



Healthy Kansans living in safe and sustainable environments.



Measles:

No Passport Required

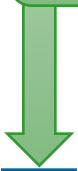
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Bureau of Epidemiology and Public Health Informatics

Timeline

Notified of
measles patient #1



Measles #1 – Notification

- Travel to Europe
 - Landed in Wichita, KS
- Unvaccinated child
- Butler County resident
- Fever, runny nose, cough → 5 days
- Rash → 3 days
- Conjunctivitis

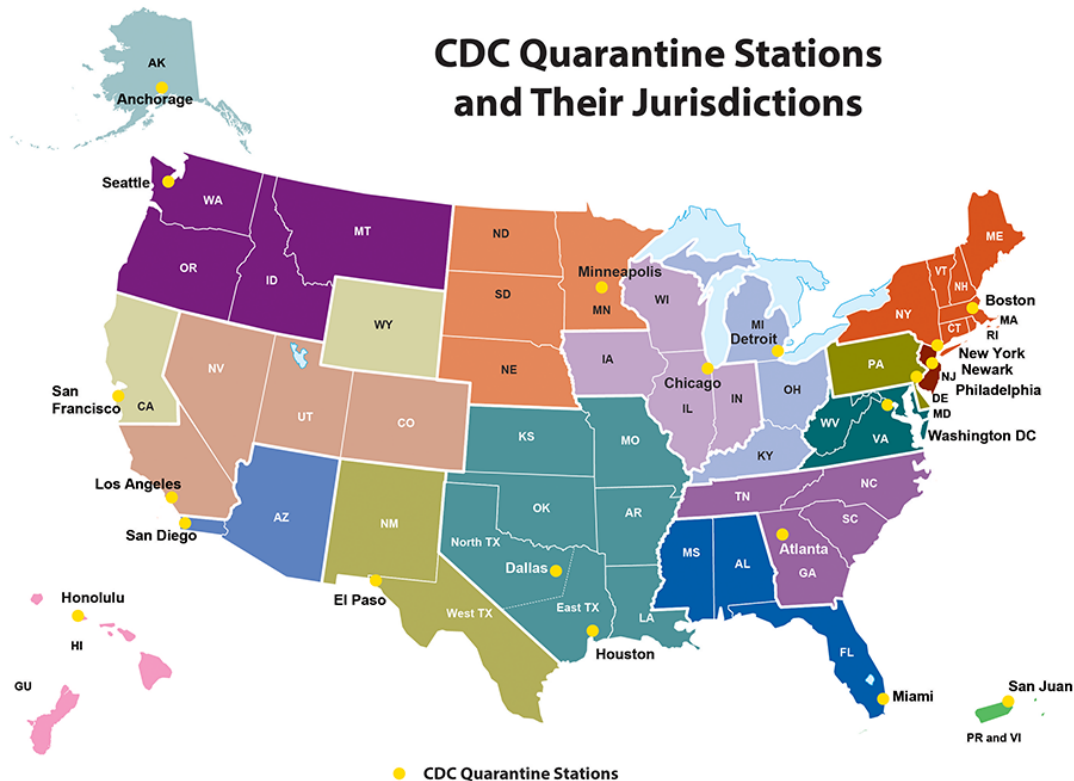


Measles #1 – Notification

- Hospital A collected blood for IgM testing
- Hospital A began line list of ER contacts
- Patient transferred to hospital B in Sedgwick County
 - Respiratory isolation
- Butler County Health Department (BCHD) notified
 - Followed up with family to determine exposure and get flight information

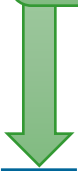
Measles #1 – Notification

- Sedgwick County Division of Health (SCDH) notified
- KDHE notified CDC EOC and CDC DGMQ



Timeline

Notified of
measles patient #1



Jun

Jul

Aug

Throat swab
collected:
PCR (+)



Measles #1 – Investigation

- 4 separate flights from Europe to Wichita
 - BCHD having difficult time obtaining accurate flight information from patient's family
- Family and travel companion contacts
 - 9 contacts → 3 unvaccinated, received MMR on 6/30
- Hospital contacts
 - 18 contacts → 3 unsure of vax status, 3 titers pulled
 - 1 with negative titer → 21 day quarantine
- Patient discharged from hospital B on 7/1, isolated at home

