

# Chikungunya in US travelers

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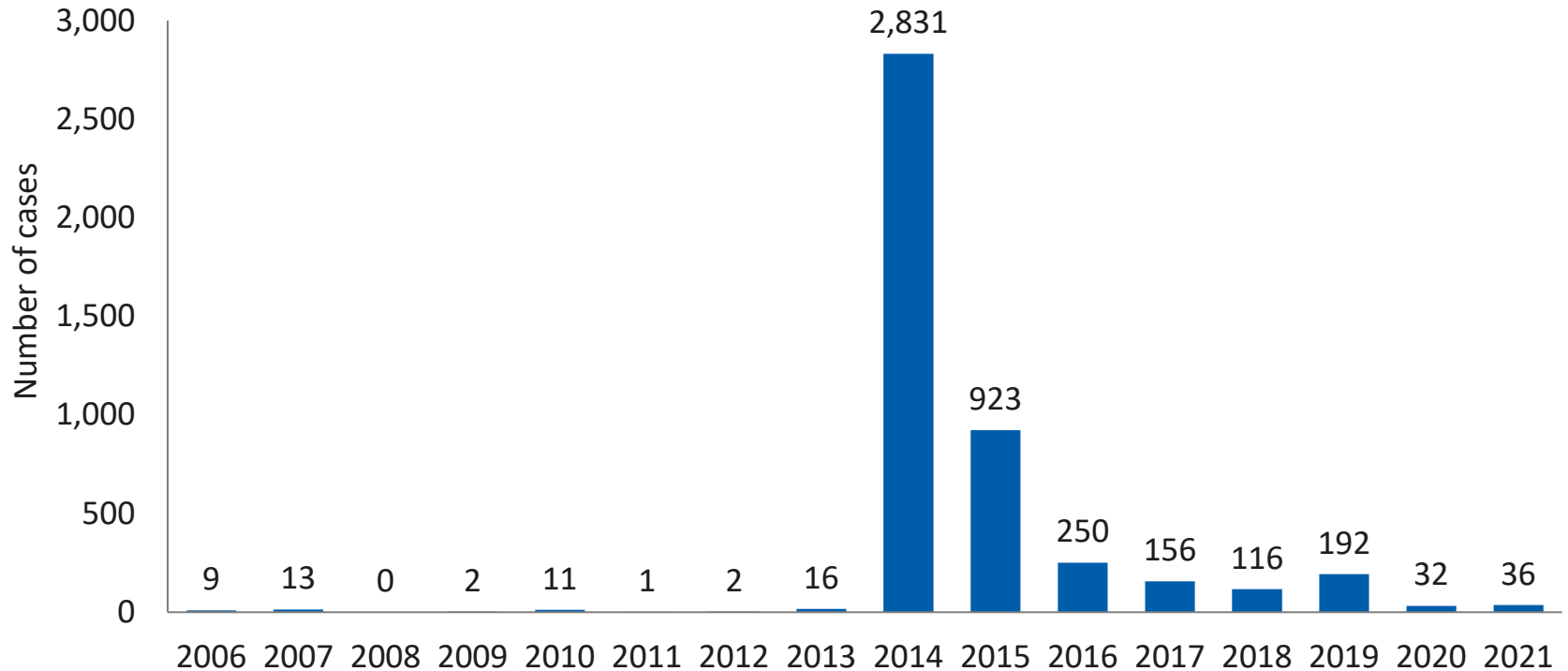
Arboviral Diseases Branch

Centers for Disease Control and Prevention

# National surveillance data for chikungunya virus disease in US travelers

- Data presented include confirmed and probable cases in residents of US states reported to CDC (excludes US territories and associated states)
- Prior to 2006, very rarely identified in US travelers; data are included from 2006–2021
  - Not nationally-notifiable from 2006–2014
- From 2006–2021, 4,590 cases in US travelers reported to CDC

# Chikungunya virus disease cases in US travelers, 2006–2021 (N=4,590)



## Sex of travel-associated chikungunya cases, 2006–2021 (N=4,590)

Sex	No.	(%)
Male	1,614	(35%)
Female	2,973	(65%)

