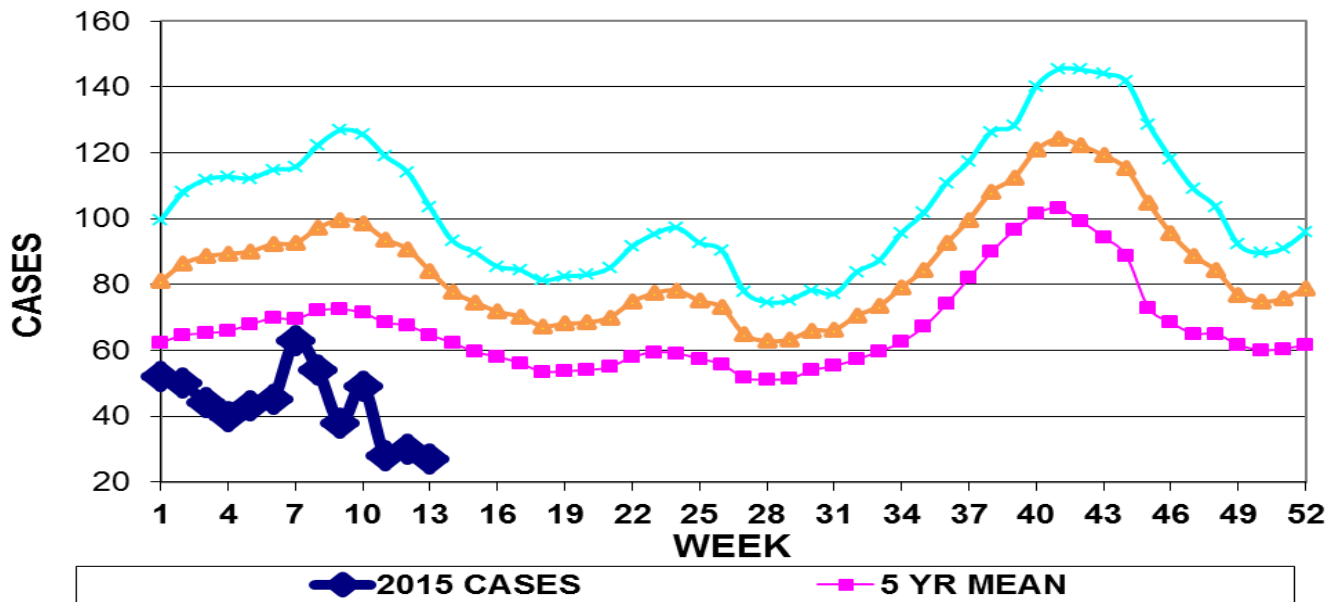


INFECTION CONTROL DEPARTMENT
 GUAM MEMORIAL HOSPITAL AUTHORITY
GUAM EPIDEMIOLOGY NEWSLETTER

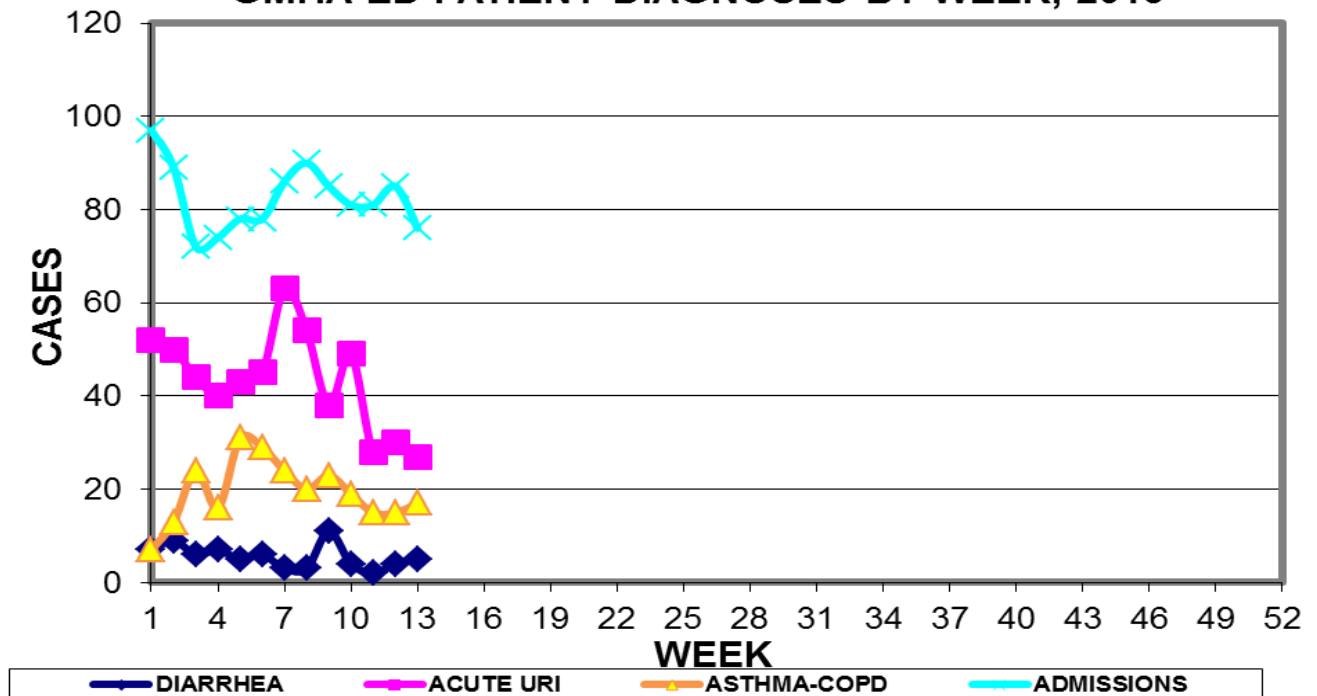
REPORT FOR WEEK ENDING: 4/4/2015 (Reporting week 2015-13)

