



Neonatal Tetanus Cases

January 1 – April 1, 2017

Epidemiology Bureau
Public Health Surveillance Division

Trend in the Philippines

Since 2013, there has been a gradual but continuous decrease of reported NT cases in the Philippines (Figure 1). From January 1 to April 1, 2017 alone, there are **13** clinically confirmed NT cases nationwide. This is **51.85%** lower compared to the same time period last year (**27 cases**).

Geographic Distribution

Clinically confirmed Neonatal Tetanus cases were variably distributed among regions, with ARMM reporting the most number of cases (Figure 2&3). Furthermore, NT rates in provinces with reported cases remain at the target rate of <1/1,000 livebirths (Figure 2).

Profile of Cases

There is an equal number of clinically confirmed NT cases in both male and female. Majority of the cases are from the **3 to 7 days** old age group (84.6%) (Figure 4). Larger part (46.2%) of the immunization status of the mother of clinically confirmed NT cases have **zero (0) dose of Tetanus Toxoid vaccine** (Figure 5).

Fig. 3 Clinically Confirmed Neonatal Tetanus Cases by Region, 2016 VS 2017, Philippines, as of April 1, 2017 (N=13)

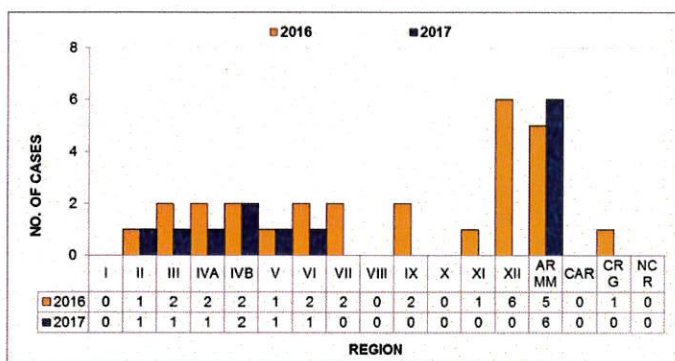
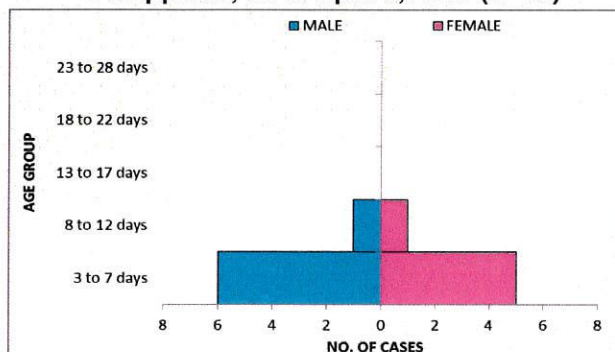
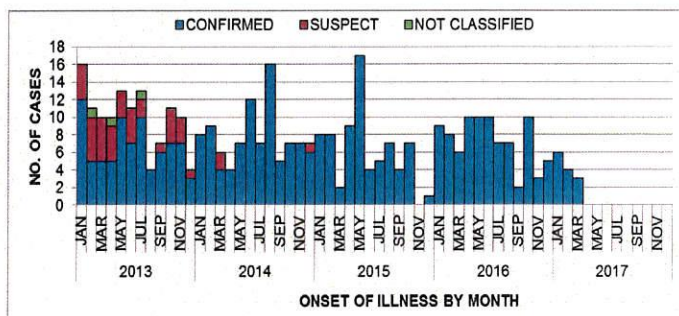


Fig. 4 Clinically Confirmed Neonatal Tetanus Cases by Age Group and Sex, Philippines, as of April 1, 2017 (N=13)



Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases.

Fig. 1 Trends of Neonatal Tetanus Cases, Philippines, 2013-2017*



*2017 = as of April 1, 2017

Fig. 2 Clinically Confirmed NT Cases and Incidence Rate by Province, Philippines, as of April 1, 2017 (N=13)