Timeline

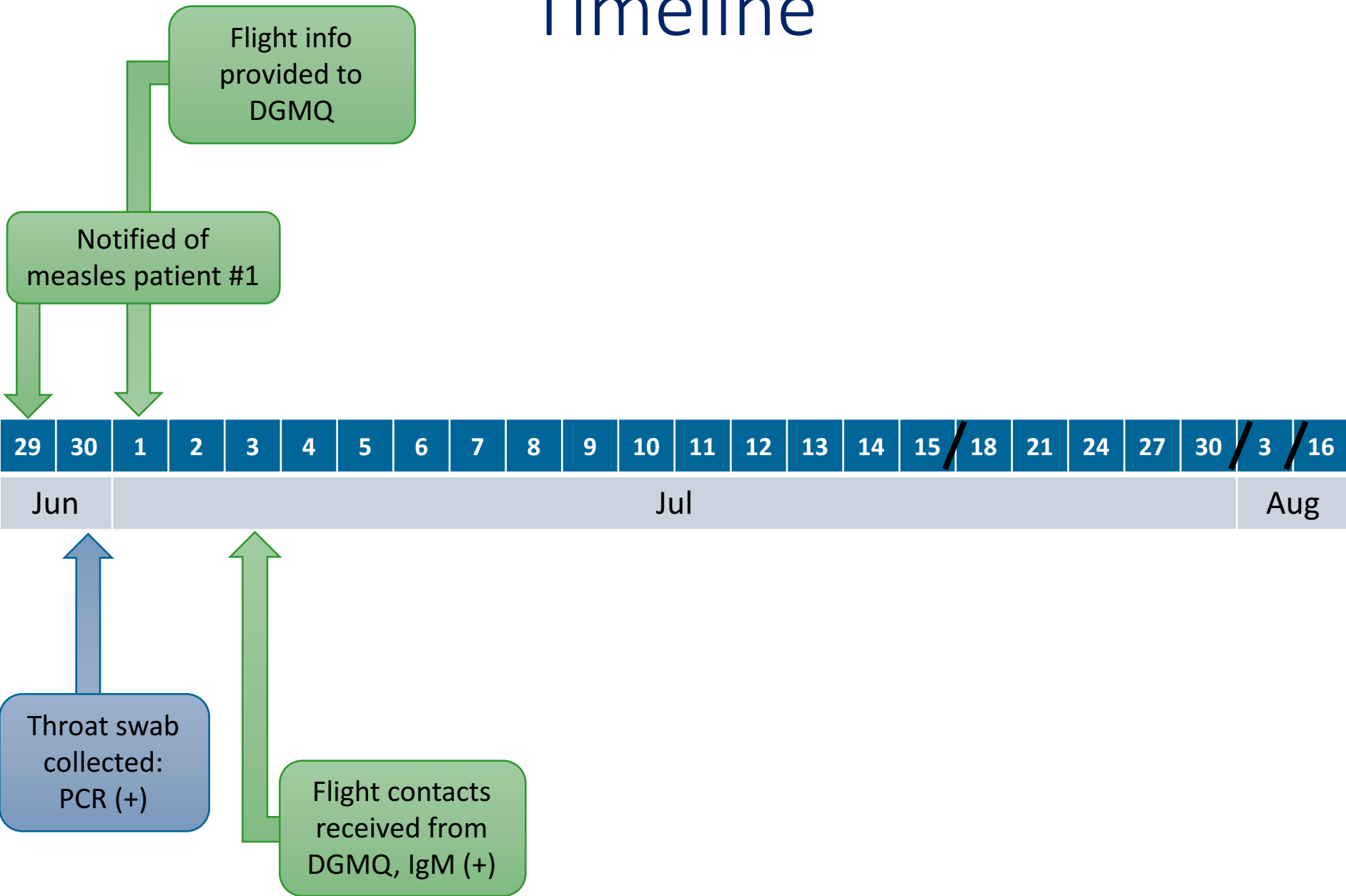
Flight info
provided to
DGMQ

Notified of
measles patient #1



Throat swab
collected:
PCR (+)

Timeline

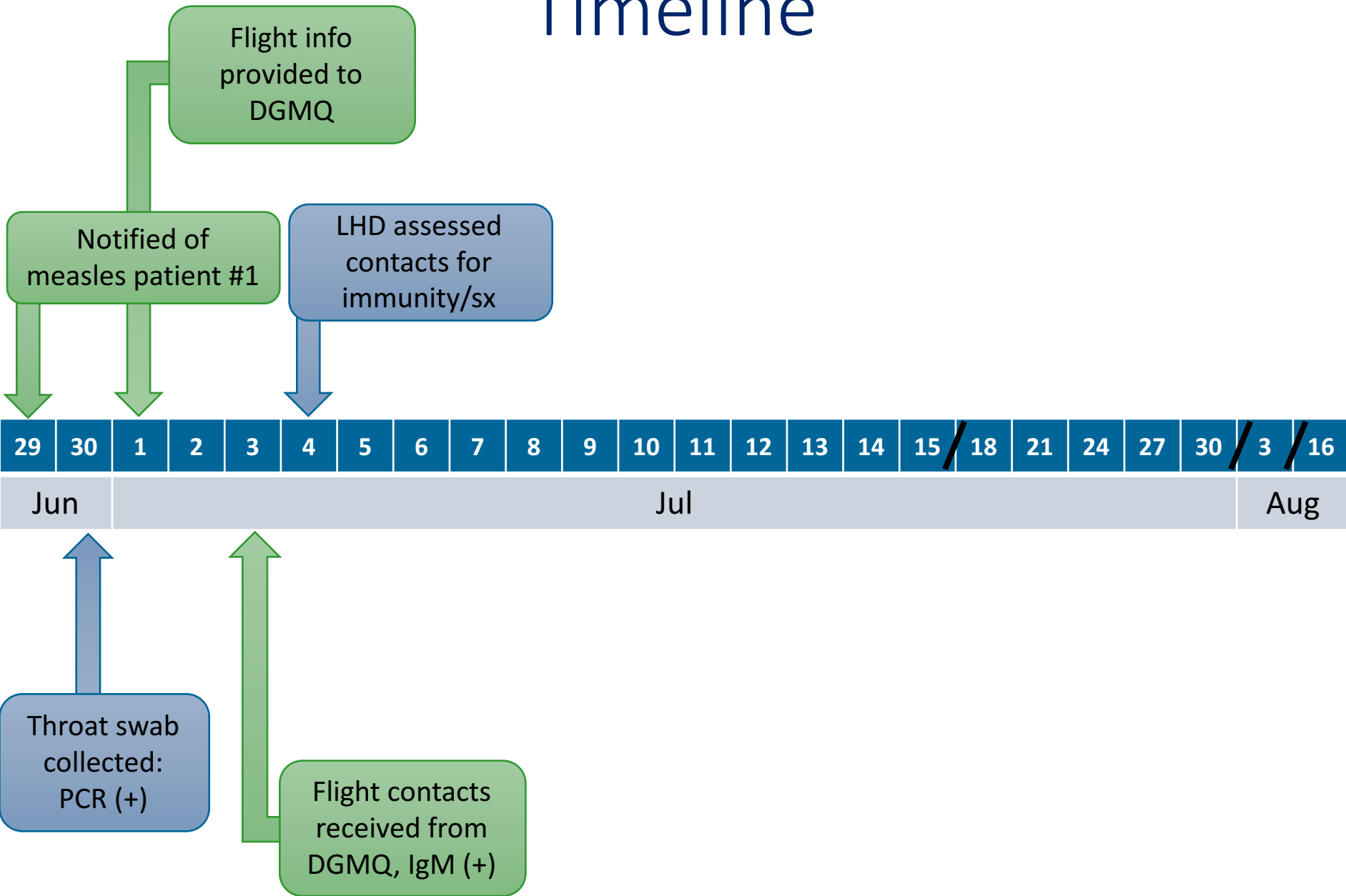


Measles #1 – Flight Contacts

- Counties
 - Sedgwick – 22 contacts
 - Butler – 2 contacts
 - Harvey – 2 contacts
 - McPherson – 1 contact
 - Pawnee – 1 contact

