



Centers for Disease Control and Prevention



Update on the Current Status of Zika Virus Epidemiology

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Zika virus in the Americas

- In 2015, the first locally acquired cases in the Americas were reported in Brazil
- By end of 2017, local mosquito-borne transmission had been reported in 48 countries or territories in the Americas
- Only countries in Americas without reported local transmission are Bermuda, Canada, Chile, and Uruguay

Zika virus in the United States

- Following introduction and spread in the Americas, cases among US travelers increased substantially
- In 2016, large outbreaks in three US territories (Puerto Rico, US Virgin Islands, and American Samoa)
- In 2016, limited local mosquito-borne transmission identified in two states (Florida and Texas)

Zika virus surveillance in the United States

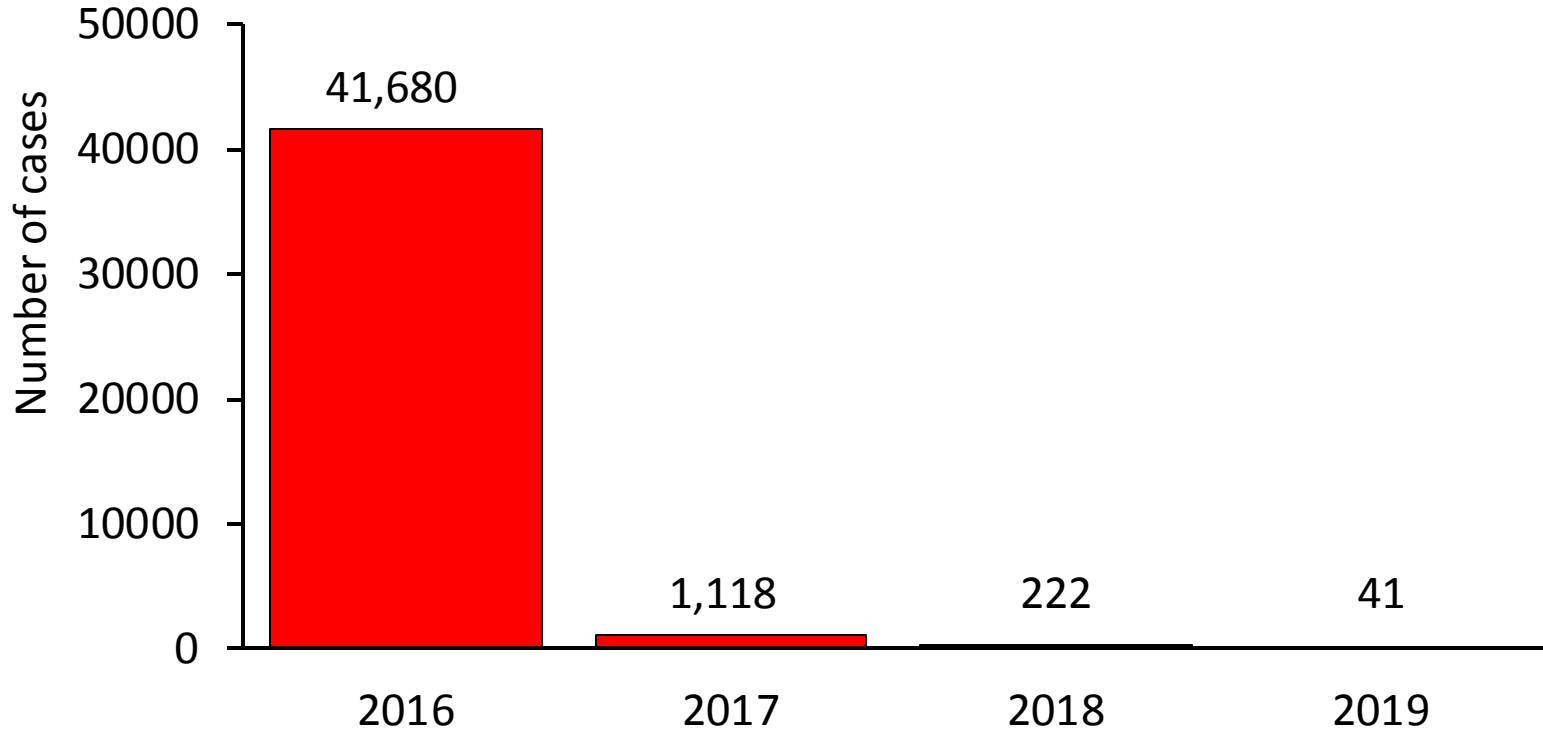
- Zika virus disease and Zika virus infection without disease became nationally notifiable conditions in 2016
- Cases and infections reported to CDC's ArboNET system by all state and territorial health departments
- Use standardized case definitions with clinical, epidemiologic, and laboratory criteria
- Congenital and non-congenital infections reported separately