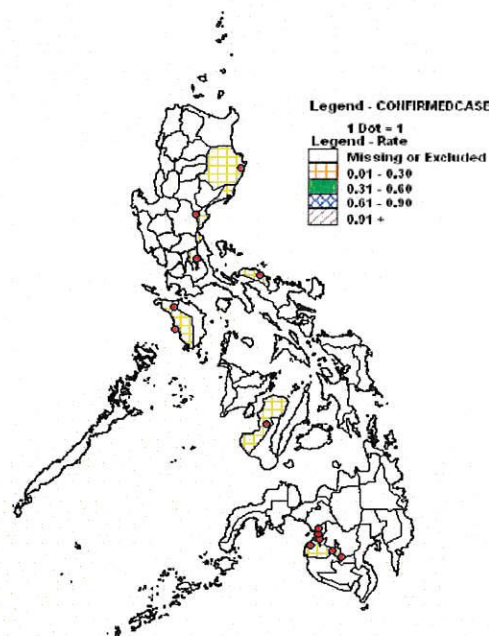
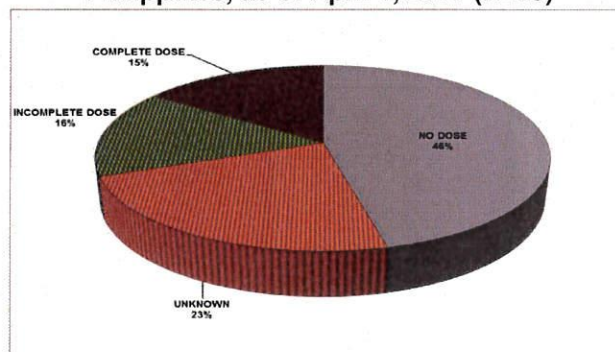


Fig. 5 Immunization Status of Mother of Clinically Confirmed Neonatal Tetanus Cases, Philippines, as of April 1, 2017 (N=13)





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Delivery Practices of Clinically Confirmed Neonatal Tetanus Cases

In terms of delivery practices, 1 NT case was delivered in a hospital (8%) while the rest were delivered at home (92%). Majority were attended by a hilot (77%). The most common cord cutting tool used was scissors (38%). Umbilical stump treatment of majority of the NT cases was not known (31%). See Figures 6-9.

Fig. 6 Place of Delivery of Clinically Confirmed Neonatal Tetanus Cases, Philippines, as of April 1, 2017 (N=13)

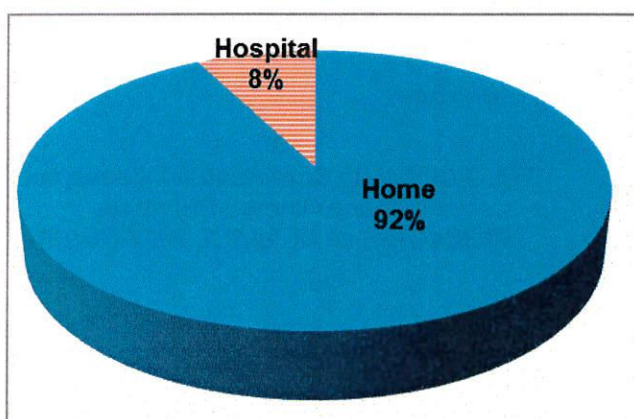


Fig. 7 Delivery Attendant of Clinically Confirmed Neonatal Tetanus Cases, Philippines, as of April 1, 2017 (N=13)

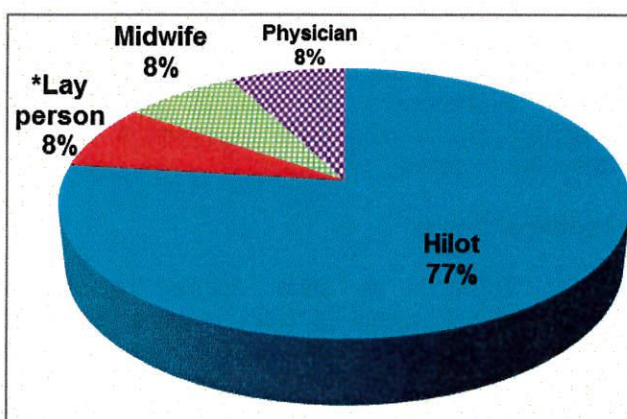


Fig. 8 Cord Cutting Tool Used among Clinically Confirmed Neonatal Tetanus Cases, Philippines, as of April 1, 2017 (N=13)