- KDHE provided recommendations to LHDs on contact investigation

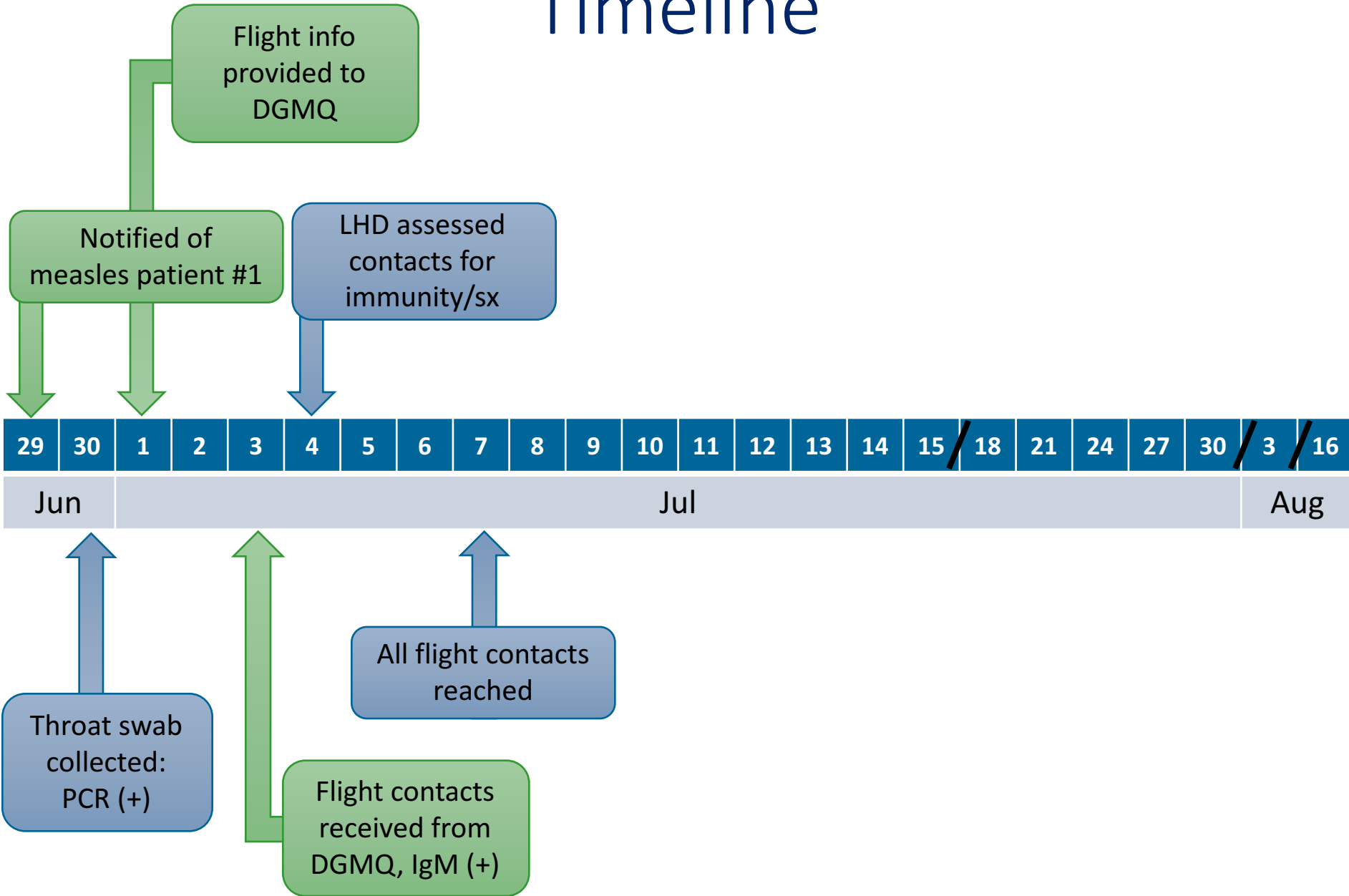
Timeline



Measles #1 – Flight Contact Follow Up

- Outside 72 hour window for MMR
- Immune globulin (IG) effective if given within 6 days
 - IGIM located, but discussion with CDC revealed not effective in persons >30 kg (66 lbs)
 - IGIV recommended for high risk persons
- 20/28 flight contacts reached → all immune

Timeline

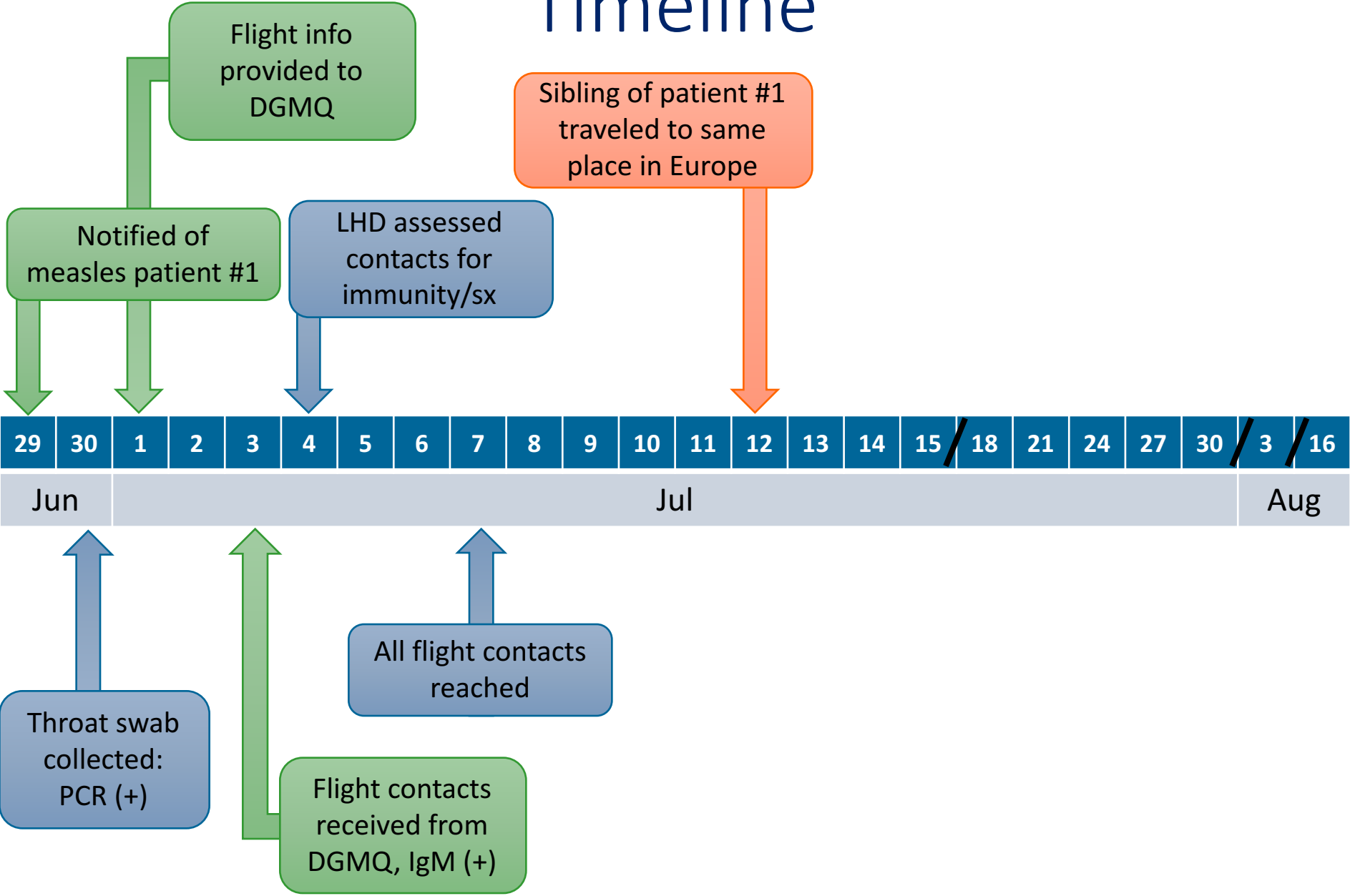


Back to Europe?

