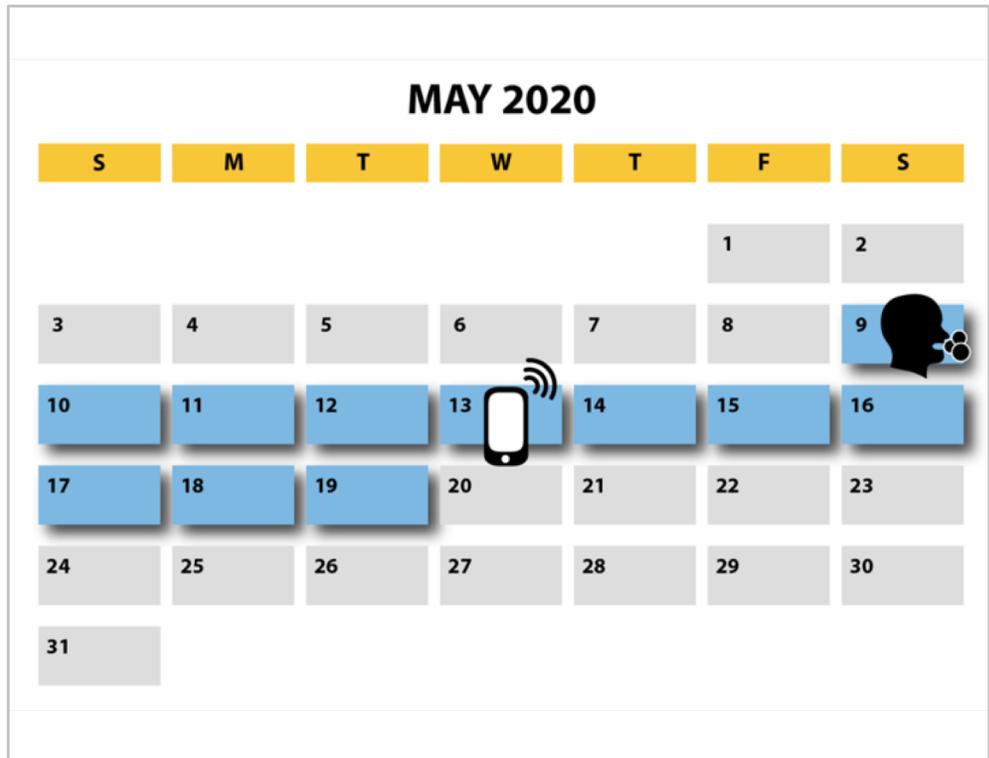
Contacts Who Live With Cases May Need to Quarantine Longer: Illness Onset

- ▶ 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