ArboNET reporting criteria for viremic blood donors

- Initial reactive individual (ID) NAT or minipool (MP) NAT result with:
 - Repeat Zika virus RNA by the same or alternate NAT assay on the same or a follow-up sample; OR
 - Zika virus IgM antibody test with Zika virus neutralizing antibodies in the same or a follow-up sample; OR
 - Zika virus or viral antigen in any specimen

**Zika virus disease cases reported to ArboNET —
United States, 2016–2019**

Confirmed and probable Zika virus disease cases, by year — U.S. states and territories, 2016–2019 (as of Sept 6, 2019)



Zika virus disease cases, by place of residence and year — U.S. states and territories, 2016–2019 (as of Sept 6, 2019)*

	2016 (N=41,680)	2017 (N=1,118)	2018 (N=222)	2019 (N=41)
Territories	36,512 (88%)	666 (60%)	148 (67%)	34 (88%)
States	5,168 (12%)	452 (40%)	74 (33%)	7 (17%)

*Includes confirmed and probable travel-associated and locally acquired cases.
Excludes congenital disease cases.

Zika virus disease cases, by type of exposure and year — U.S. territories, 2016–2019 (as of Sept 6, 2019)

Territories	2016 (N=36,512)	2017 (N=666)	2018 (N=148)	2019 (N=34)
Locally acquired*	36,367 (99%)	665 (99%)	147 (99%)	32 (94%)†
Travelers	145 (<1%)	1 (<1%)	1 (1%)	2 (6%)

*Presumed local mosquito-borne transmission in Puerto Rico (N=36,046; 97%), US Virgin Islands (N=1,034; 3%), and American Samoa (N=131; <1%).

†All cases reported in PR and diagnosed by IgM testing only; no PCR+ cases

Zika virus disease cases, by type of exposure and year — U.S. states, 2016–2019 (as of Sept 6, 2019)

States	2016 (N=5,168)	2017 (N=452)	2018 (N=74)	2019 (N=7)
Locally acquired*	224 (4%)	7 (1%)	0 (0%)	0 (0%)
Travelers	4,897 (95%)	437 (97%)	73 (99%)	7 (100%)
Other routes†	47 (1%)	8 (2%)	1 (1%)	0 (0%)

*Presumed local mosquito-borne transmission in Florida (N=220; 95%) and Texas (N=11; 5%).

†Includes sexual transmission (N=52), laboratory transmission (N=3), and unknown route (N=1).

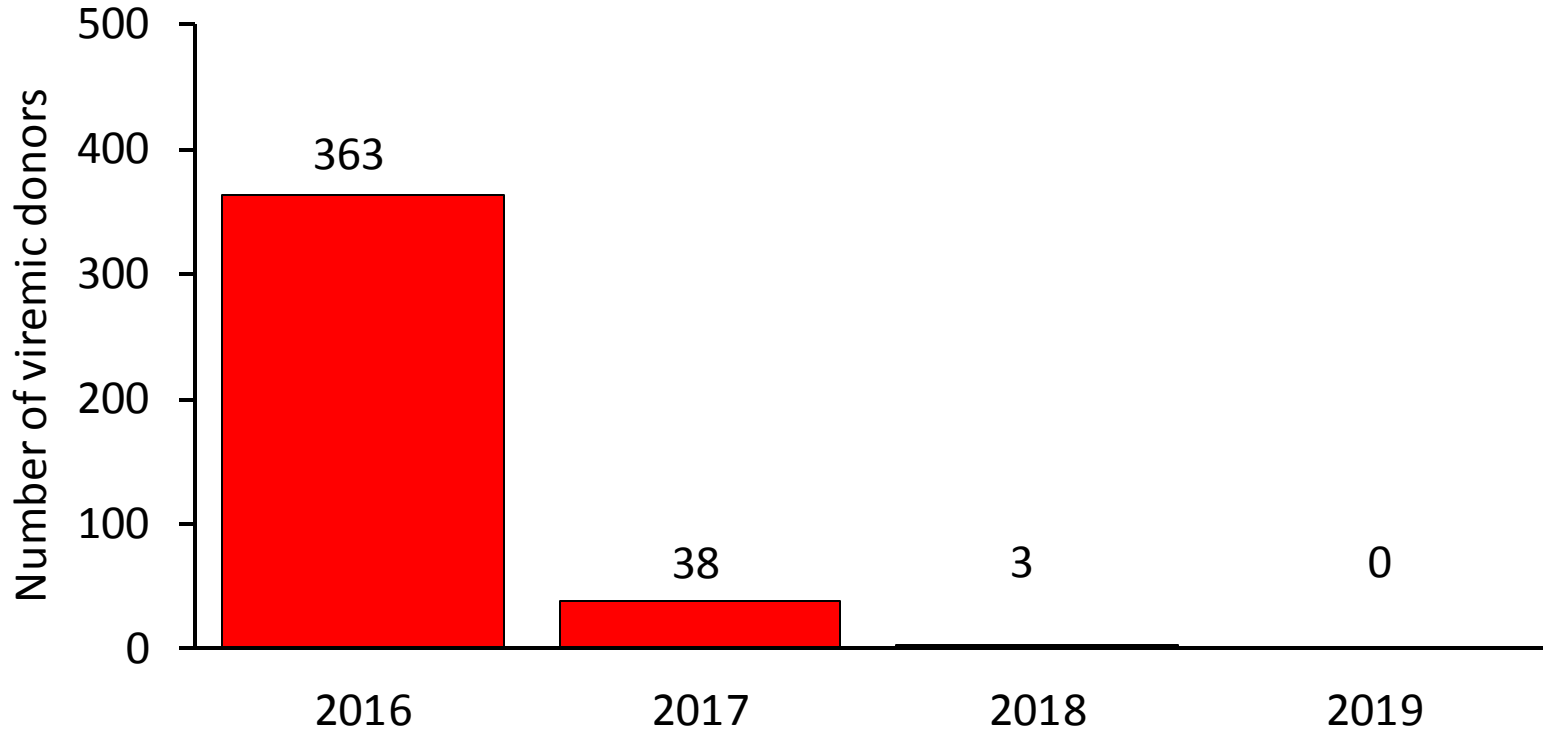
Travel location for Zika virus disease cases — U.S. states and territories, 2018–2019 (as of Sept 6, 2019)

