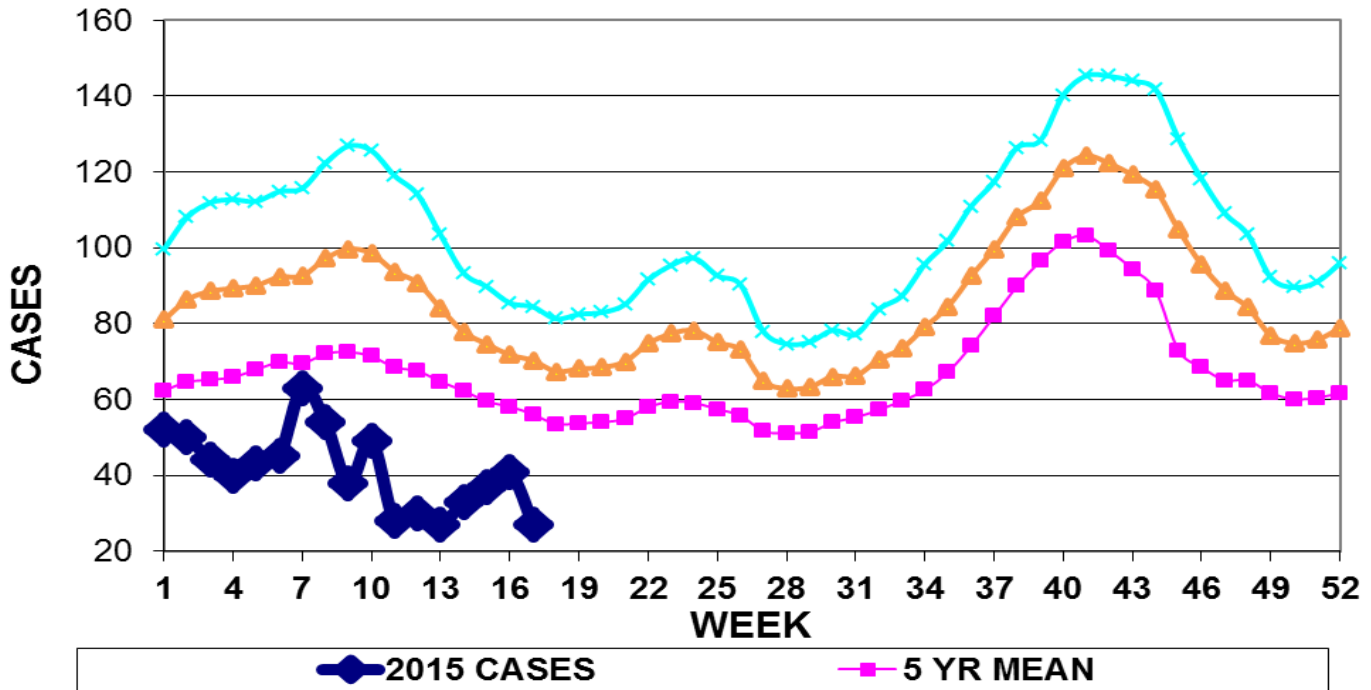


INFECTION CONTROL DEPARTMENT
 GUAM MEMORIAL HOSPITAL AUTHORITY
GUAM EPIDEMIOLOGY NEWSLETTER

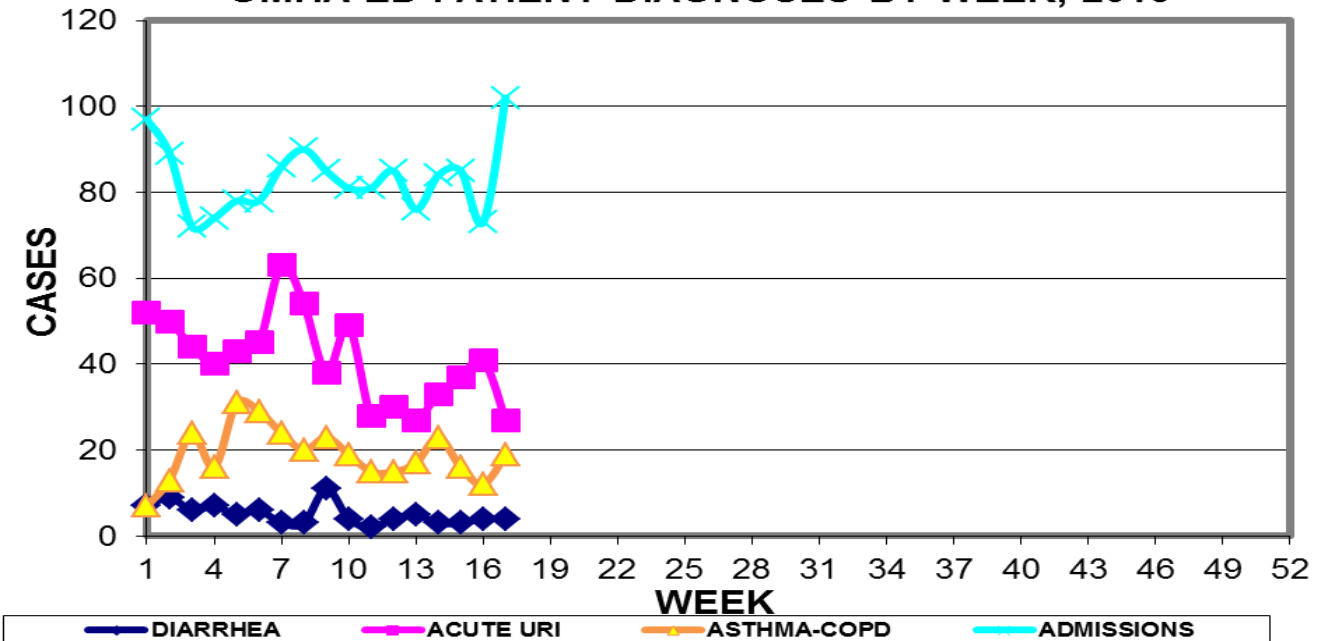
REPORT FOR WEEK ENDING: 5/2/2015 (Reporting week 2015-17)