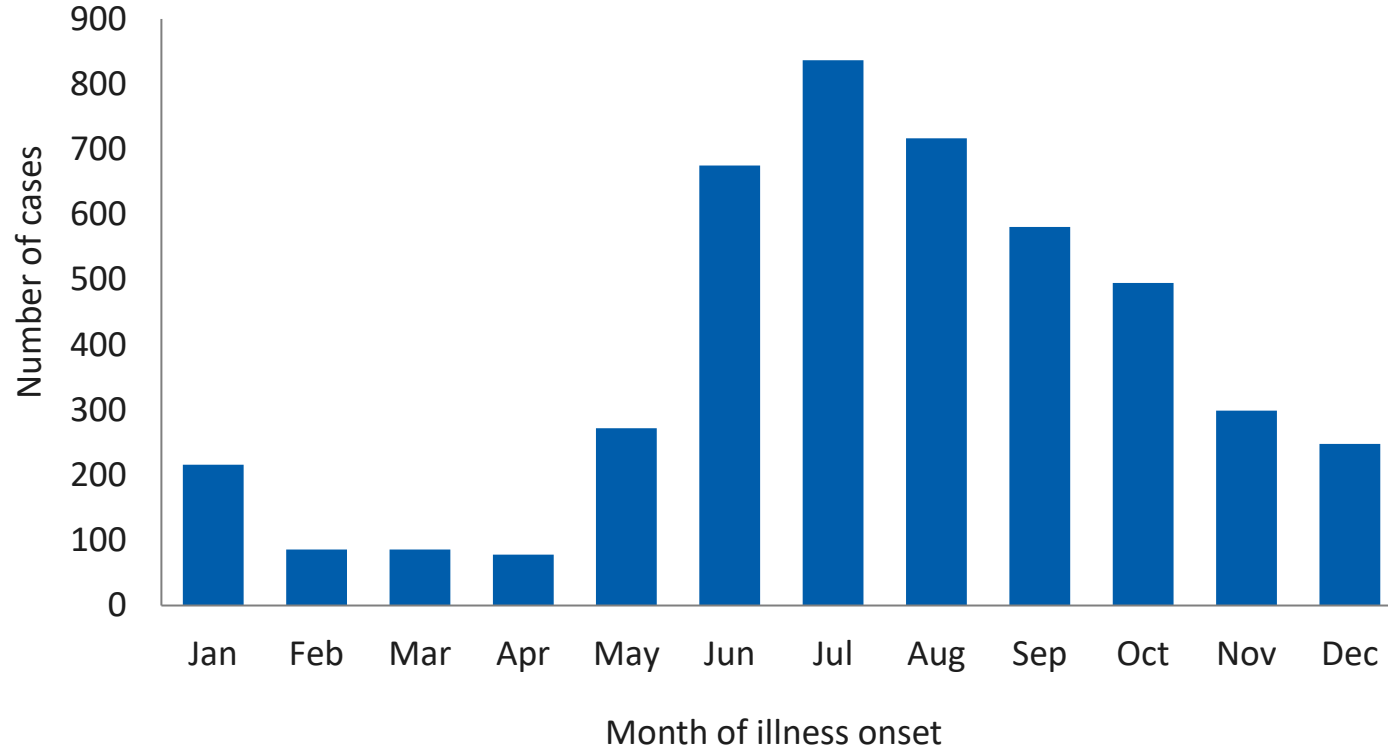
3 cases unreported sex

## Age of travel-associated chikungunya cases, 2006–2021 (N=4,590)

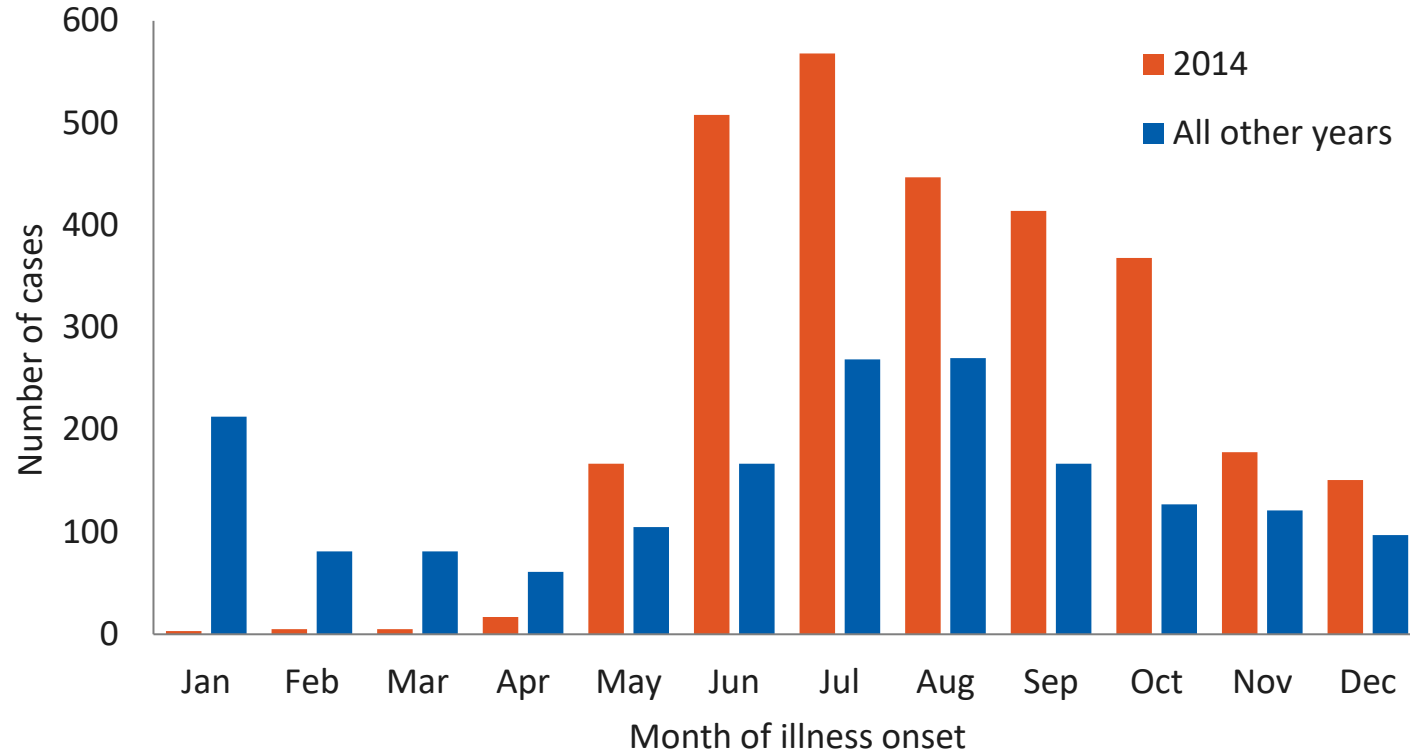
Years	No.	(%)
0–19	445	(10%)
20–39	1,166	(25%)
40–59	1,927	(42%)
60–79	952	(21%)
80+	86	(2%)

14 cases unreported age

# Month of onset of travel-associated chikungunya cases, 2006–2021 (N=4,590)



# Month of onset of travel-associated chikungunya cases, 2006–2021 (N=4,590)



# Outcomes of travel-associated chikungunya cases, 2006–2021 (N=4,590)

Outcome	No. (%)
Hospitalized	834 (18%)
Died*	4 (0.1%)

\*Cause of death unknown: All aged 63–84 years and died 36–61 days after illness onset

