



### 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 September 30, 2017 alone, there are **52** clinically confirmed NT cases nationwide. This is **23.53%** lower compared to the same time period last year (**68 cases**).

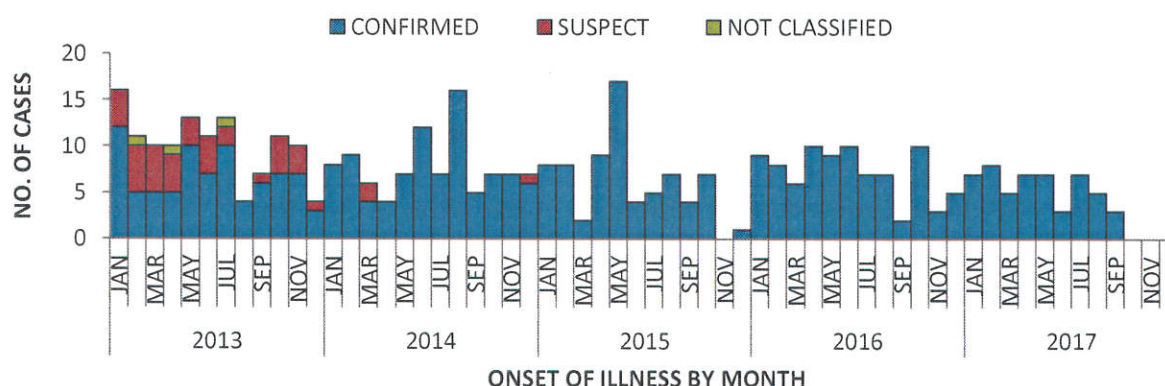
### Geographic Distribution

Clinically confirmed Neonatal Tetanus cases were variably distributed among regions, with ARMM reporting the most number of cases (Figures 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

Thirty three cases (63.46%) were male. Majority of the cases are from the **3 to 7 days** old age group (37, 71.15%) (Figure 4). Larger part (29, 55.77%) of the immunization status of the mother of clinically confirmed NT cases have **zero (0) dose of Tetanus Toxoid vaccine** (Figure 5).

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



\*data as of September 30, 2017

Fig. 2 Clinically Confirmed Neonatal Tetanus Cases and Incidence Rate by Province, Philippines, as of September 30, 2017 (N=52)

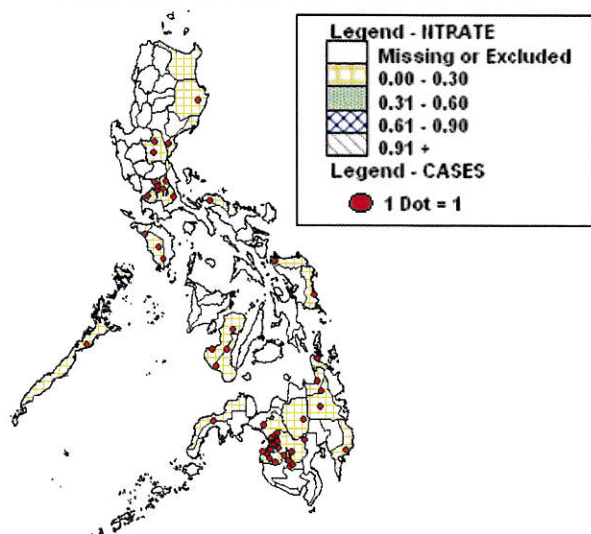


Fig. 3 Clinically Confirmed Neonatal Tetanus Cases by Region, Philippines, 2016 VS 2017, as of September 30, 2017 (N=52)

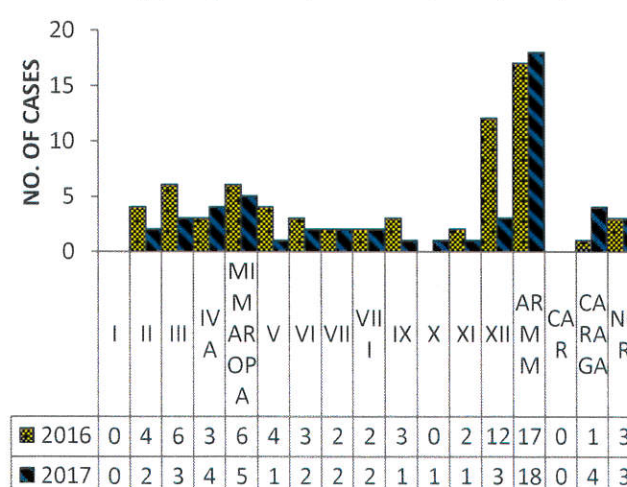




Fig. 4 Clinically Confirmed Neonatal Tetanus Cases by Age Group and Sex, Philippines, as of September 30, 2017 (N=52)