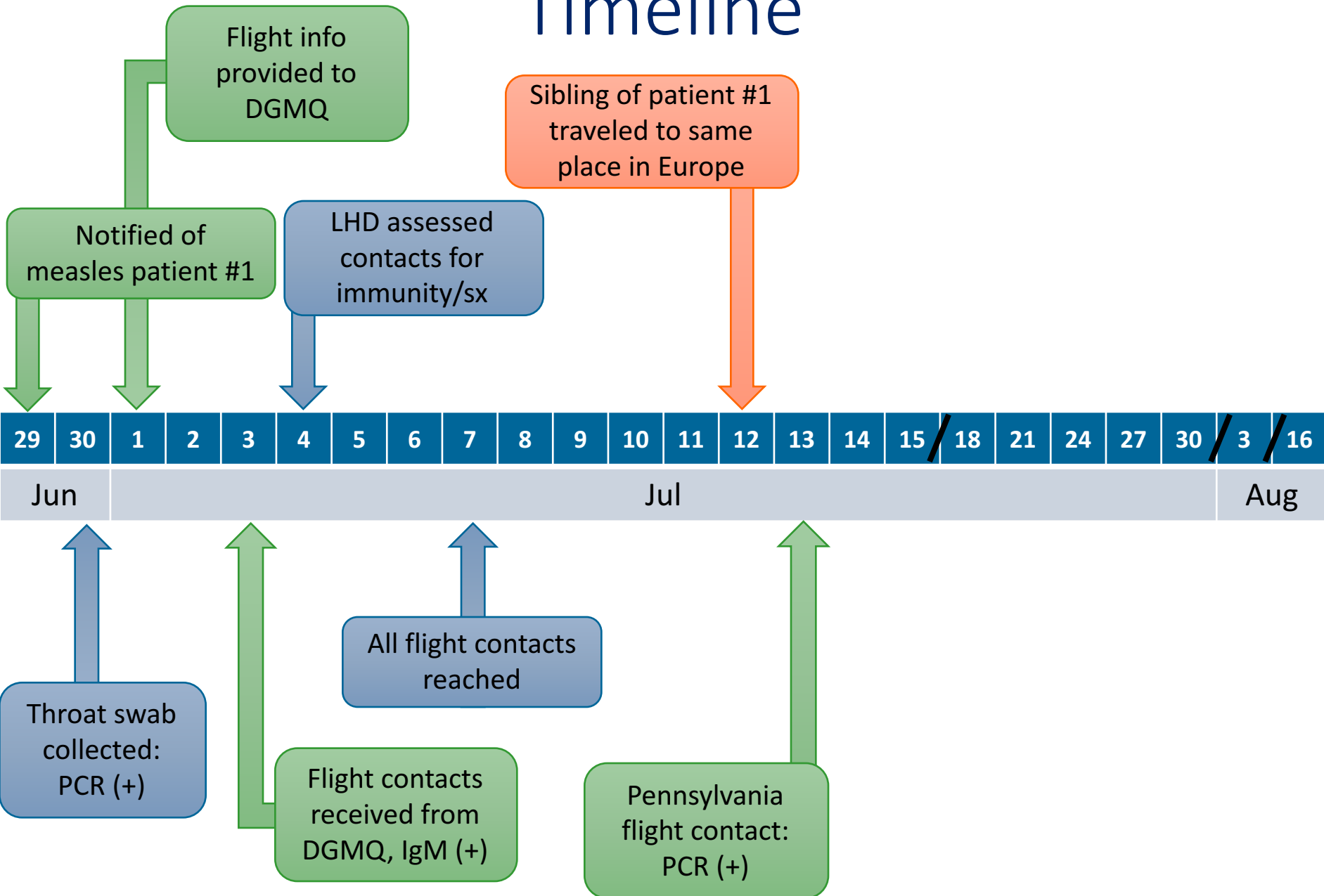
- Older sibling of measles patient planned to go to Europe on 7/12
- Received MMR on 6/30 (12 days prior to planned trip)
- Public health repeatedly advised to not go