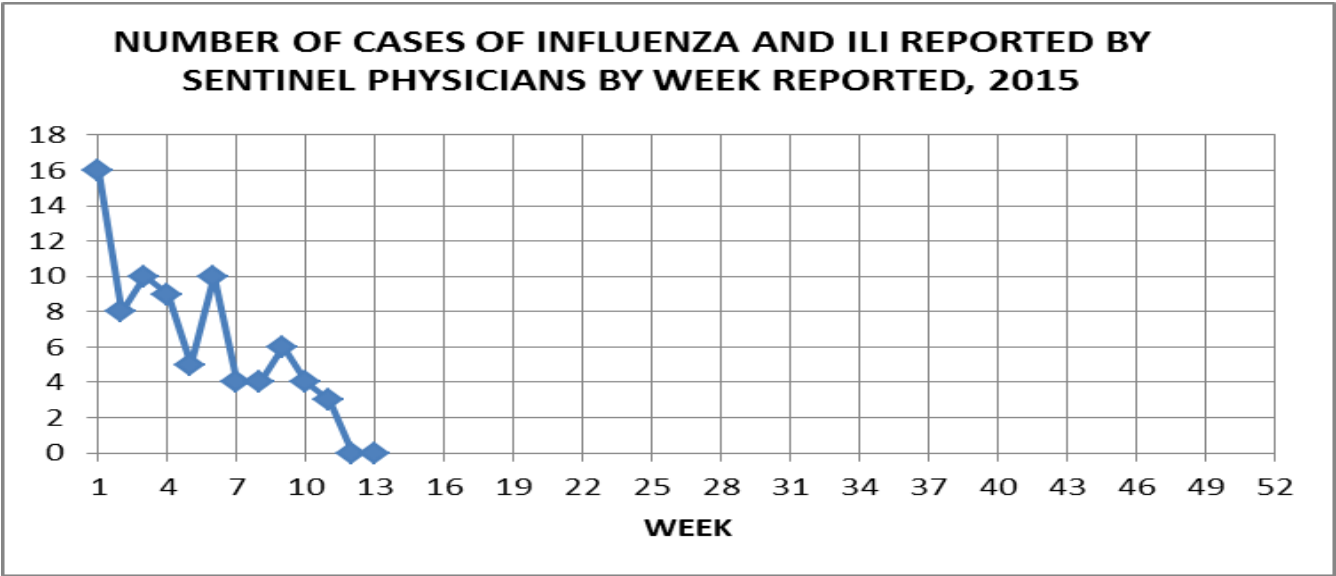
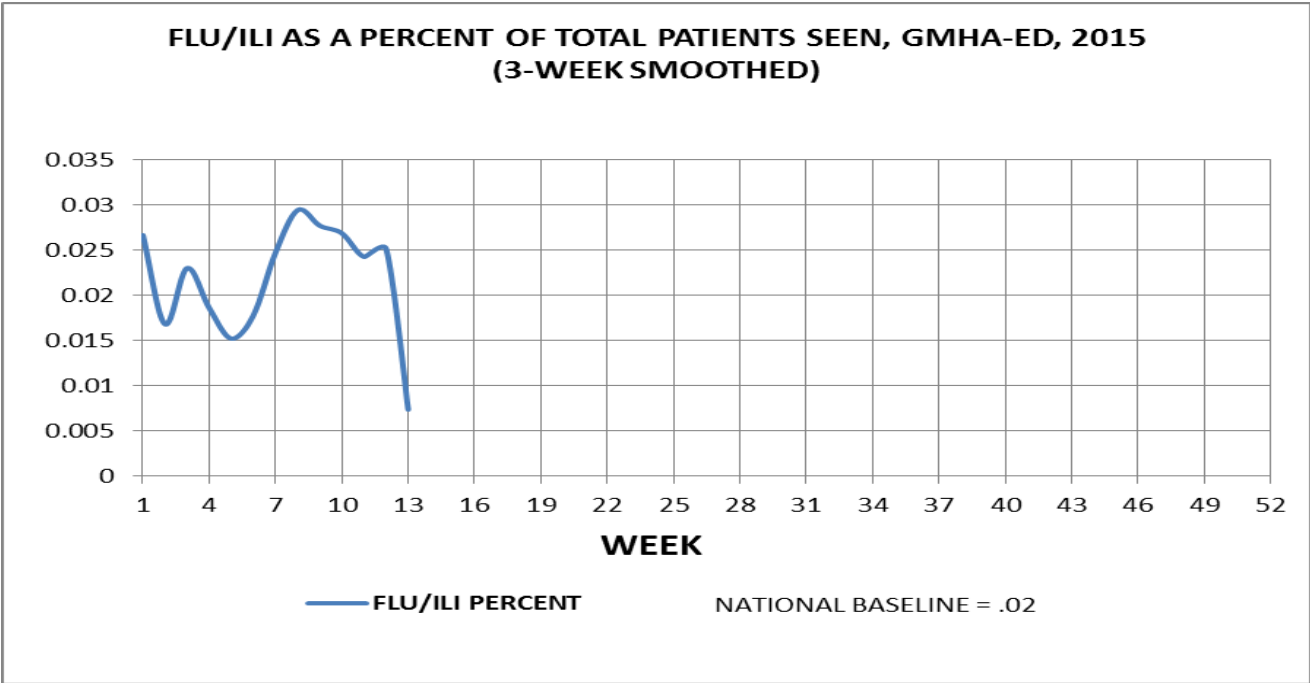
GUAM REPORTS

**GUAM ACUTE RESPIRATORY INFECTION SURVEILLANCE 2015;
 GMHA-EMERGENCY DEPARTMENT PATIENTS BY WEEK SEEN**



**GUAM SYNDROMIC DISEASE SURVEILLANCE
 GMHA-ED PATIENT DIAGNOSES BY WEEK, 2015**





GUAM SENTINEL PHYSICIAN INFLUENZA SURVEILLANCE
 REPORTS OF INFLUENZA OR INFLUENZA-LIKE ILLNESSES
 RECEIVED FOR THE WEEK ENDING 4/4/15
 No cases reported by sentinel physicians