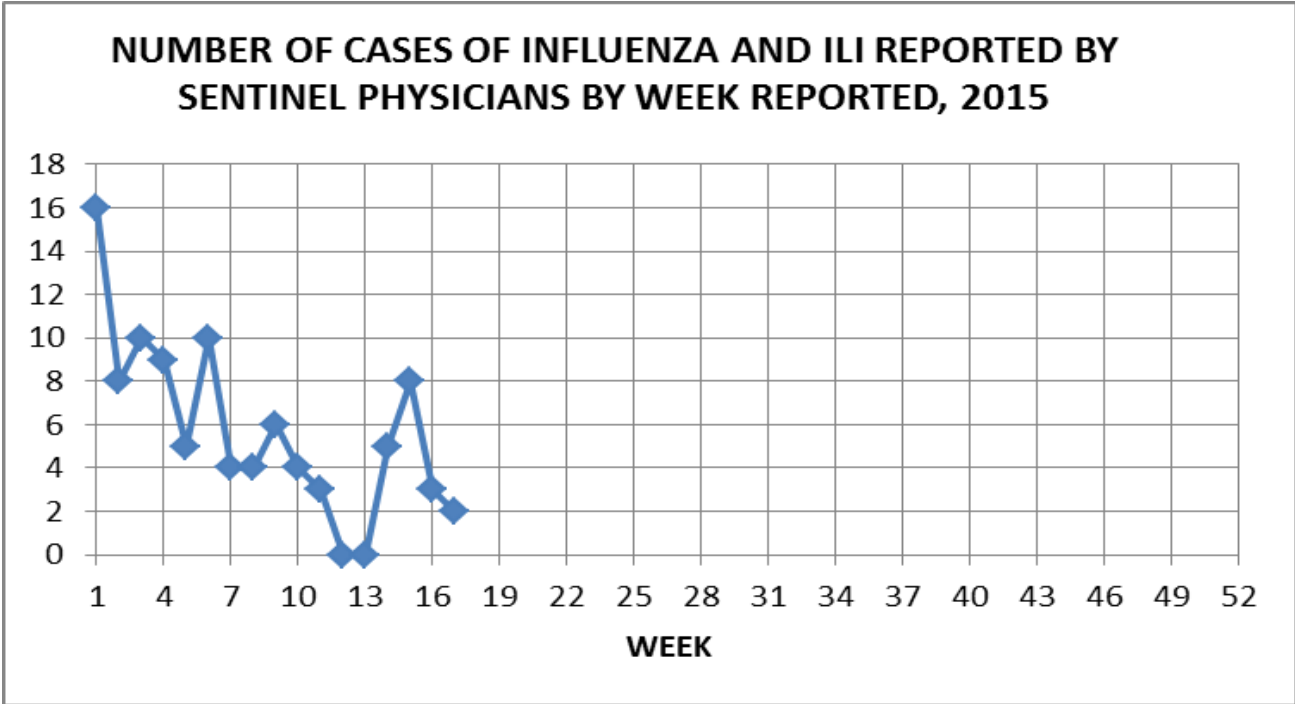
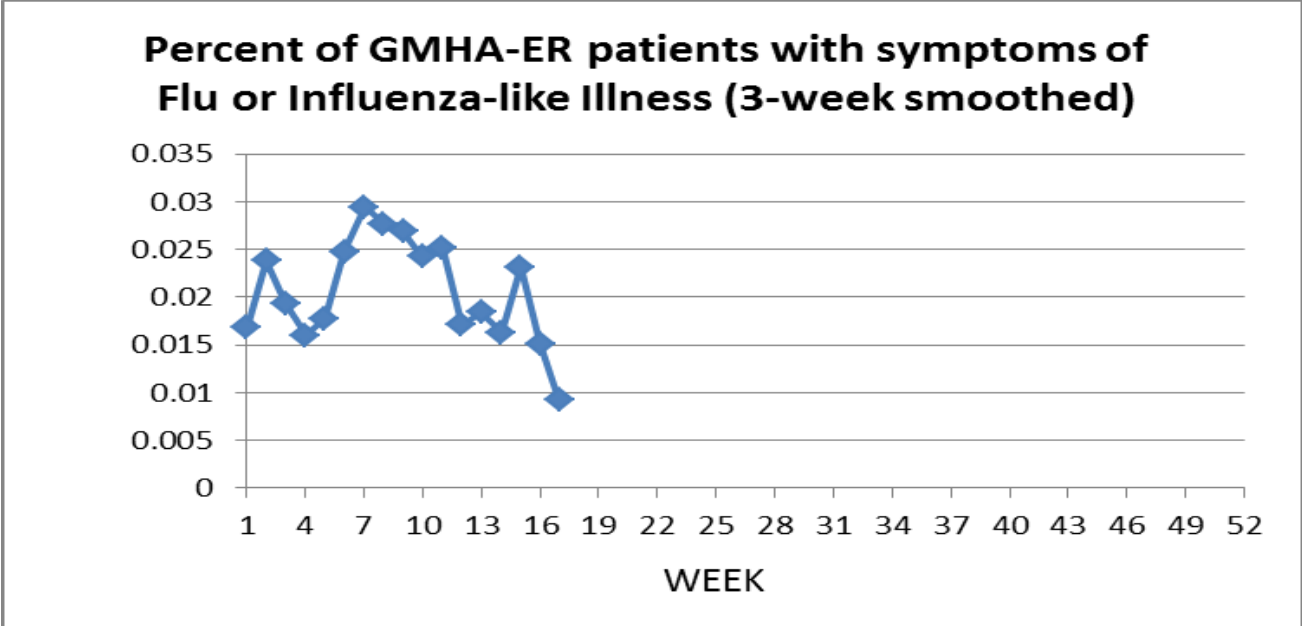
GUAM REPORTS

**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 5/2/15
 Two cases reported by sentinel physicians

Bureau of Communicable Disease Control
Guam Department of Public Health & Social Services
H1N1 INFLUENZA SURVEILLANCE, WEEK 17
NO CASES OF H1N1 REPORTED FOR WEEK 17
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	6	7	8	9	10	11	12	13	14	15	16	17	TOTAL
0-4					1								1
5-18													
19-24													
25-49													
50-64													
65+													
TOTAL	0	0	0	0	1	0	0	0	0	0	0	0	1

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

REPORTS RECEIVED DURING THE WEEK ENDING 5/2/2016

<i>Chlamydia trachomatis</i>	52
Conjunctivitis	4
<i>Enterobacter cloacae</i> MDR	1
<i>E. coli</i> MDR	2
Gonorrhea	8
Hepatitis A	3
Hepatitis B	4
Hepatitis C	1
HPV	2
<i>Klebsiella pneumoniae</i> MDR	1
MRSA	4
Scabies	2
Shigellosis	1
Streptococcal sore throat	2
Streptococcal disease, other	6
Syphilis, Primary	1
Varicella	2

□

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)

