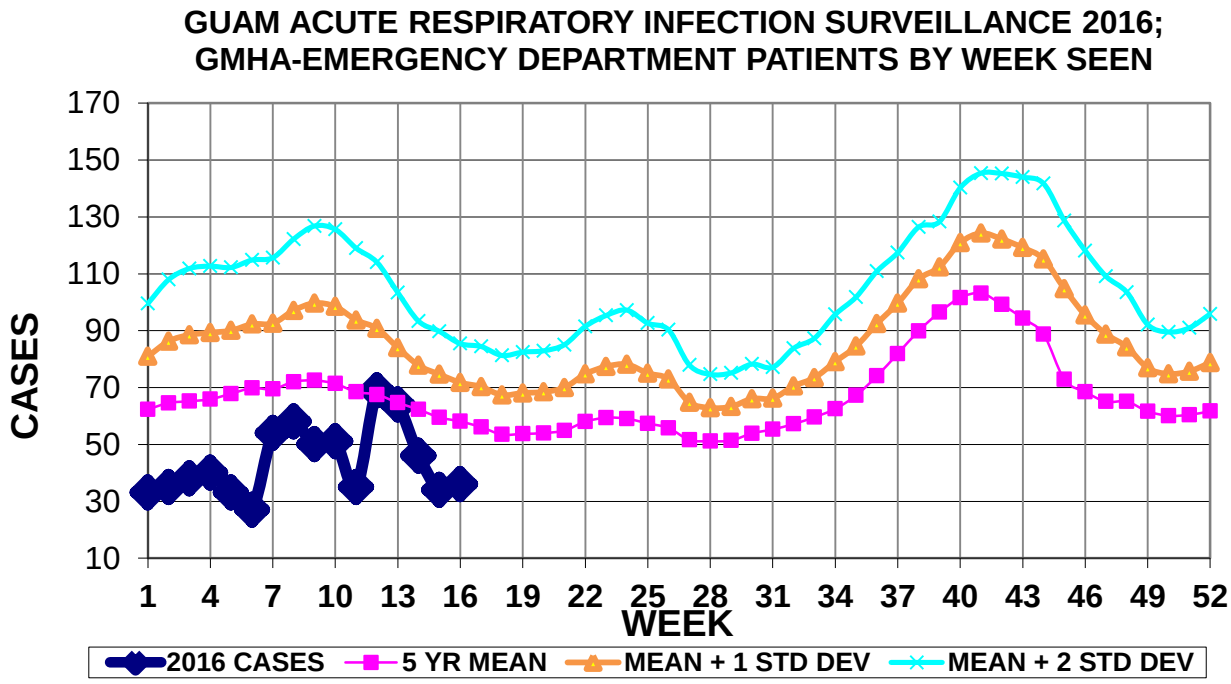
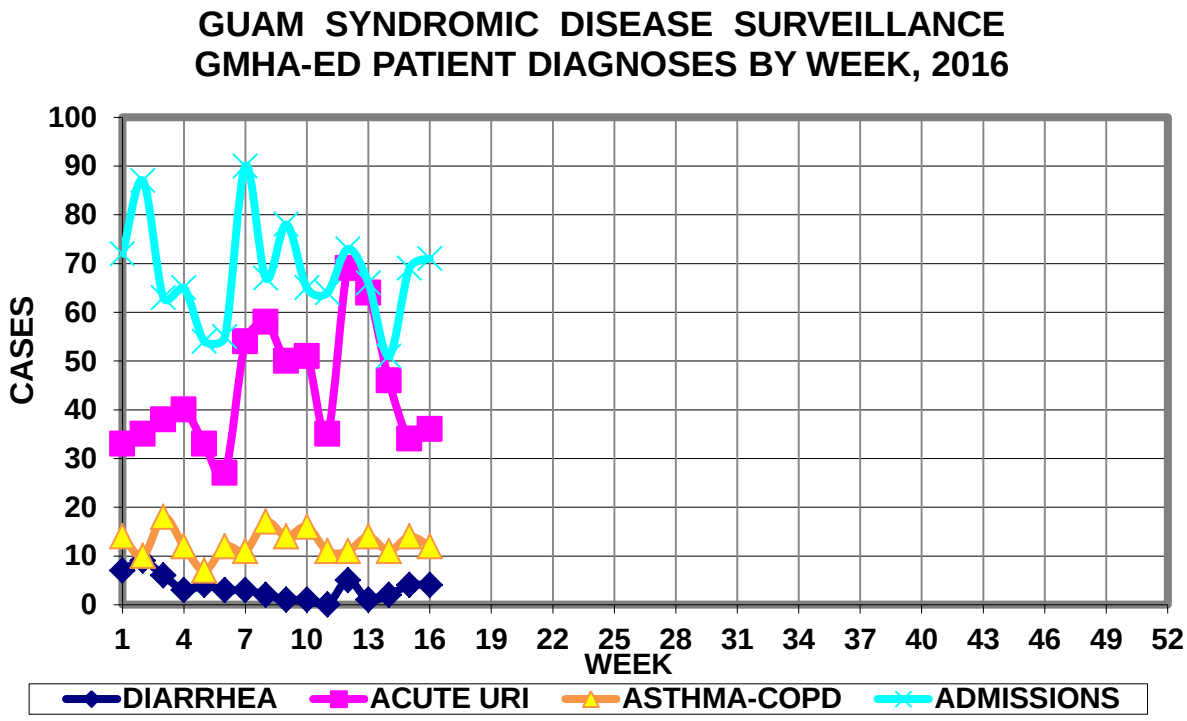
INFECTION CONTROL DEPARTMENT
GUAM MEMORIAL HOSPITAL AUTHORITY