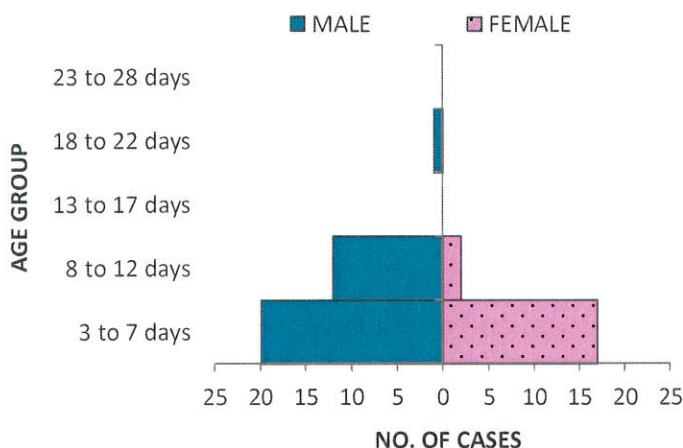
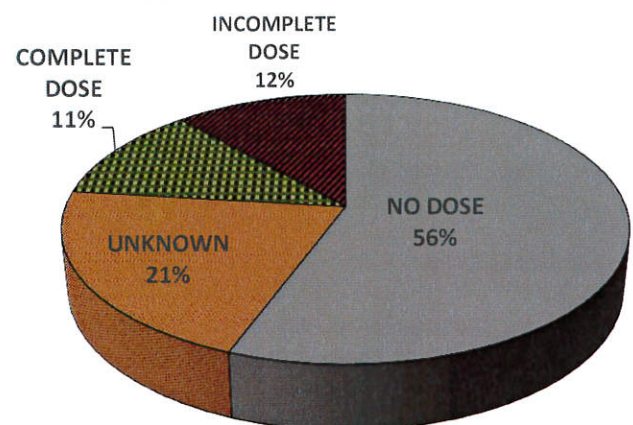


Fig. 5 Immunization Status of Mother of Clinically Confirmed Neonatal Tetanus Cases, Philippines, as of September 30, 2017 (N=52)



### Delivery Practices of Clinically Confirmed Neonatal Tetanus Cases

In terms of delivery practices, 2 NT case were delivered in a hospital (4%) while the rest were delivered at home (96%). Majority were attended by a hilot (39, 75%). Most common cord cutting tools used was blade (17, 33%). Umbilical stump treatment of majority of the NT cases was not known (21, 40%). See Figures 6-9.

LEGEND : \* Lay Person: grandmother, husband, mother, mother in law & sister in law

Fig. 6 Place of Delivery of Clinically Confirmed Neonatal Tetanus Cases, Philippines, as of September 30, 2017 (N=52)

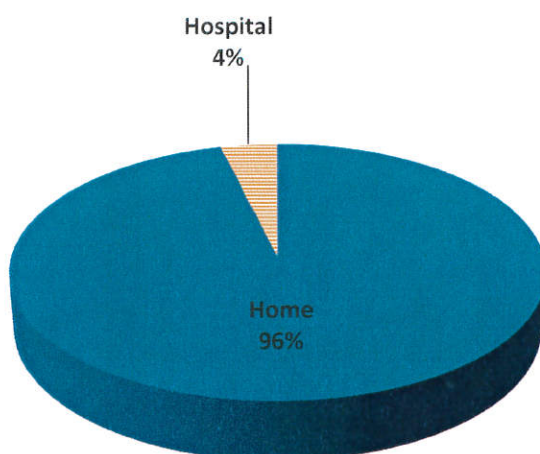


Fig. 7 Delivery Attendant of Clinically Confirmed Neonatal Tetanus Cases, Philippines, as of September 30, 2017 (N=52)