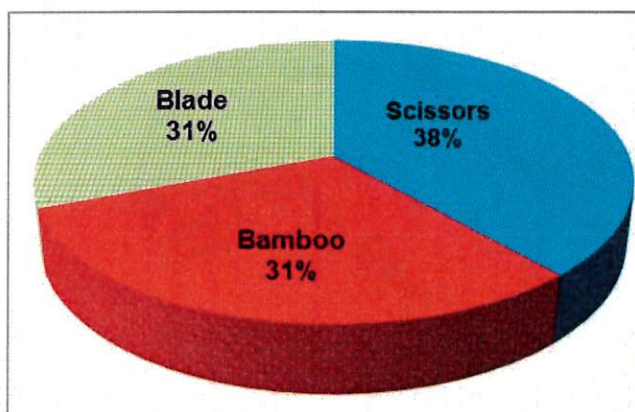
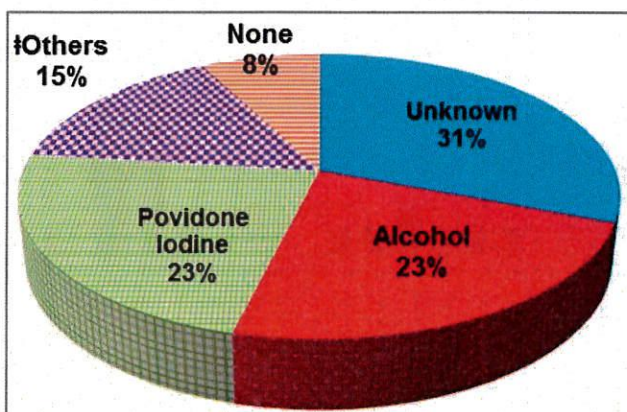


Fig. 9 Stump Treatment Used of Clinically Confirmed Neonatal Tetanus Cases, Philippines, as of April 1, 2017 (N=13)



* Lay Person: husband
† Others: ash



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Table 1. Clinically Confirmed Neonatal Tetanus Cases and Fatality Rate by Region, Philippines, as of April 1, 2017 (N=13)

Region	Clinically Confirmed Neonatal Tetanus Cases						
	Cases			Deaths			
	2017	2016	% Change	2017	CFR	2016	CFR
I	0	0	⇒ 0.00	0	0.00	0	-
II	1	1	⇒ 0.00	1	100.00	0	0.00
III	1	2	↓ -50.00	1	100.00	0	-
IVA	1	2	↓ -50.00	0	0.00	2	100.00
IVB	2	2	⇒ 0.00	1	50.00	2	100.00
V	1	1	⇒ 0.00	1	100.00	1	100.00
VI	1	2	↓ -50.00	1	100.00	2	100.00
VII	0	2	↓ -100.00	0	0.00	2	100.00
VIII	0	0	⇒ 0.00	0	0.00	0	0.00
IX	0	2	↓ -100.00	0	0.00	2	-
X	0	0	⇒ 0.00	0	-	0	0.00
XI	0	1	↓ -100.00	0	0.00	1	100.00
XII	0	6	↓ -100.00	0	0.00	5	83.33
ARMM	6	5	↑ 20.00	4	66.67	3	60.00
CAR	0	0	⇒ 0.00	0	-	0	0.00
CRG	0	1	↓ -100.00	0	0.00	1	-
NCR	0	0	⇒ 0.00	0	0.00	0	0.00
PHL	13	27	↓ -51.85	9	69.23	21	77.78

Neonatal Tetanus Elimination in the Philippines

NT elimination is defined as the achievement of <1 NT case per 1, 000 live births (LB) in every province/city of every country. This is operationally defined by an algorithm assessing four major indicators: reported incidence of NT, the reliability of NT surveillance (quality NT surveillance indicators), the proportion of women with at least two doses of tetanus toxoid (TT2+) and the estimated clean delivery rate.

In 2013, a new Neonatal Tetanus case definition and classification was introduced retaining only Clinically Confirmed NT. These may be observed in Figure 1 which depicts a decrease in the reported suspect NT cases overtime from 2013.

In 2015, 16 out of the 17 regions in the Philippines have been certified to eliminate NT. This was after an external validation of the UNICEF and WHO conducted in February 2015 in partnership with the Department of Health. Efforts are now being made for ARMM to meet WHO requirements and be NT free as well.

In 2016, 4 high risk areas in ARMM were identified. Tetanus diphtheria-oral polio vaccine (Td-OPV) supplemental immunization activity (SIA) was one of the strategies where in all women from 15 to 40 years old irrespective of their prior TT immunization status and children less than 5 years old were target for 2 doses of OPV irrespective of their previous immunization status. Round 2 of SIA was completed and agreements to improve maternal and child programs was made.

Standard Case Definition

• Clinically Confirmed Neonatal Tetanus

- Any neonate (≤ 28 days of life) that sucks and cries normally during the first 2 days of life, and becomes ill between 3 to 28 days of age and develops both an inability to suck and diffuse muscle rigidity (stiffness) and spasms (jerking of the muscles), which may include trismus, clenched fists or feet, continuously pursed lips, and/or curved back (opisthotonus);

OR

- A neonate between 3 to 28 days of life, diagnosed as a case of tetanus by a physician.

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