



Morbidity Week 5 : January 1 - February 6, 2016 Epidemiology Bureau
Public Health Surveillance Division

Introduction

Neonatal tetanus (NT) is an acute, often fatal disease characterized by generalized, increased rigidity and convulsive spasms of skeletal muscles caused by the spore-forming bacterium *Clostridium tetani*.

Neonatal tetanus is not transmitted from person to person. The disease is acquired when dirt-containing tetanus spores enter open wounds (injections, cutting the umbilical cord) or breaks in the skin.

The incubation period is 3 to 21 days, with an average of 6 days. It is particularly common in rural areas where deliveries are done at home without adequate sterile procedures. Unclean cord care practices during delivery for neonates and lack of tetanus antibody protection from inadequately immunized mothers are the risk factors for the disease.

Criteria for NT Elimination

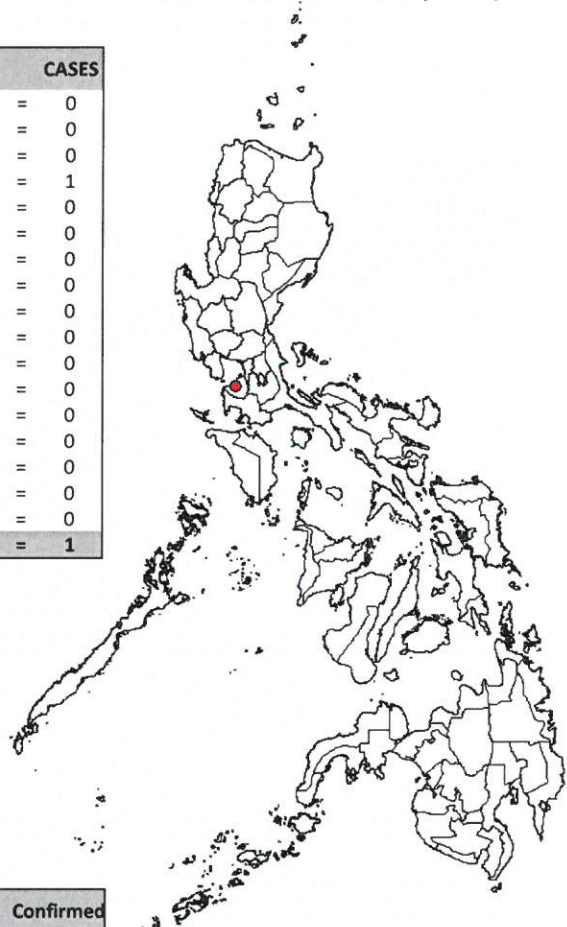
- NT Rate of <math><1/1000</math> live births
- Quality NT Surveillance (*early detection, prompt notification, timely reporting and investigation, at least 80% of Disease Reporting Units (DRUs) are reporting including zero case reporting*)
- $\geq 80\%$ Child Protected After Birth (CPAB)
- $\geq 80\%$ Clean delivery
- $\geq 80\%$ Facility-based delivery

Trend in the Philippines

Only **1** clinically confirmed neonatal tetanus case was reported nationwide from January 1 to February 6, 2016. This is **91%** lower compared to the same time period last year (**11**).

Neonatal Tetanus Cases (MW5)

| REGION | CASES |
|------------|------------|
| I | = 0 |
| II | = 0 |
| III | = 0 |
| IVA | = 1 |
| IVB | = 0 |
| V | = 0 |
| VI | = 0 |
| VII | = 0 |
| VIII | = 0 |
| IX | = 0 |
| X | = 0 |
| XI | = 0 |
| XII | = 0 |
| ARMM | = 0 |
| CAR | = 0 |
| CRG | = 0 |
| NCR | = 0 |
| PHL | = 1 |



| Legend | Confirmed |
|--------|-----------|
| 1 dot | = 1 case |

Geographic Distribution

One clinically confirmed NT case from **Cavite (Region IV-A)** was reported from January 1 to February 6, 2016. This indicates an NT incidence rate of **0.01** in the province.