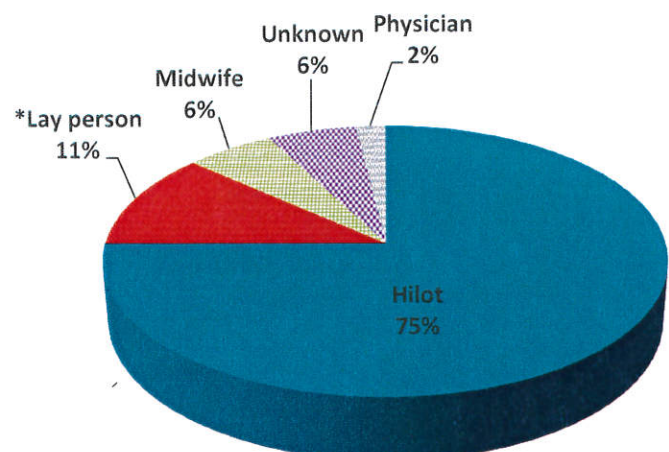






Fig. 8 Cord Cutting Tool Used among Clinically Confirmed Neonatal Tetanus Cases, Philippines, as of September 30, 2017 (N=52)

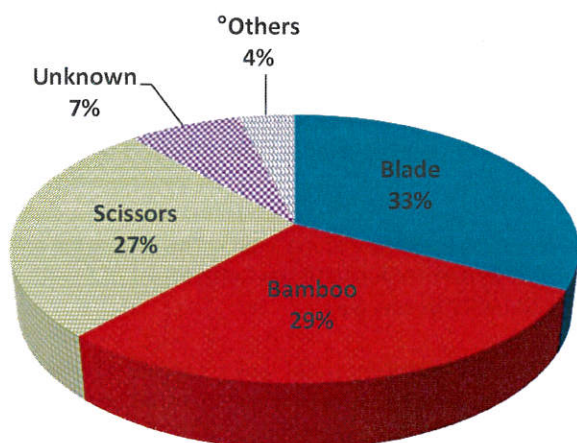
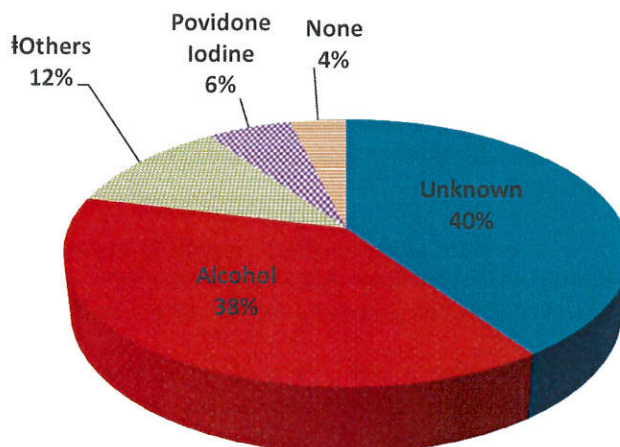


Fig. 9 Stump Treatment Used of Clinically Confirmed Neonatal Tetanus Cases, Philippines, as of September 30, 2017 (N=52)



LEGEND : °Others: palm frond  
†Others: ash, hot water, merthiolate and powder

Table 1. Clinically Confirmed Neonatal Tetanus Cases and Fatality Rate by Region, Philippines, as of September 30, 2017 (N=52)

Region	Clinically Confirmed Neonatal Tetanus Cases						
	Cases			Deaths			
	2017	2016	% Change	2017	CFR %	2016	CFR %
I	0	0	⇒ 0.00	0	0.00	0	0.00
II	2	4	↓ -50.00	2	100.00	3	75.00
III	3	6	↓ -50.00	2	66.67	3	50.00
IVA	4	3	↑ 33.33	2	50.00	3	100.00
MIMAROPA	5	6	↓ -16.67	2	40.00	4	66.67
V	1	4	↓ -75.00	1	100.00	3	75.00
VI	2	3	↓ -33.33	1	50.00	3	100.00
VII	2	2	⇒ 0.00	2	100.00	2	100.00
VIII	2	2	⇒ 0.00	2	100.00	2	100.00
IX	1	3	↓ -66.67	1	100.00	2	66.67
X	1	0	↑ 100.00	0	0.00	0	0.00
XI	1	2	↓ -50.00	0	0.00	2	100.00
XII	3	12	↓ -75.00	3	100.00	8	66.67
ARMM	18	17	↑ 5.88	11	61.11	7	41.18
CAR	0	0	⇒ 0.00	0	0.00	0	0.00
CARAGA	4	1	↑ 300.00	3	75.00	1	100.00
NCR	3	3	⇒ 0.00	2	66.67	3	100.00
PHILIPPINES	52	68	↓ -23.53	34	65.38	46	67.65



### 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 ( $\leq 28$  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);