Region	2018 (N=73)	2019 (N=7)
Americas		
Caribbean	27 (37%)	1 (14%)
North America	15 (20%)	2 (29%)
Central America	7 (10%)	2 (29%)
South America	4 (6%)	1 (14%)
Asia/Western Pacific	12 (16%)	1 (14%)
Unknown	8 (11%)	0 (0%)

**Zika viremic blood donors reported to ArboNET —
United States, 2016–2019**



Zika viremic blood donors, by year — U.S. states and territories, 2016–2019 (as of Sept 6, 2019)



Zika viremic blood donors, by place of residence and year — U.S. states and territories, 2016–2019 (as of Sept 6, 2019)

	2016 (N=363)	2017 (N=38)	2018 (N=3)	2019 (N=0)
Territories	325 (90%)	6 (16%)	0 (0%)	0
States	38 (10%)	32 (84%)	3 (100%)	0

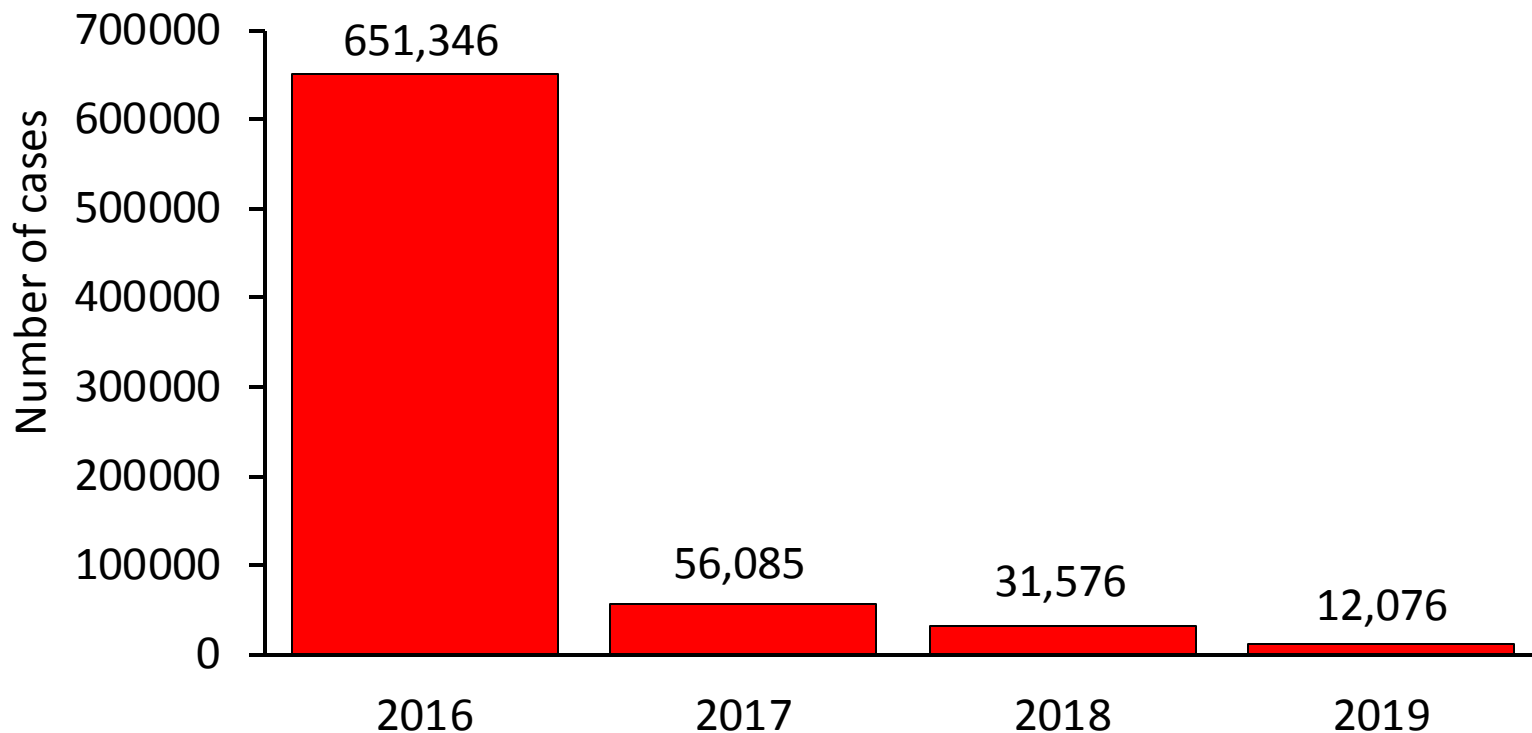
Travel location for Zika viremic blood donors — U.S. states and territories, 2018 (as of Mar 6, 2019)