Bureau of Communicable Disease Control
Guam Department of Public Health & Social Services
H1N1 INFLUENZA SURVEILLANCE, WEEK 13
NO CASES OF H1N1 REPORTED FOR WEEK 13
Cumulative 2015: 0 civilian & 0 military cases

INFECTION CONTROL DEPARTMENT
 GUAM MEMORIAL HOSPITAL AUTHORITY
HOSPITALIZATIONS FOR INFLUENZA A BY AGE
AND MORBIDITY REPORTING WEEK, 2015

AGE	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0-4													
5-18													
19-24													
25-49													
50-64													
65+													
TOTAL	0	0	0	0	0	0	0	0	1	0	0		

Bureau of Communicable Disease Control
Guam Department of Public Health & Social Services
ISLAND-WIDE COMMUNICABLE DISEASE REPORT

REPORTS RECEIVED DURING THE WEEK ENDING 4/4/2015

<i>Chlamydia trachomatis</i>	21
<i>Clostridium difficile</i>	2
Conjunctivitis	3
Hepatitis A	1
Hepatitis B	1
Hepatitis C	4
Influenza A	1
Influenza B	4
MRSA	8
Respiratory syncytial virus	1
Scabies	3
Streptococcal sore throat	11
Streptococcal disease, other	1
Syphilis	1
Tuberculosis, pulmonary	3
Varicella	1
VRE	1

INFECTION CONTROL DEPARTMENT
 GUAM MEMORIAL HOSPITAL AUTHORITY
**GMHA-EMERGENCY DEPARTMENT CLINICAL DIAGNOSES OF INFLUENZA OR
 FLU-SYNDROME BY WEEK AND PATIENT'S VILLAGE OF RESIDENCE, 2015**
 (Villages listed geographically from northern-most to southern-most)

VILLAGE	WEEK										TOTAL	2015 RATE
	4	5	6	7	8	9	10	11	12	13		
Yigo	1	4	2	1	2	1	5	1	1	0	20	95.91
Dededo	1	1	4	6	3	3	4	2	3	1	35	76.71
Tamuning	0	0	0	1	3	1	2	1	0	0	12	60.05
Barrigada	0	0	1	1	0	2	0	0	0	0	6	66.59
Mangilao	2	0	1	1	0	0	2	1	1	0	9	58.36
Mongmong-T-M	0	0	1	1	1	1	0	0	3	0	12	173.19
Hagatña	0	0	0	1	0	0	0	0	0	0	1	93.72
Agaña Heights	0	0	0	0	0	0	0	0	0	0	0	0.00
Sinajana	0	0	0	1	0	0	1	0	0	0	2	76.02
Chalan Pago-Ordot	0	0	0	0	1	0	0	1	0	0	3	43.32
Asan-Maina	0	0	0	0	0	0	0	0	0	0	0	0.00
Piti	0	0	0	0	0	0	0	0	0	0	0	0.00
Santa Rita	0	0	0	0	1	0	0	0	0	0	4	64.76
Agat	1	0	1	1	0	0	0	0	0	0	5	100.16
Yona	0	0	0	0	1	0	0	0	0	0	3	45.60
Talofofu	0	0	0	0	0	1	0	0	0	0	1	32.30
Inarajan	0	0	0	1	1	0	0	1	0	0	4	173.31
Merizo	1	1	1	0	0	0	0	0	0	0	5	266.24
Umatac	0	0	0	0	0	0	0	0	0	0	0	0.00
Tourist	0	0	1	0	1	0	0	0	1	2	5	
Unknown	0	0	0	1	0	0	0	0	0	0	1	
TOTAL	6	6	12	16	14	9	14	8	9	3	132	81.59

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

INFLUENZA/ILI ACTIVITY LEVEL - Local (1 village affected)
 (ACTIVITY LEVELS: No activity, Sporadic, Local, Regional, Widespread)

GUAM ANIMAL DISEASE (ZONOSSES) REPORTS
 REPORTS RECEIVED FOR THE WEEK ENDING 4/4/2015

No reports received

Predictable Unpredictability - Influenza

Seasonal influenza epidemics occur each year, but any prediction about the severity of upcoming influenza seasons is often conjecture, at best.