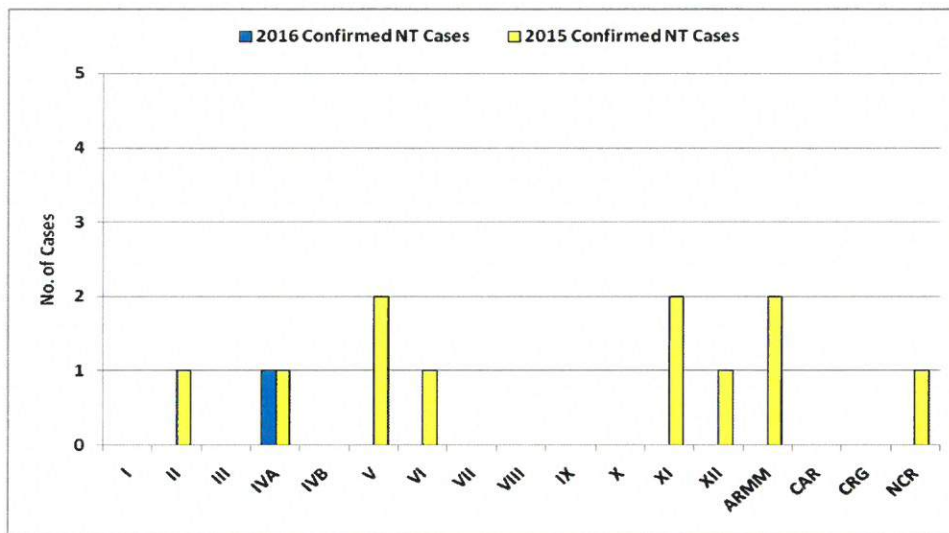
Profile of Cases

The case from Cavite is a 3 days old male that died (**CFR = 100.00**) of neonatal tetanus. The neonate was born at home and delivery was assisted- by a traditional birth attendant. The cord was cut using a pair of scissors and stump was treated using an alcohol.



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**Fig. 1 Clinically Confirmed Neonatal Tetanus Cases by Region
 Philippines, January 1 - February 6, 2016
 2016 (N=1) vs. 2015 (N=11)**



**Table 1 Clinically Confirmed Neonatal Tetanus Case Fatality Rate by Region
 Philippines, January 1 - February 6, 2016**

| Region | Cases | | | | Deaths | | | |
|------------|----------|-----------|---------------|-------------|----------|---------------|----------|--------------|
| | 2016 | 2015 | % Change | NT Rate | 2016 | CFR | 2015 | CFR |
| I | 0 | 0 | 0.00 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| II | 0 | 1 | -100.00 | 0.00 | 0 | 0.00 | 1 | 100.00 |
| III | 0 | 0 | 0.00 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| IVA | 1 | 1 | 0.00 | 0.00 | 1 | 100.00 | 1 | 100.00 |
| IVB | 0 | 0 | 0.00 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| V | 0 | 2 | -100.00 | 0.00 | 0 | 0.00 | 1 | 50.00 |
| VI | 0 | 1 | -100.00 | 0.00 | 0 | 0.00 | 1 | 100.00 |
| VII | 0 | 0 | 0.00 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| VIII | 0 | 0 | 0.00 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| IX | 0 | 0 | 0.00 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| X | 0 | 0 | 0.00 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| XI | 0 | 2 | -100.00 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| XII | 0 | 1 | -100.00 | 0.00 | 0 | 0.00 | 1 | 100.00 |
| ARMM | 0 | 2 | -100.00 | 0.00 | 0 | 0.00 | 1 | 50.00 |
| CAR | 0 | 0 | 0.00 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| CRG | 0 | 0 | 0.00 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| NCR | 0 | 1 | -100.00 | 0.00 | 0 | 0.00 | 1 | 100.00 |
| PHL | 1 | 11 | -90.91 | 0.00 | 1 | 100.00 | 7 | 63.64 |



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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

How can a newborn get it?

- Unhygienic cutting of umbilical cord
- Improper handling of cord stump

How can tetanus be prevented?

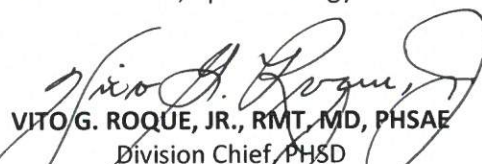
- Women of child-bearing age must be immunized by tetanus toxoid
- Clean delivery and cord clumping/cutting must be practiced
- Infants must be immunized with 3 doses of DPT

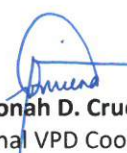
How can tetanus be treated?

- antibiotics & antitoxin drugs,
- as well as sedatives for muscle spasms


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