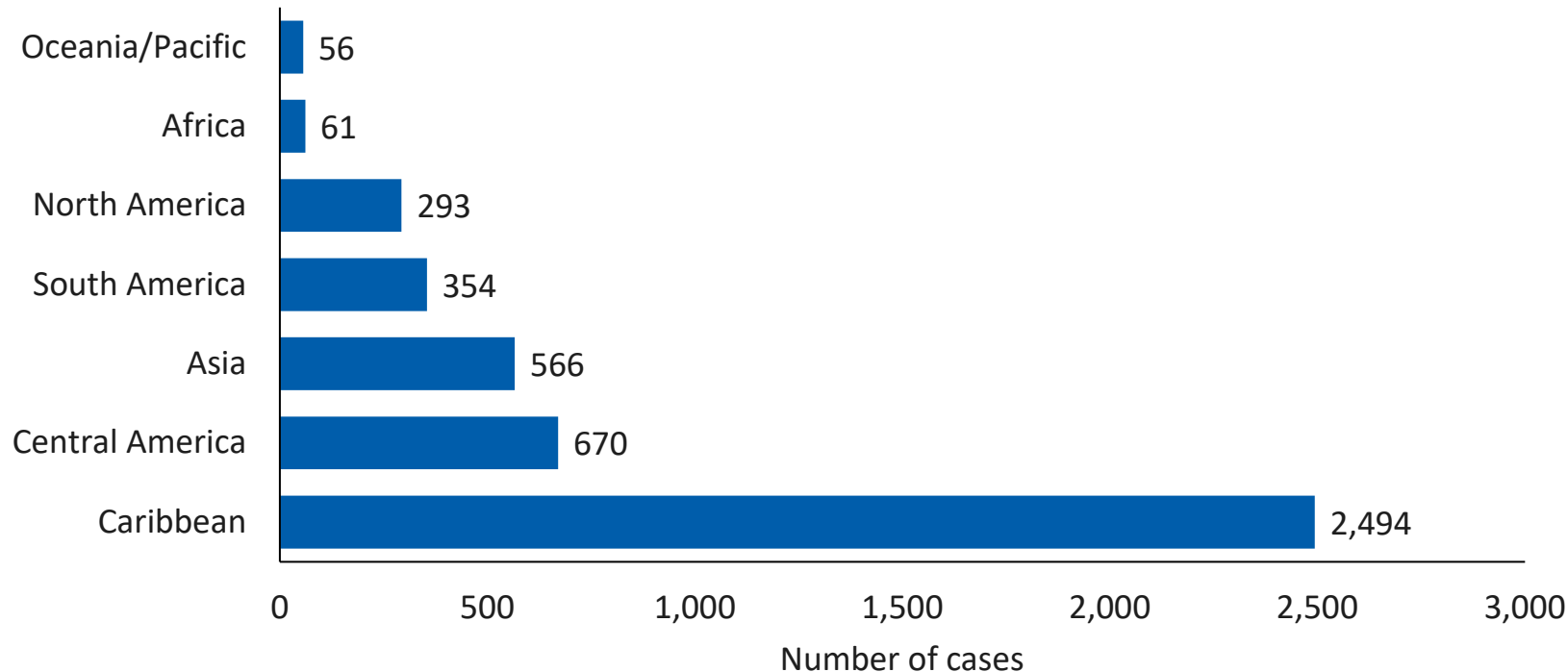


## Hospitalization rates by age among travel-associated chikungunya cases, 2006–2021 (N=4,590)

Age (years)	No.	Hospitalized (%)
0–1	17	7 (41%)
2–9	101	31 (31%)
10–19	327	60 (18%)
20–39	1,166	192 (16%)
40–59	1,927	295 (15%)
60–79	952	220 (23%)
80+	86	33 (38%)