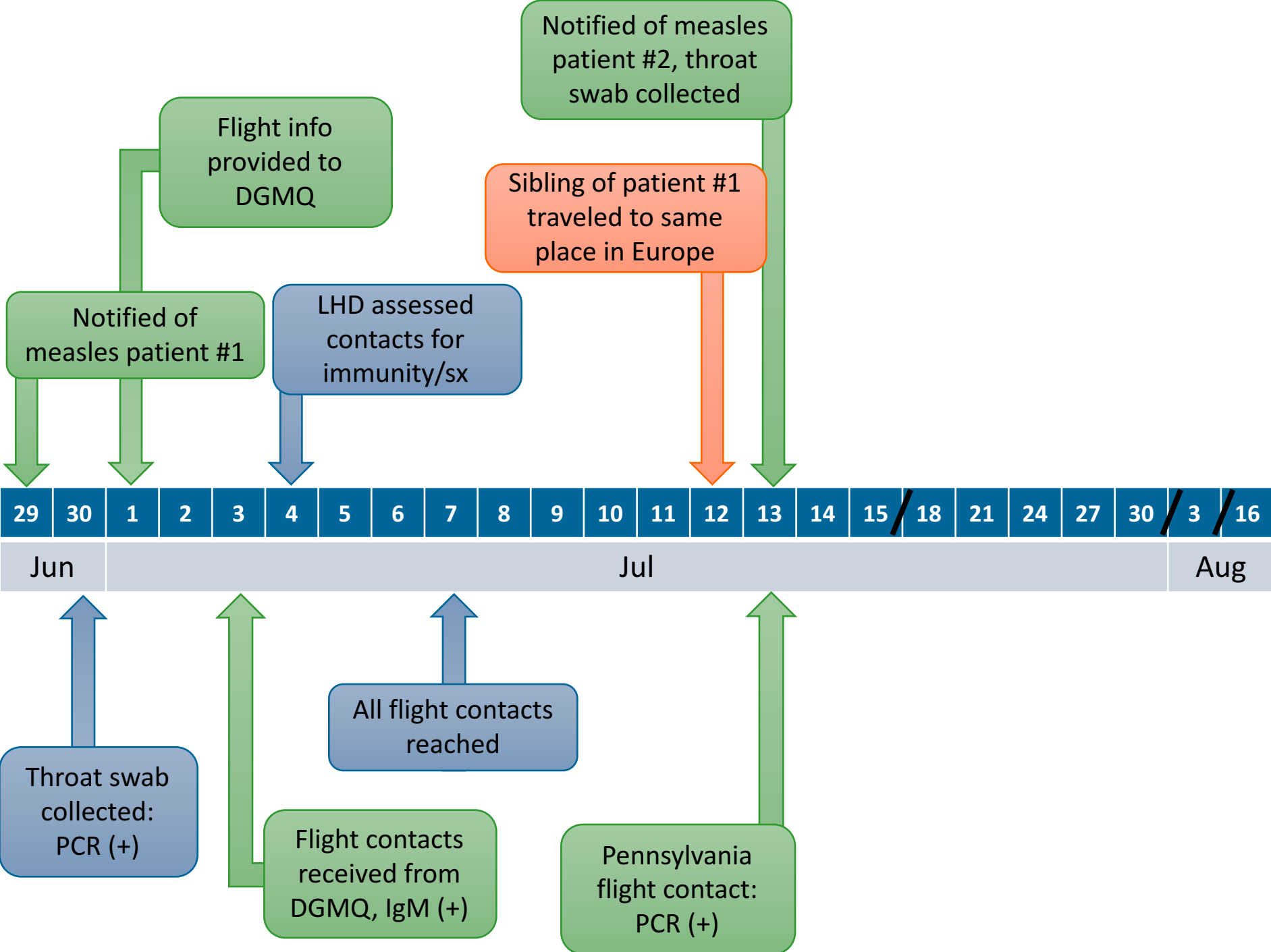


Timeline



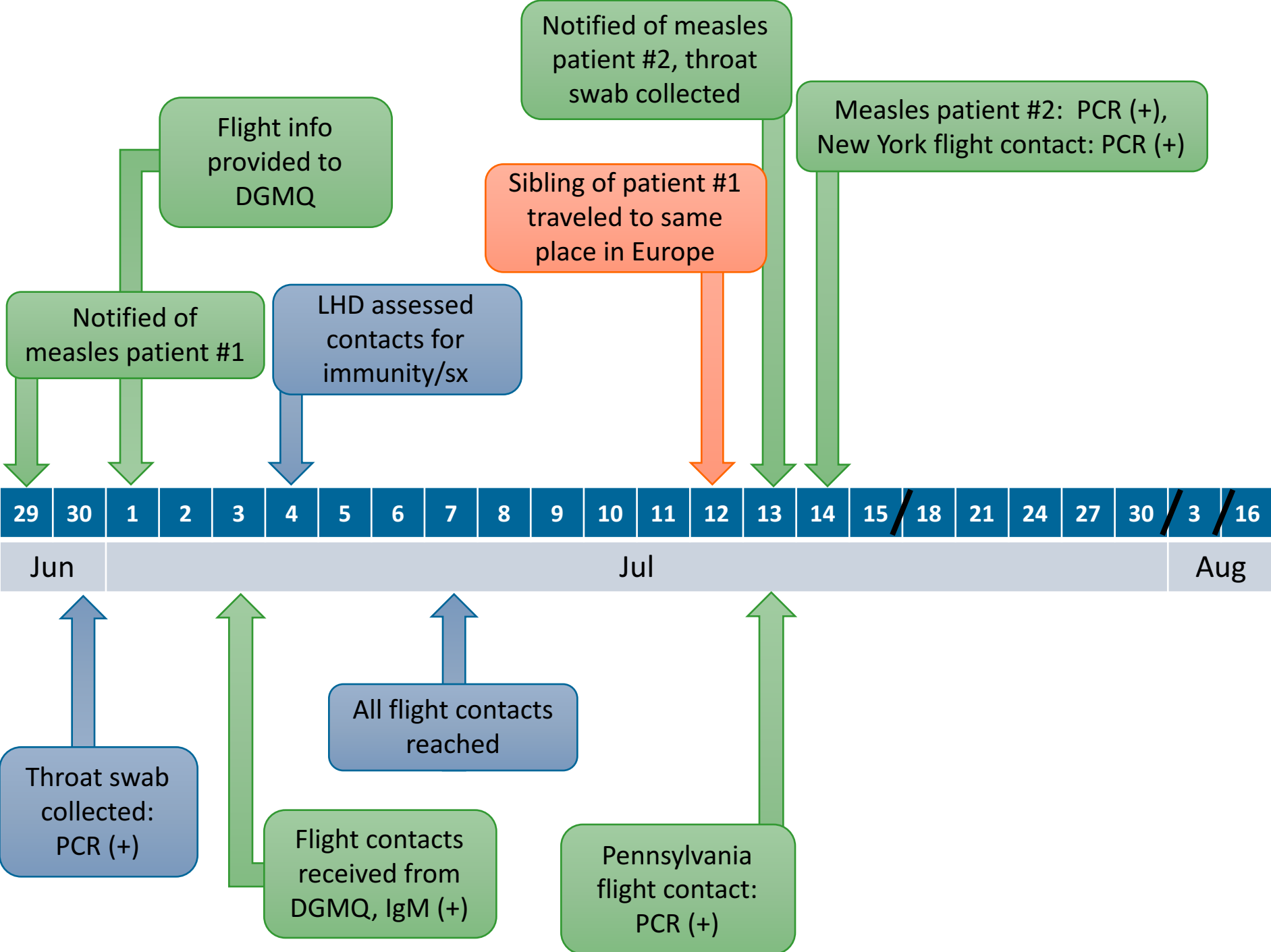
Timeline



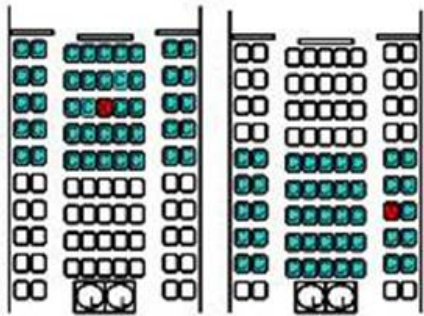
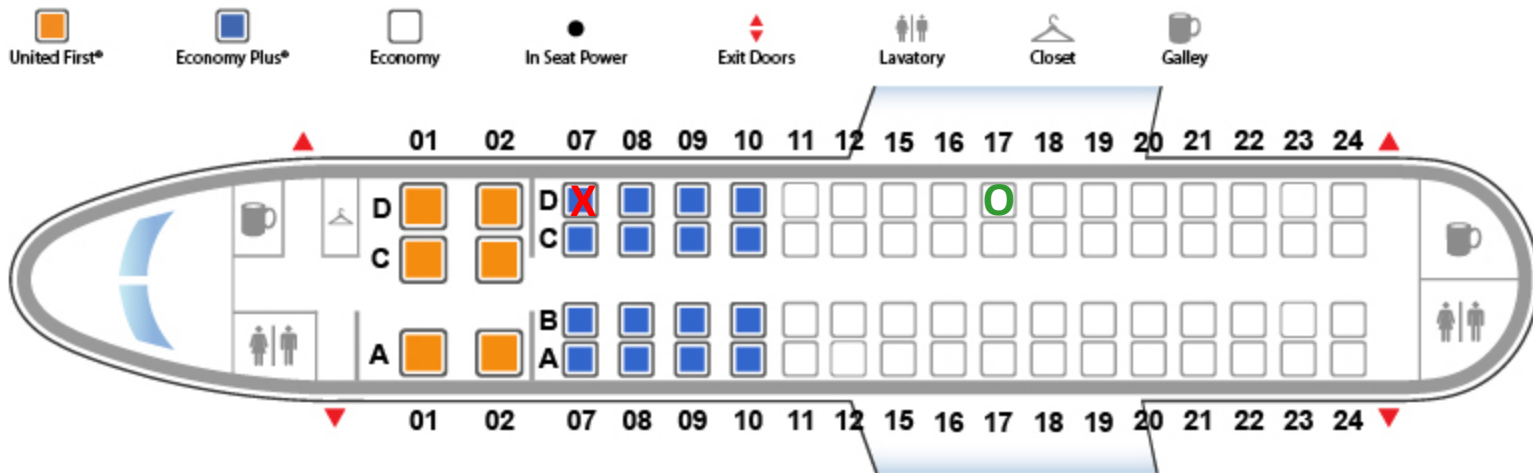


Measles #2 - Notification

- Flight contact to 1st measles patient
- Vaccinated, 44 y/o with autoimmune disorder
- Had oral surgery performed 7/7
- Fever
- Koplick spots