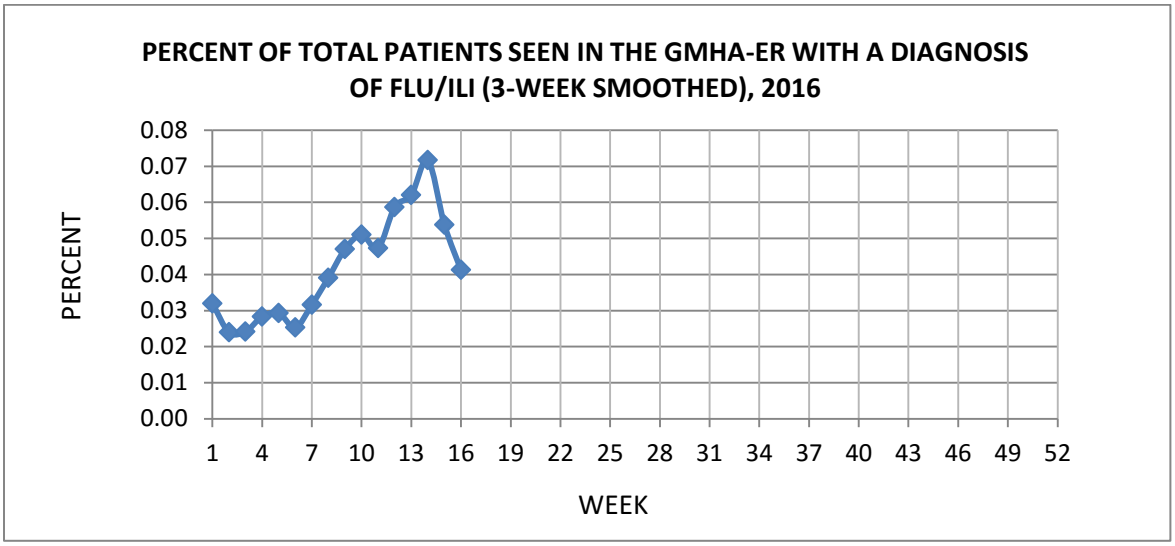
# GUAM EPIDEMIOLOGY NEWSLETTER

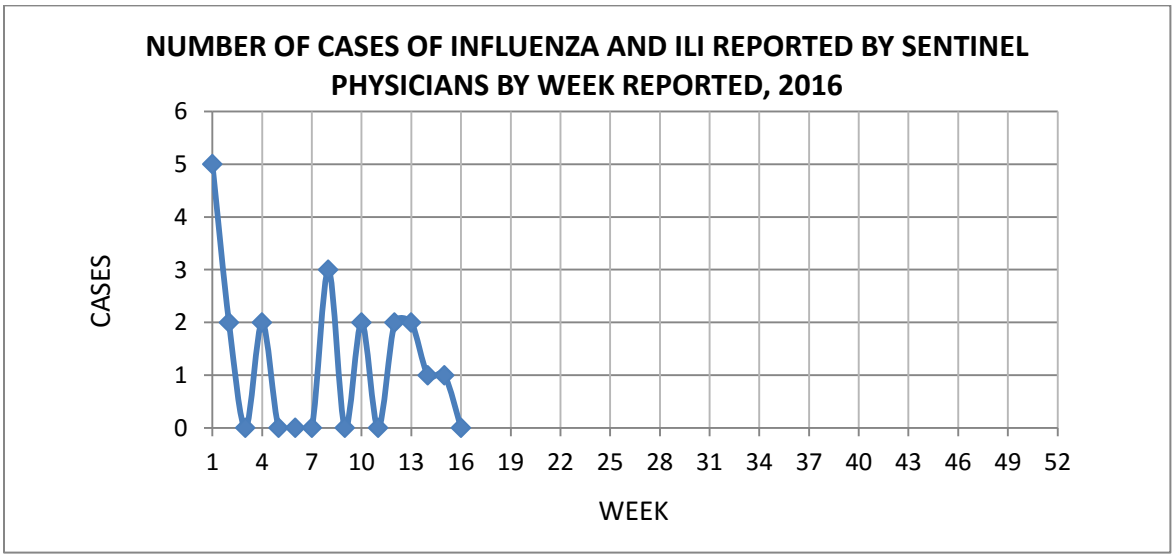
REPORT FOR WEEK ENDING: 4/23/2016 (Reporting week 2016-16)