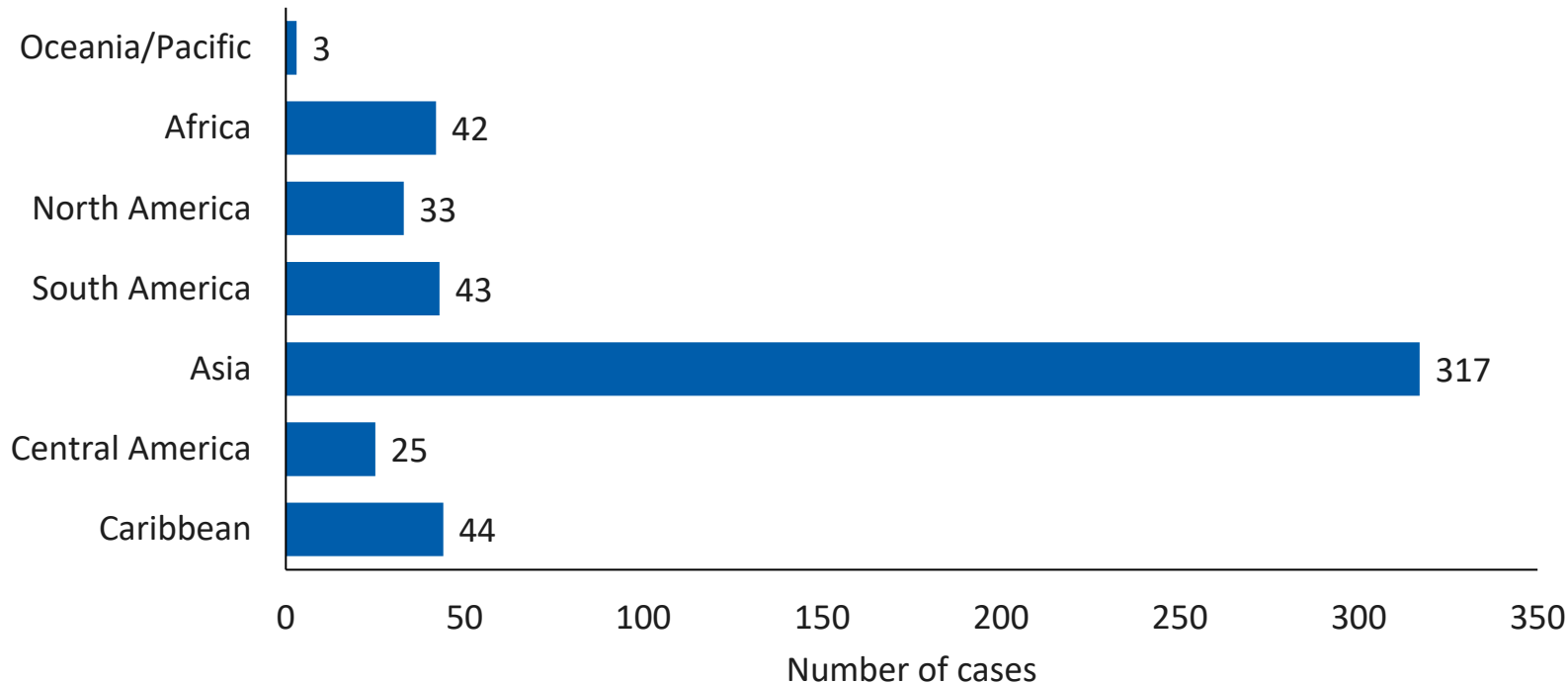
14 cases unreported age

# Regions of probable acquisition of travel-associated chikungunya, 2006–2021 (N=4,590)



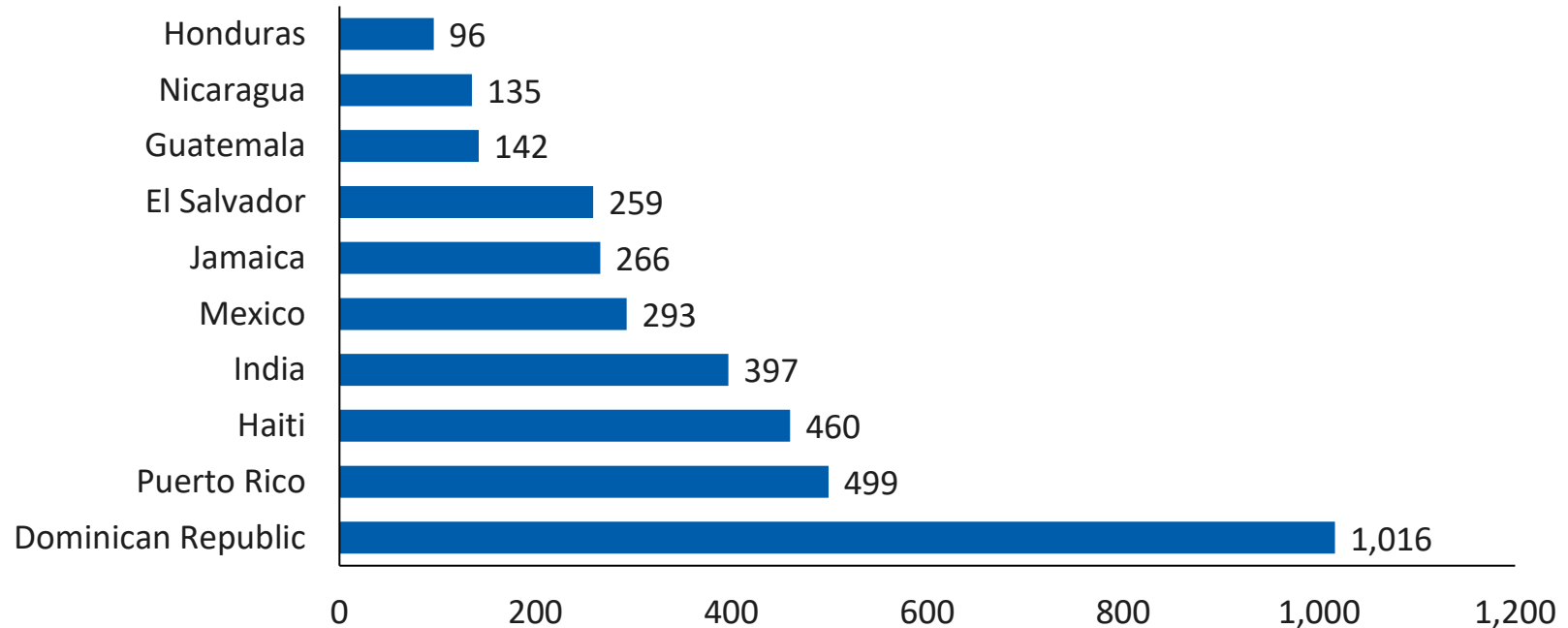
95 cases unknown location of infection

# Regions of probable acquisition of travel-associated chikungunya, 2017–2021 (N=532)



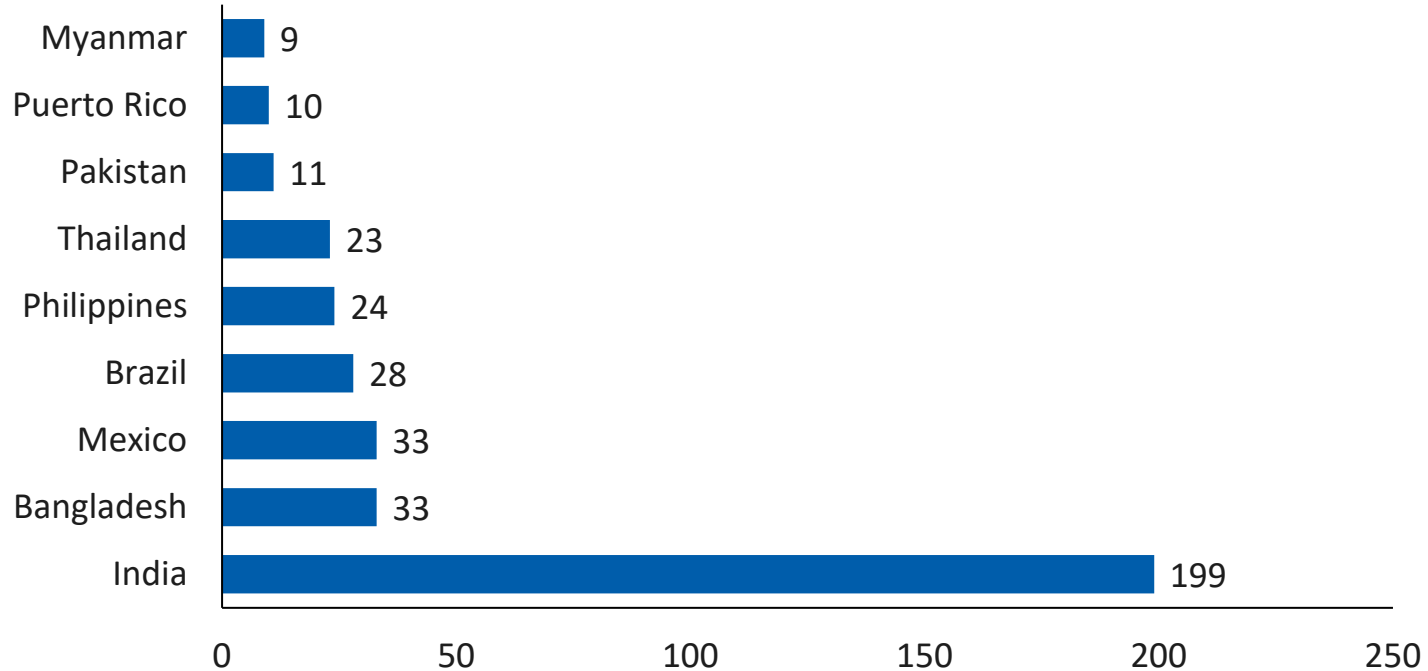
25 cases unknown location of infection

# Most common locations of probable acquisition of travel-associated chikungunya, 2006–2021 (N=4,590)



95 cases unknown location of infection

# Most common locations of probable acquisition of travel-associated chikungunya, 2017–2021 (N=532)



25 cases unknown location of infection

## Limitations of national surveillance data

- Reported cases likely underestimate true incidence of chikungunya disease among travelers
- Reported cases likely represent higher proportion of severe outcomes
- Complete data often unavailable, particularly for travel history
  - No information on duration of travel or activities during travel
- No information on duration of symptoms or long-term sequelae

# Summary

- Relatively few traveler cases reported annually except during time of large outbreaks in Americas
- Reported cases likely underestimate true incidence but overestimate proportions of severe outcomes
- Very young children and older adults have highest hospitalization rates
- Cases have occurred among travelers to all regions with chikungunya risk and can occur year-round
  - Case numbers reflect level of chikungunya virus activity in, and number of travelers to, destinations with risk