



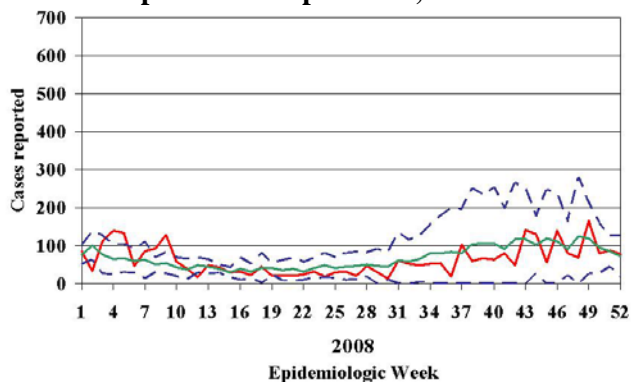
**WEEKLY DENGUE SURVEILLANCE REPORT**  
**CDC DENGUE BRANCH & PUERTO RICO DEPARTMENT OF HEALTH**

December 21 to December 27 of 2008 (week 52)

Preliminary data as of January 5, 2009



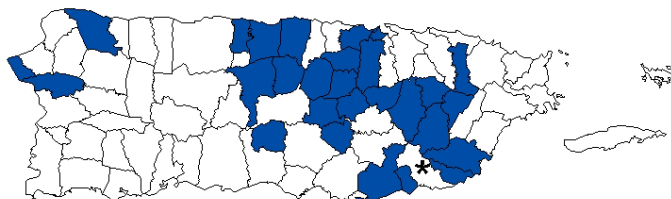
**Number of reported cases per week, 2008**



— Number of cases — Average number of cases - - (+ 2DS) - - (- 2DS)

The level of reporting during week 52 is over the average for the five reference years (average for the years 2000-2004  $\pm$  2 standard deviations).

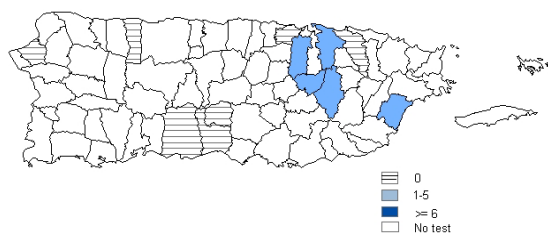
**Municipalities with a significant increase in reported dengue cases during weeks 49 to 52**



\*Patillas is the site of a special dengue project and is not part of this weekly surveillance report

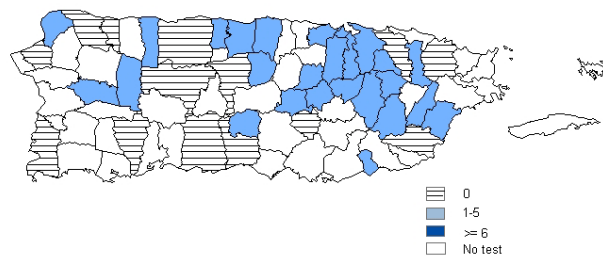
The following municipalities have a significant increase in cases in the last four weeks compared to what is expected when dengue activity level is minimal (four weeks average during the months of April, May, and June, 2000-04) (reported cases/expected): **Aguas Buenas (3/1), Aibonito (1/0), Añasco (10/1), Arroyo (12/2), Barceloneta (6/1), Barranquitas (1/0), Bayamón (44/12), Caguas (28/7), Canóvanas (9/2), Cataño (4/1), Ciales (3/0), Comerío (10/0), Corozal (3/1), Guayama (10/4), Gurabo (13/1), Isabela (4/1), Juncos (5/1), Manatí (20/1), Maunabo (4/0), Morovis (9/1), Naranjito (3/1), Rincón (3/0), San Lorenzo (5/1), Toa Alta (11/4), Toa Baja (7/3), Vega Baja (12/3), Villalba (4/1) and Yabucoa (5/1).**