## GUAM REPORTS






## GUAM SENTINEL PHYSICIAN INFLUENZA SURVEILLANCE

REPORTS OF INFLUENZA OR INFLUENZA-LIKE ILLNESSES
RECEIVED FOR THE WEEK ENDING 4/23/16

No cases reported by sentinel physicians

Bureau of Communicable Disease Control
**Guam Department of Public Health & Social Services**

## H1N1 INFLUENZA SURVEILLANCE

**9 CASES OF H1N1 REPORTED FOR 2016 WEEK 16**

**Cumulative 2016: 47 civilian & 2 military cases**

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# HOSPITALIZATIONS FOR INFLUENZA A BY AGE AND MORBIDITY REPORTING WEEK, 2016

| AGE | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-4 | | | | | | | | | | | |
| 5-18 | | | | | | | | | | | |
| 19-24 | | | | | | | | | | | |
| 25-49 | | | | | | | | | | | |
| 50-64 | | | | | | | | | | | |
| 65+ | | | | | | | | | | 1 | 1 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |

Bureau of Communicable Disease Control

## Guam Department of Public Health & Social Services

# ISLAND-WIDE COMMUNICABLE DISEASE REPORT

REPORTS RECEIVED DURING THE WEEK ENDING 4/23/2016

| | |
|---|---|
| *Acinetobacter. baumannii* MDR | 4 |
| *Chlamydia trachomatis* | 12 |
| *Clostridium difficile* | 1 |
| Conjunctivitis | 1 |
| *E. coli* MDR, ESBL+ | 2 |
| Gonorrhea | 1 |
| Hepatitis C | 1 |
| HPV | 1 |
| Influenza A | 7 |
| Influenza B | 3 |
| MRSA | 16 |
| Streptococcal sore throat | 37 |
| Streptococcal disease, other | 3 |
| Tuberculosis MDR | 1 |

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# GMHA-EMERGENCY DEPARTMENT CLINICAL DIAGNOSES OF INFLUENZA OR FLU-SYNDROME BY WEEK AND PATIENT'S VILLAGE OF RESIDENCE, 2016

(Villages listed geographically from northern-most to southern-most)

| | WEEK | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VILLAGE** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **TOTAL** | **2016 RATE** |
| Yigo | 4 | 1 | 3 | 1 | 2 | 1 | 4 | 3 | 1 | 1 | 25 | 119.19 |
| Dededo | 3 | 4 | 3 | 5 | 1 | 8 | 4 | 4 | 2 | 3 | 50 | 108.94 |
| Tamuning | 1 | 2 | 2 | 3 | 1 | 0 | 7 | 2 | 0 | 2 | 22 | 109.44 |
| Barrigada | 2 | 1 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 11 | 121.37 |
| Mangilao | 3 | 3 | 1 | 6 | 2 | 1 | 4 | 1 | 1 | 0 | 26 | 167.59 |
| Mongmong-T-M | 3 | 2 | 0 | 2 | 3 | 2 | 1 | 2 | 1 | 1 | 21 | 301.29 |
| Hagatña | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 186.39 |
| Agaña Heights | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 6 | 154.28 |
| Sinajana | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 113.34 |
| Chalan Pago-Ordot | 0 | 0 | 4 | 0 | 0 | 1 | 2 | 1 | 0 | 1 | 9 | 129.18 |
| Asan-Maina | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 7 | 320.81 |
| Piti | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 67.34 |
| Santa Rita | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 4 | 0 | 0 | 9 | 144.86 |
| Agat | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 179.25 |
| Yona | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 2 | 12 | 181.32 |
| Talofofo | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 4 | 128.41 |
| Inarajan | 1 | 3 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 1 | 11 | 473.93 |
| Merizo | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 3 | 158.81 |
| Umatac | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 125.16 |
| Tourist | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | |
| Unknown | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| TOTAL | 22 | 17 | 20 | 23 | 12 | 30 | 27 | 19 | 6 | 14 | 239 | 146.82 |

NOTE: Rate = cases per 100,000 population for the year to date.