<u>Region</u>	<u>(N=3)</u>	
Americas		
Caribbean	1	(33%)
North America	2	(67%)
Central America	0	(10%)
South America	0	(6%)
<u>Asia/Western Pacific</u>	0	(16%)

Zika virus disease cases reported to PAHO — Americas, 2016–2019



Suspected and confirmed Zika virus disease cases, by year — Americas, 2016–2019 (as of Aug 16, 2019)



<http://www.paho.org/data/index.php/en/mnu-topics/zika.html>

Zika virus disease cases, by year and case status — Americas, 2016–2019 (as of Aug 16, 2019)*

Type	2016 (N=651,346)	2017 (N=56,085)	2018 (N=31,576)	2019 (N=12,076)
Confirmed†	199,370 (31%)	19,790 (35%)	3,589 (11%)	3,479 (29%)
Suspected‡	451,976 (69%)	36,295 (65%)	27,987 (89%)	8,597 (71%)

*Excludes imported cases

†For some countries, “confirmed” includes cases with clinical findings and epidemiologic link

‡Clinically compatible illness with no laboratory testing

**Suspected and confirmed Zika virus disease cases,
by year and region — Americas, 2016–2018 (as of Aug 16, 2019)**

Region	2016 (N=651,346)	2017 (N=56,085)	2018 (N=31,576)	2019 (N=12,076)
Brazil	273,904	31,754	19,020	9,071 (75%)
South America*	160,070	12,546	3,992	1,977 (16%)
Central America	56,359	7,017	6,617	959 (8%)
Caribbean	152,281	1,501	1,070	25 (<1%)
North America	8,732	3,267	877	44 (<1%)

*Excludes Brazil

Confirmed Zika virus disease cases, by region — Americas, 2019 (as of Aug 16, 2019)

Region	Confirmed	Total	(% confirmed)
Brazil	2,650	9,071	(29%)
South America*	744	1,977	(38%)
Central America	16	959	(2%)
Caribbean	25	25	(100%)
North America	44	44	(100%)
All	3,479	12,076	(29%)

*Excludes Brazil

Suspected and confirmed Zika virus disease cases reported from PAHO for selected countries — Americas, 2019 (as of Aug 16, 2019)

Country	Total	Confirmed (%)	Population
Brazil	9,071	2,650 (29%)	208,495,000
Peru	1,370	725 (53%)	32,552,000
El Salvador	452	--	6,412,000
Colombia	302	4 (1%)	49,465,000
Guatemala	166	10 (6%)	17,245,000
Honduras	164	0	9,417,000
Paraguay	162	0	6,897,000
Bolivia	102	15 (15%)	11,216,000
Costa Rica	95	--	4,953,000
Nicaragua	76	0	6,285,000
Mexico	39	39 (100%)	130,759,000
Venezuela	39	0	32,381,000
Cuba	--	--	11,489,000

Zika virus epidemiology in the Americas

Summary

- Large outbreaks in the Americas peaked in 2016 with substantially decreased activity in 2017
- Much lower levels of transmission in focal areas of some countries as of 2019
 - Limited surveillance and testing capacity
- Incidence and disease risk among US travelers has followed epidemiology of outbreaks in the Americas

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