- Rash (neck behind ear, progressed to thighs and chest)



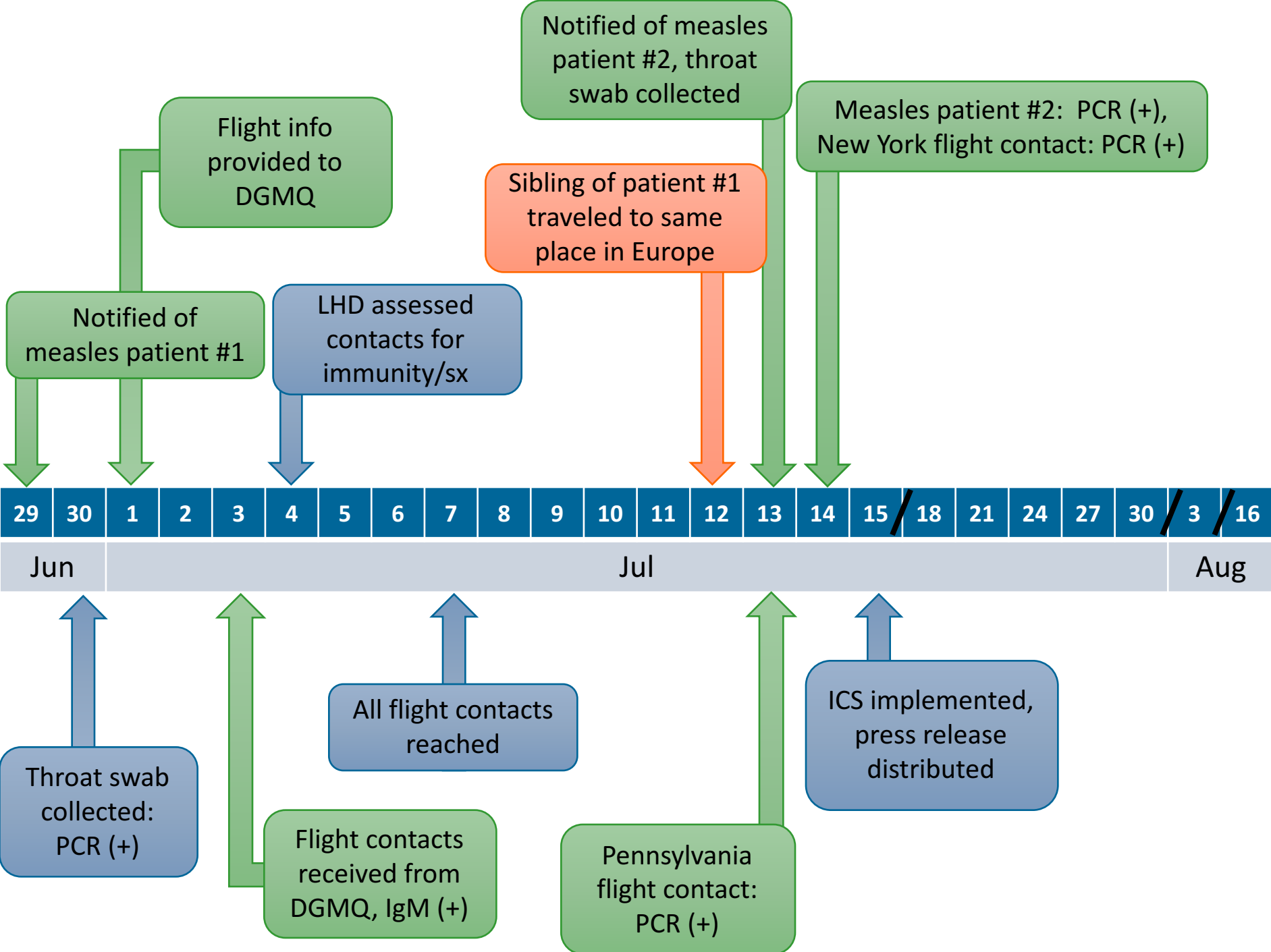
Flight Exposure of Measles #2



Measles #2 - Investigation

- Lamar's Donuts
- Pathway Church
- Walmart
- Kwik Shop
- Jason's Deli
- Jiffy Lube
- Academy Sports
- Michael's
- Family Video
- Moxley and Wagle Periodontics
- Vermillion Elementary