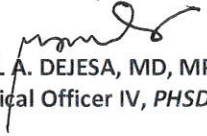
OR


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


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## Neonatal Tetanus Cases

Epidemiology Bureau  
 Public Health Surveillance Division

January 1 – September 30, 2017

### ANNEX A. Reported Neonatal Tetanus Cases by Barangay

REPORTED NEONATAL TETANUS CASES PHILIPPINES, JANUARY 1 - SEPTEMBER 30, 2017 (N=52)						
REGION	PROVINCE	MUNCITY	BARANGAY	ALIVE	DIED	TOTAL
II	CAGAYAN	ALLACAPAN	MATUCAY	0	1	1
	ISABELA	ANGADANAN	MACANIAO	0	1	1
III	AURORA	CASIGURAN	COZO	0	1	1
	NUEVA ECIJA	JAEN	SAN JOSE	0	1	1
		PANTABANGAN	VILLARICA	1	0	1
IVA	CAVITE	KAWIT	GAHAK	1	0	1
	LAGUNA	CALAUAN	LIMAO	0	1	1
	RIZAL	ANTIPOLO CITY	MAYAMOT	0	1	1
		RODRIGUEZ	SAN RAFAEL	1	0	1
MIMAROPA	OCCIDENTAL MINDORO	ABRA DE ILOG	UDALO (CAMURONG)	0	1	1
		CALINTAAN	NEW DAGUPAN	1	0	1
		MAGSAYSAY	GAPASAN	0	1	1
			PURNAGA	1	0	1
	PALAWAN	BALABAC	BANCALAN	1	0	1
V	CAMARINES NORTE	MERCEDES	COLASI	0	1	1
VI	NEGROS OCCIDENTAL	CAUAYAN	UNSPECIFIED	0	1	1
		SAN CARLOS CITY	CODCOD	1	0	1
VII	NEGROS ORIENTAL	SIATON	CASALA-AN	0	1	1
		TAYASAN	BAGO	0	1	1
VIII	EASTERN SAMAR	JIPAPAD	SAN ROQUE	0	1	1
	NORTHERN SAMAR	VICTORIA	LIBERTAD	0	1	1
IX	ZAMBOANGA DEL NORTE	SIAYAN	MOYO	0	1	1
X	BUKIDNON	TALAKAG	SANTO NIÑO (LUMBAYAWA)	1	0	1
XI	DAVAO ORIENTAL	GOVERNOR GENEROSO	TIBANBAN	1	0	1
XII	NORTH COTABATO	BANISILAN	SOLAMA	0	1	1
		KABACAN	BANNAWAG	0	1	1
		PIKIT	FORT PIKIT	0	1	1
ARMM	LANAO DEL SUR	MARAWI CITY	CALOCAN EAST	1	0	1
	MAGUINDANAO	AMPATUAN	DICALONGAN (POB.)	1	0	1
		BULUAN	POBLACION	0	1	1
		DATU ANGAL MIDTIMBANG	NUNANGAN	0	1	1
			TUGAL	1	0	1
		DATU ODIN SINSUAT	DALICAN POBLACION	0	2	2
			DINAIG PROPER	1	0	1
		DATU PIANG	GANTA	0	1	1
		DATU SAUDI AMPATUAN	MADIA	1	0	1



## Neonatal Tetanus Cases

Epidemiology Bureau  
 Public Health Surveillance Division

January 1 – September 30, 2017

### ANNEX A. Reported Neonatal Tetanus Cases by Barangay, *continuation*

REPORTED NEONATAL TETANUS CASES PHILIPPINES, JANUARY 1 - SEPTEMBER 30, 2017 (N=52)						
REGION	PROVINCE	MUNCITY	BARANGAY	ALIVE	DIED	TOTAL
ARMM	MAGUINDANAO	MAMASAPANO	LIBUTAN	1	0	1
		PAGALUNGAN	KILANGAN	0	2	2
		PARANG	BONGO ISLAND (LITAYEN)	0	1	1
		RAJAH BUAYAN	BAKAT	1	0	1
		SOUTH UPI	ROMANGAOB (POB.)	0	1	1
		SULTAN KUDARAT	CROSSING SIMUAY	0	1	1
			KATULI	0	1	1
CARAGA	AGUSAN DEL NORTE	JABONGA	BANGONAY	0	1	1
	AGUSAN DEL SUR	LORETO	SAN MARIANO	0	1	1
		SAN LUIS	SAN PEDRO	0	1	1
		SURIGAO DEL NORTE	CLAVER	URBIZTONDO	1	0
NCR	METRO MANILA	LAS PIÑAS CITY	B. F. INTERNATIONAL VILLAGE	0	1	1
		PARAÑAQUE CITY	SAN DIONISIO	1	0	1
		PASIG CITY	KALAWAAN	0	1	1
PHILIPPINES				18	34	52