GMHA-ER INFLUENZA/ILI ACTIVITY LEVEL – WIDESPREAD (10 of19 villages affected)
(ACTIVITY LEVELS: No activity, Sporadic, Local, Regional, Widespread)

GMHA-ER INFLUENZA/ILI ACTIVITY BY AGE – WEEK 16

| GENDER | Total | < 1 | 1 – 4 | 5 - 9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-39 | 40-49 | 50-64 | 65+ | UNK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MALE | 7 | 1 | 3 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| FEMALE | 7 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 |
| TOTAL | 14 | 2 | 6 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 0 |

## GUAM ANIMAL DISEASE (ZOONOSES) REPORTS

None reported

# Beyond Zika: The threat of diseases spread by *Aedes* mosquitoes

The rapid emergence of Zika virus, particularly as it pertains to the risk for microcephaly in children, led WHO to declare a Public Health Emergency of International Concern and the CDC to warn pregnant women against traveling to endemic areas. Zika, however, is not the only mosquito-borne disease that should concern travelers. Dengue and chikungunya viruses are rampant in the Americas and cause symptoms that are often debilitating. All three diseases share a common vector — the *Aedes* mosquito, an aggressive daytime biter.

Headlines about Zika have overshadowed recent outbreaks of dengue and chikungunya in the Americas. However, the attention on Zika also may be helpful in the fight against those diseases, according to Annelies Wilder-Smith, MD, PhD, MIH, professor of infectious diseases at Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore, and president of the International Society of Travel Medicine.

"Their commonalities around geographic locations and transmission by the same vectors mean that research on Zika, in particular improved vector control measures, will benefit all three," Wilder-Smith said in an interview.

**'Breakbone fever' and an overlooked epidemic**

Dengue is the world's most common arbovirus, with yearly global infections reaching an estimated 390 million. The virus is primarily spread by the *Aedes aegypti* mosquito, according to WHO, although it also is transmitted to a lesser extent by *A. albopictus*. *A. aegypti*, a likely vector in urban areas, prefers biting humans and is commonly found indoors, according to the CDC, while *A. albopictus* is an aggressive biter more commonly found outdoors. Both mosquitoes can be identified by the white stripes on their black legs.

"Globally, dengue is far more frequent than Zika and chikungunya combined," Wilder-Smith said. Symptoms of dengue range from a high fever to severe headache and pain in the muscles and joints. It is seldom fatal, but can be severely painful. The disease occasionally develops into severe dengue — or dengue hemorrhagic fever — a more lethal stage of the disease, according to WHO.

"Dengue is called 'breakbone fever' because it can cause such severe myalgia and bone pain," Angelle Desiree LaBeaud, MD, MS, associate professor of pediatrics and infectious disease at the Lucile Salter Packard Children's Hospital, Stanford School of Medicine, told *Infectious Disease News*.

Dengue typically occurs in tropical and subtropical climates, mostly in urban and semi-urban areas, according to WHO. Recently, Hawaii experienced its first cluster of locally acquired dengue since 2011. In February, the mayor of Hawaii's Big Island declared a state of emergency to stop the acceptance of tires at county landfills — a breeding ground for mosquitoes — after the number of confirmed cases of dengue reached more than 250. However, the disease is more widespread in Latin America, where severe dengue has become a leading cause of hospitalization and death among children, WHO reported.

Improved surveillance and eradication measures have done a better job at halting the spread of dengue in the United States, according to Davidson H. Hamer, MD, professor of global health and medicine at Boston University School of Public Health and School of Medicine.

"There's been some smoldering outbreak of dengue in the [Florida] Keys, in Key West and so forth, and then along the border of Texas and Mexico," Hamer told *Infectious Disease News*. "But it really hasn't established a major foothold in the U.S."

Chikungunya also can cause debilitating pain, and it can persist for months or even years, although most patients fully recover, according to WHO. Travelers in certain groups may be at a higher risk for chikungunya, including those aged older than 65 years and people with conditions such as arthritis, hypertension, heart disease and diabetes, according to the CDC. Its primary vectors are *A. aegypti* and *A. albopictus*.