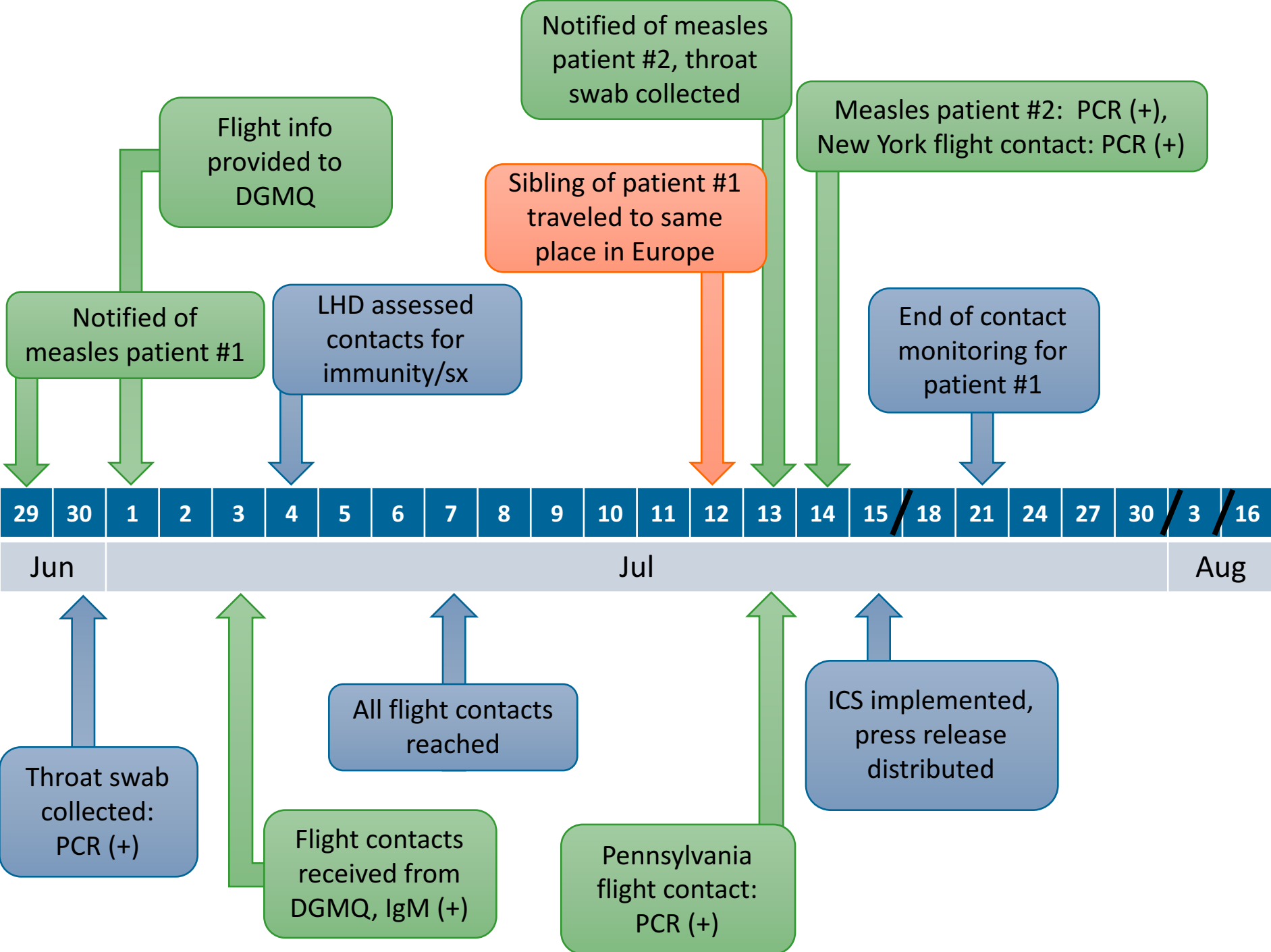


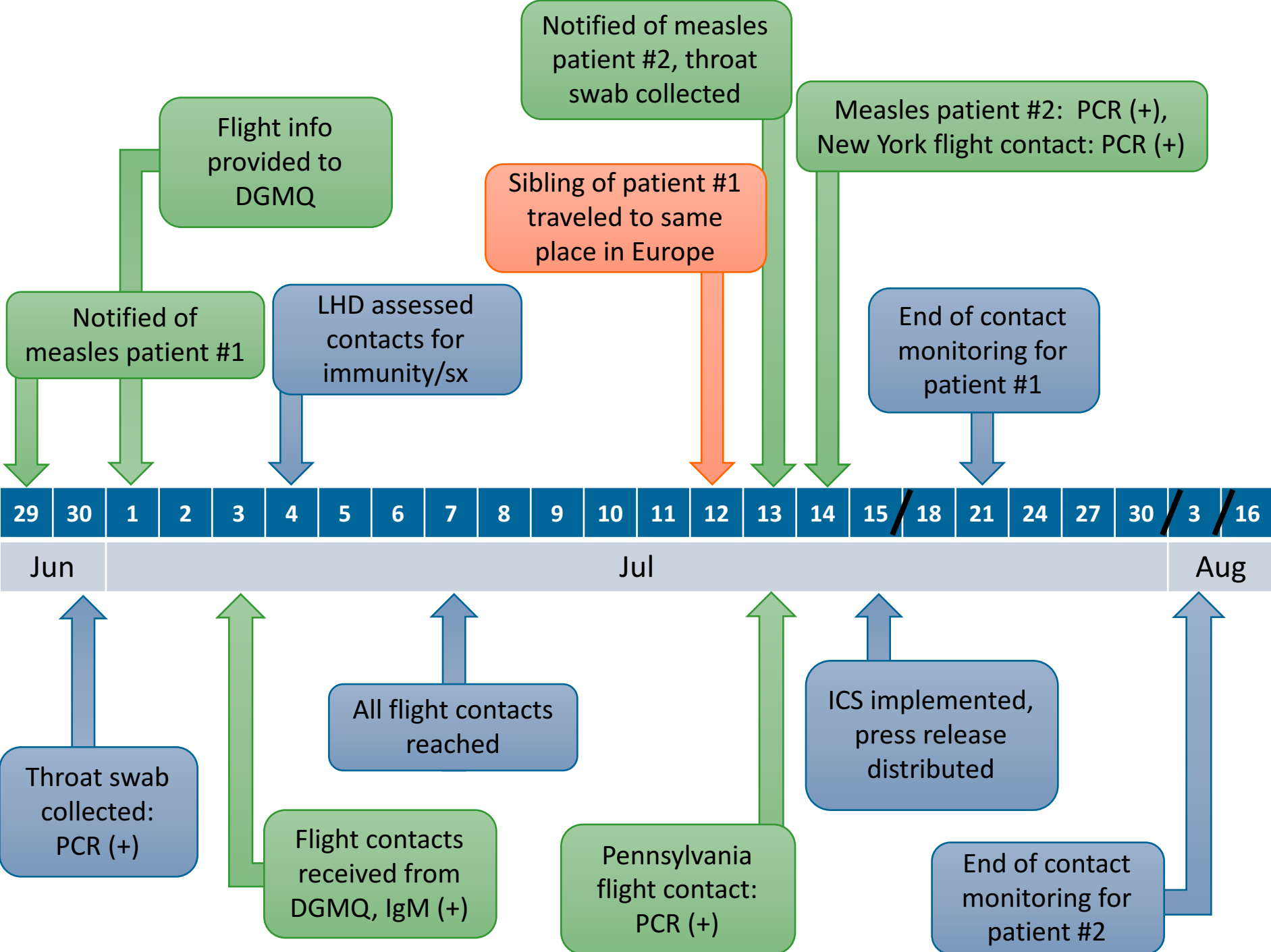
Goals of Incident Command Structure

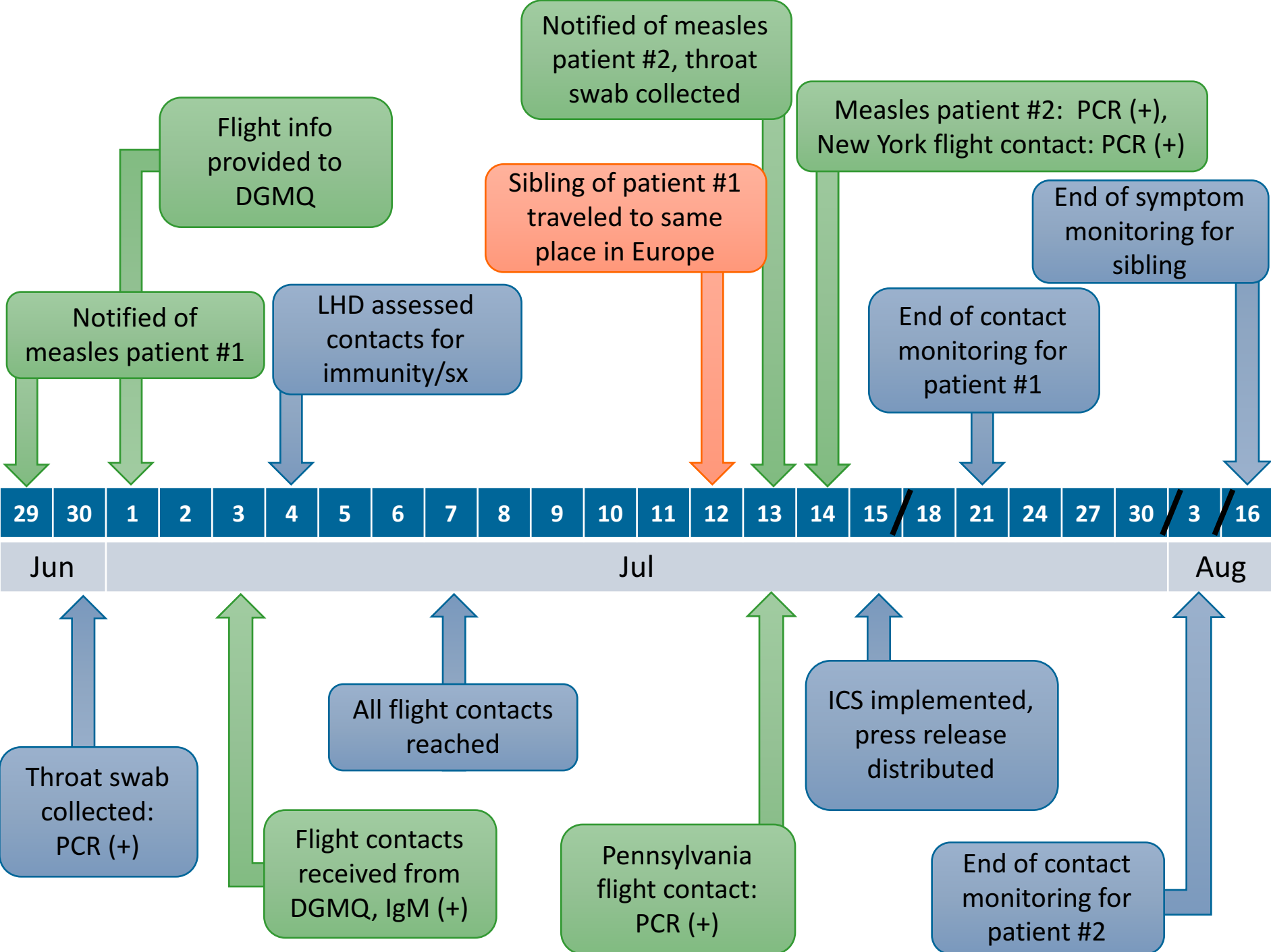
- Create and maintain surge capacity
- Provide consistent prevention recommendations
 - Susceptible
 - Out of 72 hour time frame for MMR for most
 - Recommended to get IG, but consult with PCP
 - Mandatory quarantine vs voluntary quarantine
 - Immune
 - Monitor for symptoms for 21 days

Measles #2 - ICS

- Received ~900 calls in July
 - On average, receive <200 calls/month
- >400 persons considered potentially exposed
 - 19 recommended IG → 7 received
 - 10 tested for measles → all negative
- Concluded on 7/17







Measles #1 – Summary

- Unvaccinated child traveled to Europe
- Exposed 55 persons in Kansas
 - 9 family → 3 unvaccinated received MMR
 - 18 hospital → 1 staff in quarantine
 - 28 flight → all immune
- 3 exposed flight contacts developed measles
 - Kansas
 - Pennsylvania
 - New York
- Vaccinated sibling traveled to Europe
 - Did not develop measles

Measles #2 – Summary

- Vaccinated, autoimmune disorder exposed on flight
 - 10 rows away
- ICS implemented
- Exposed >400 persons in Sedgwick County
 - 19 recommended IG → 7 received
- 0 developed measles

Questions



Discussion Points

- Travel to places experiencing large outbreaks
- Sufficient travel advisories
- Healthcare employee immunity assessment
- CDC current airplane exposure determination



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