WEEK

VILLAGE	8	9	10	11	12	13	14	15	16	17	TOTAL	2015 RATE
Yigo	2	1	5	1	1	0	1	1	0	1	23	110.30
Dededo	3	3	4	2	3	1	4	2	5	3	50	109.58
Tamuning	3	1	2	1	0	0	1	0	2	2	17	85.06
Barrigada	0	2	0	0	0	0	1	1	0	0	8	88.79
Mangilao	0	0	2	1	1	0	1	1	1	0	12	77.81
Mongmong-T-M	1	1	0	0	3	0	2	0	1	0	15	216.48
Hagatña	0	0	0	0	0	0	0	0	1	0	2	187.44
Agaña Heights	0	0	0	0	0	0	0	0	0	0	0	0.00
Sinajana	0	0	1	0	0	0	0	1	1	0	4	152.03
Chalan Pago-Ordot	1	0	0	1	0	0	0	0	0	1	4	57.75
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	1	0	0	0	0	0	0	0	0	0	4	64.76
Agat	0	0	0	0	0	0	0	1	1	1	9	1180.29
Yona	1	0	0	0	0	0	0	0	0	0	3	45.60
Talofof	0	1	0	0	0	0	0	1	0	0	2	64.60
Inarajan	1	0	0	1	0	0	0	0	0	1	5	216.64
Merizo	0	0	0	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	1	0	0	0	1	2	0	0	0	0	5	
Unknown	0	0	0	0	0	0	0	0	0	0	1	
TOTAL	14	9	14	8	9	3	10	8	12	9	171	105.70

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

INFLUENZA/ILI ACTIVITY LEVEL - Regional (6 villages affected)
 (ACTIVITY LEVELS: No activity, Sporadic, Local, Regional, Widespread)

GUAM ANIMAL DISEASE (ZONOSSES) REPORTS
 REPORTS RECEIVED FOR THE WEEK ENDING 5/2/2015

Anaplasmosis – 1 canine, Babesiosis – 1 canine, Ehrlichia – 2 canine, Leptospirosis – 1 canine

Guest commentary:

The anti-vaccination movement: March of the lemmings

Infectious Disease News, April 2015

Marjorie P. Pollack, MD; Donald Kaye, MD

As physicians who have actually seen patients with tetanus, diphtheria, smallpox and poliomyelitis, we are appalled at the effectiveness of the anti-vaccination movement in the United States. The issue today is the resurgence of measles, but tomorrow it may be any one of the other vaccine-preventable diseases.

To focus on the current epidemic of measles, a disease that was essentially eliminated in the U.S. in the last century, the size of the current epidemic in the U.S. is undoubtedly in large part due to the anti-vaccination groups. As of Feb. 11, 49 (45%) of the 110 cases of measles in California were unvaccinated, and an additional five (5%) had a history of a single dose of measles-containing vaccine.

While some of the unvaccinated have true religious reasons for avoiding vaccination, they are in a minority and often clustered without major contact with outsiders. Also among the unvaccinated are the most vulnerable populations, the immunocompromised and children aged 1 year and younger — both of whom cannot be given attenuated live virus measles vaccines. However, the bulk of the unvaccinated are children of presumably well-meaning parents who have been influenced by rumor, discredited science or often by cult leaders, some of whom are, unfortunately, physicians and other scientists. While motivation for the expressed opinions of these people may be honest belief, we suspect that there are often less altruistic motives.

A prime example of this was the Andrew Wakefield case. In 1998, Wakefield, a former medical doctor from Britain, and colleagues published a paper linking use of the measles, mumps and rubella (MMR) vaccine to autism and inflammatory bowel disease. His research was subsequently reported to be fraudulent. A motive reported in both medical journals and the news was related to conflicts of interest, including litigation and business interests. Multiple studies have subsequently found no relationship between autism and vaccination, yet the damage caused by Wakefield lingers on. This begs the question of whether the same conflict of interest exists with some of the physicians and other “experts” who continue to espouse anti-vaccination sentiment. A PubMed search using the terms “measles vaccine, autism” can produce around 450 citations beginning with the original Wakefield paper. The sad thing is that researchers are continuing to conduct case-control studies addressing this issue, suggesting that there is still the need to debunk the Wakefield hypothesis, with the most recent publication on this topic in early January.

The thesis of the anti-vaccination groups seems to be divided into:

- the purported harm done by vaccines such as causing autism or other neurological disease;
- vaccines causing the disease they are intended to prevent such as influenza; or

- the prevention of the full expression of our immune systems by stopping “natural” infections such as measles.