We know that flu strikes in the winter, but other than that, flu has no real pattern. That is especially evident in the 2014-2015 flu season, which has been exceptionally severe, thanks to the predominant circulating strain — a drifted H3N2 strain — that was not included in this year's vaccine. It first was detected in the United States just a few weeks after the strains for the annual flu vaccine were selected and manufacture began.

Flu affects many different species. In order to survive in humans, it has to adapt regularly to continue to be infectious, and the sometimes subtle changes to the virus can cause significant illness. This year, the primary circulating flu strain is close to the A/Switzerland/9715293/2013 H3N2 strain, which is a component of the 2015 flu vaccine for the Southern Hemisphere. However, that strain is antigenically and genetically different from the H3N2 component in this season's Northern Hemisphere flu vaccine, A/Texas/50/2012.

Some viruses such as measles are very stable and don't mutate. The two-shot measles vaccine series conveys immunity for life because measles is a stable virus. Flu viruses, on the other hand, are inherently unstable and frequently develop mutations or antigenic drifts which are smaller mutations that are just enough to make a person susceptible to flu again.

Children bear a large amount of the flu burden. In a normal year, the flu attack rate can be as high as 50% in children. Although children with comorbid conditions, such as lung disease or congenital heart disease, are at a higher risk for severe disease compared with healthy children, the majority of children with severe disease, by numbers alone, are otherwise healthy children. Children are also susceptible to many other respiratory viruses, not only because they are young, but also because they may attend school or preschool — environments which allow for easy virus transmission. Young children also are susceptible to respiratory syncytial virus, parainfluenza, enterovirus and rhinoviruses, and it is difficult to distinguish flu clinically from these other viruses.

In general, despite potential crossover immunity, older adults may be more susceptible to flu complications because they generally have a lower effective immune response and an increased prevalence of existing chronic diseases.

While a physician may be confident that a moderately ill person with a fever and dry cough likely has the flu, it is important to ensure that other, more serious circulating illnesses are not overlooked. In patients with a high fever, it is necessary to exclude meningitis and other serious infections.

Vaccination is the best defense against flu, but it is not perfect. Some people do not respond well to vaccines because they are immunocompromised. Some just do not get vaccinated. Other times, like this year, the circulating strain does not match the vaccine strain. Two-thirds of the currently circulating H3N2 strains do not match the vaccine strain, but the other third do. The vaccine is also a match for the H1N1 strain and the predominant B strain. So it's an overstatement to say this year's flu vaccine was a total waste.

When people do get flu, there is a second line of defense: neuraminidase inhibitors. These include the oral agents Tamiflu and Relenza, and the IV agent Rapivab. Although the ability of antivirals to lessen disease severity may be lower than physicians would like, their impact is still significant, especially because they decrease the need for hospitalization. Approximately 1.5% of people with flu need to be hospitalized but that number goes down to 0.6% with the use of antivirals.

There is a universal recommendation for the flu vaccine: everyone aged 6 months and older without contraindications should receive it annually. Children who are receiving the flu vaccine for the first time need two doses.

A primary argument when discussing the importance of the flu vaccine with patients is to remember that, sometimes, “It is not all about you. The truth is, while nobody likes to be sick, you will probably get over a flu infection. But when you’re sick and in line at the grocery store, and the person in front of you is immunocompromised for any reason, he or she may not get over it.”

Source: Infectious Disease News, March 2015, edited