**Positivity for anti-dengue IgM antibody detection, week 52**



Positivity for all samples tested for anti-dengue IgM antibody was 40% (6 positive samples/15 processed samples). **There was positivity in 6% (5) of 78 municipalities.** Samples processed for anti-dengue IgM during the current week indicate dengue transmission in **Aguas Buenas, Bayamón, Caguas, Humacao and San Juan.**

**Positivity for anti-dengue IgM antibody detection, weeks 49 to 52**



There was positivity in 33% (26) of the 78 municipalities. Samples processed for anti-dengue IgM during the last four weeks indicate dengue transmission in **Aguadilla, Aguas Buenas, Arroyo, Barceloneta, Barranquitas, Bayamón, Caguas, Canóvanas, Cataño, Comerío, Guaynabo, Gurabo, Hatillo, Humacao, Lares, Las Marías, Las Piedras, Manatí, Morovis, Naranjito, San Juan, San Lorenzo, Toa Baja, Trujillo Alto, Vega Baja and Villalba.**

## Positivity for dengue virus isolation

11/02/2008 - 12/27/2008



**Dengue 1**



**Dengue 2**



**Dengue 3**



**Dengue 4**

### The following are the virus isolation results for the last two months:

**Dengue 1:** Aguas Buenas, Barceloneta, Barranquitas, Bayamón, Caguas, Canóvanas, Carolina, Cayey, Comerío, Dorado, Guayanilla, Guaynabo, Gurabo, Juncos, Manatí, Maunabo, Morovis, Río Grande, San Juan, San Lorenzo, Toa Alta, Vega Baja and Yabucoa.

**Dengue 2:** Aguada, Añasco, Arroyo, Bayamón, Dorado, Guayama, Isabela, Jayuya, Las Marías, Manatí, Mayagüez, Morovis, Ponce, Rincón, Salinas, San Germán, San Juan, Utuado and Vega Baja.

**Dengue 3:** Bayamón, Camuy, Canóvanas, Carolina, Cataño, Fajardo, Guaynabo, San Juan and Trujillo Alto.

**Dengue 4:** Arecibo, Bayamón, Vega Baja and Villalba.

### Level of dengue activity:

We have five activity levels (no activity, sporadic, local, regional, and widespread), adapted from the CDC influenza web page (<http://www.cdc.gov/flu/weekly/fluactivity.htm>), but have modified the definition for level of activity to better reflect the level of dengue activity in Puerto Rico. **We consider the activity level in a region as a dengue outbreak if one or more municipalities within the region have dengue cases positive by the anti-dengue IgM antibody detection test during the week and if two or more municipalities within that same region have a significant increase in dengue cases reported.**

**No activity:** No laboratory-confirmed cases of dengue and no significant increase in the number of cases reported.

**Sporadic:** Small numbers (1-5) of laboratory-confirmed dengue cases but there is no significant increase in the number of dengue cases reported.

**Local:** Significant increase in the number of dengue cases reported and recent laboratory-confirmed dengue cases in a single region of Puerto Rico.

**Regional:** Significant increase in the number of dengue cases reported and recent laboratory-confirmed dengue cases in at least 2 but less than half the regions of Puerto Rico.

Widespread: Significant increase in the number of dengue cases reported and recent laboratory-confirmed dengue cases in at least half the regions of Puerto Rico.

**For this week the level of dengue activity is REGIONAL since the Bayamón and Caguas regions have laboratory-positive cases and a significant increase in cases reported from 2 or more municipalities within the same region.**



### **Additional information:**

From January 1 to December 27 of 2008, two laboratory-positive fatal cases have been reported. Sixty four suspected dengue hemorrhagic cases have been reported of which 18 are positive, 12 are negative, 30 have indeterminate test results and four have pending test results.

According to data provided by Dr. Marta Patricia Cano, Director of the Environmental Hygiene Program, 57 suspected dengue cases were reported during week 52 of 2008. From January 1 to December 27, 2008 3425 suspected dengue cases were reported.

For general information about dengue go to: [www.cdc.gov/ncidod/dvbid/dengue/index.htm](http://www.cdc.gov/ncidod/dvbid/dengue/index.htm)