These groups also trivialize the effects of measles as well as rubella, mumps and varicella. A classic example of this can be found at the National Vaccine Information Center’s website (<http://www.nvic.org>), purporting to help parents and caregivers learn about measles and vaccines to make their own decisions, but clearly misrepresenting data from the Vaccine Adverse Event Reporting System (VAERS) and providing scare “data” on deaths and permanent injuries reported through VAERS.

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It cannot be denied that there are side effects of vaccines, and it is critical to consider risk/benefit when vaccinating. Yellow fever vaccine, for example, carries a risk of 1 in 100,000 of causing a life-threatening complication in individuals aged 65 years and older and therefore should not be given to someone who is not traveling to an endemic area. In this scenario, there is risk from the vaccine but no benefit to the vaccinee. On the other hand, MMR is an example of a relatively safe vaccine. Serious side effects occur in less than 1 in 1 million, and measles is not a trivial disease. Approximately 30% of cases have some complication from the disease. Diarrhea is a very common complication (8%), followed by ear infections (7%) that carry the risk for deafness. Pneumonia also is common in pediatric measles cases (6%). Encephalitis occurs in 1 in 1,000 cases. Subacute sclerosing panencephalitis is a degenerative central nervous system disease thought to result from persistent viral infection. It has been reported in 5 to 10 cases per 1 million and has virtually disappeared since the widespread use of measles vaccine. The overall reported case-fatality rate in children is about 2 per 1,000 reported cases. Before 1963 — prior to vaccine use in the U.S. — there were approximately 500,000 cases and 500 deaths reported annually.

Measles also is extremely contagious and communicable for 4 days before appearance of the rash. We wonder how many anti-vaccinators — parents, physicians, etc. — have ever seen a case of measles about which they talk so glibly.

One particular statement that amazed us came from an anti-vaccine physician on CNN, who said our children have the right to get infections, we have immune systems to fight infections and that childhood preventable diseases are benign. He went on to indicate that by putting foreign substances into our children we are experimenting with them. Statements like this coming from medically trained people are not only difficult to comprehend but also feed into the beliefs of parents about the harms of vaccination, such as those in affluent parts of California where it is trendy among some groups to avoid childhood immunizations. As a result, 10% of children or more in some areas are not immunized against measles, a figure higher than some developing nations. We wonder where in a line these anti-vaccine physicians would be to receive their smallpox vaccine if that disease were to return — at the head of the line, most likely.

An argument used by the anti-vaccinators is that there have been more reported deaths from MMR vaccine (about 100) in the last decade than from measles in the U.S. These groups have used the VAERS database, ignoring the disclaimers, "Please note that VAERS staff follow-up on all serious and other selected adverse event reports to obtain additional medical, laboratory, and/or autopsy records to help understand the concern raised. However, in general, coding terms in VAERS do not change based on the information received during the follow-up process. VAERS data should be used with caution as numbers and conditions do not reflect data collected during follow-up. Note that the inclusion of events in VAERS data does not imply causality." Thus, when you consider that there have been no deaths from measles due to herd immunity, which is now evaporating, it is easy for these groups to claim the vaccine caused more reported deaths than the disease itself. On reviewing the VAERS cases, one of the anti-vaccination groups presented data showing a reported death of a child who had received multiple vaccines on the same day. The child reportedly died that day and had a history of cardiac heterotaxy, dextrocardia, complete atrioventricular septal defect, pulmonary atresia and a positive blood culture for *Streptococcus pneumoniae* and septic shock. A scary report for the non-medically trained person. Need we say more? A vaccination rate of 95% is required for herd immunity to protect against spread, often from cases imported from other countries. Only 10 states have reached that level among children aged 19 to 35 months, and in 17 states less than 90% of children receive at least one dose of measles vaccine.

If the anti-vaccinators had their way, we would go back to about 4,500 deaths in a decade.

Ignoring, for the moment, the danger to their own children, when parents decide not to immunize, the unimmunized pool creates a major public health problem. It serves as a pool that can infect children who cannot be immunized – those aged younger than 1 year and children who are immunocompromised. We wonder just how comfortable some of these "trendy" parents interviewed on television would respond if their neighbor's infant or immunocompromised child died from measles acquired from that parent's unimmunized child.

Perhaps a quote from Gandhi says it all about anti-vaccinators: "An error does not become truth by reason of multiplied propagation, nor does the truth become error because nobody sees it."

NOTE: Lemmings have become the subject of a widely popular misconception that they commit mass suicide when they migrate, by jumping off cliffs. [http://en.wikipedia.org/wiki/Lemming]