Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

FEB 09 2018

ADMINISTRATIVE ORDER
No. 2018- 0004

SUBJECT: Interim Guidelines on the Surveillance of Adverse Events among Dengvaxia Vaccinees (AEDV Surveillance)

I. BACKGROUND AND RATIONALE

Dengue vaccine was first introduced in the country through a school-based immunization of Grade 4 students, 9 years old and above, in all public elementary schools in Regions 3, 4A and NCR in April 2016. It was then followed in June 2017 by a community-based immunization in Cebu Province of Region 7 and in August 2017 for the 4 selected cities in NCR. A total of 830, 000 individuals were vaccinated in these programs, excluding those vaccinated by the private sector.

However, in November 29, 2017, Sanofi released an update which confirmed that Dengvaxia provides persistent protective benefit against dengue fever in those who had prior Dengue infection. But for those not previously infected by dengue virus, more cases of severe disease could occur following vaccination upon a subsequent dengue infection in the longer term.

Hence, to identify Dengvaxia vaccinees with possible severe dengue infection as well as other diseases, a Surveillance of Adverse Events among Dengvaxia Vaccinees (AEDV Surveillance) was established based on the existing national surveillance systems: the Adverse Event Following Immunization Surveillance; the Dengue Surveillance of the Philippine Integrated Disease Surveillance and Response (PIDSR); and the Event-based Surveillance and Response (ESR). This administrative order is hereby provided as the interim guidelines for all health agencies (DOH Central Offices, Regional offices, public or private referral hospitals, etc.) and their local counterparts in the implementation of Surveillance of Adverse Events among Dengvaxia vaccinees.

II. OBJECTIVES

1. To identify and immediately report vaccinated individuals who have died or are ill and admitted in health facilities.

2. To determine the post vaccination adverse events and diseases among Dengvaxia vaccinees.
3. To provide strategic information to help improve the efficiency of referral systems and enhance the clinical management of Dengvaxia vaccinees who become ill.

III. SCOPE AND COVERAGE

This issuance shall apply to health facilities and health professionals from both the public and private sectors catering to and managing individuals who have received at least one (1) dose of dengue vaccine (Dengvaxia) and became ill. This shall also include the DOH concerned offices and attached agencies, epidemiology and surveillance units, private and government health facilities and local government units.

IV. DEFINITION OF TERMS

a. Adverse Event following Dengvaxia vaccination	-	Any untoward medical occurrence which follows vaccination with dengue vaccine (Dengvaxia). The adverse event may be any unfavorable or unintended clinical sign, abnormal laboratory finding, symptom or disease occurring within a minimum of 5 years from the time of vaccination.
b. Surveillance of Adverse Events among Dengvaxia vaccinees (AEDV Surveillance)	-	An information-based activity involving the collection, analysis and interpretation of data on adverse events among Dengvaxia vaccinees.
c. Hospital Admission	-	The formal acceptance by a hospital or other inpatient health care facility of a patient who is to be provided with room, board, and continuous nursing service in an area of the hospital or facility where patients generally reside at least overnight.
d. Philippine Integrated Disease Surveillance and Response	-	The Philippine Integrated Disease Surveillance and Response (PIDSR) System was established to improve the current disease surveillance systems in the Philippines and to comply with the 2005 IHR call for an urgent need to adopt an integrated approach for strengthening the epidemiologic surveillance and response system for each member nation. The focus of PIDSR is to strengthen the capacity of local government units for early detection and response to epidemics.
e. Dengue	-	Dengue is a mosquito-borne viral disease that has rapidly spread in all regions of WHO in recent years. Dengue virus is transmitted by female mosquitoes mainly of the species *Aedes aegypti* and, to a lesser extent, *Ae. albopictus*.
	-	Symptoms include high fever accompanied by 2 of the following symptoms: severe headache, pain behind the eyes, muscle and joint pains, nausea, vomiting, swollen glands or rash.
	-	The three classification of Dengue are: Dengue without Warning Sign, Dengue with Warning Signs and Severe Dengue.

V. GENERAL GUIDELINES

1. Surveillance of adverse events among Dengvaxia vaccinees (from both public and private immunization programs) shall be conducted for a minimum of 5 years from the day of first vaccination dose.
2. Surveillance of Adverse Events among Dengvaxia vaccinees (AEDV Surveillance) shall be established and made functional in all hospitals (public and private) nationwide.
3. All national and local Epidemiology and Surveillance Units (i.e. DOH Epidemiology Bureau, DOH Regional Offices, and Municipality/City/Provincial Health Offices), shall establish a secure mechanism for quick reporting from all health facilities, and reinforce the system for case verification, case investigation, data collection, and laboratory confirmation.
4. Adequate manpower, logistics including communication, transportation and courier services, laboratory reagents and supplies, materials, and financial resources needed to support enhanced disease surveillance shall be made available and accessible. Additional surveillance officers may be hired for national, regional, local and hospital Epidemiology and Surveillance Units to implement the enhanced disease surveillance.
5. All field investigation and response activities shall be recorded and a copy of the report shall be submitted to the Regional Epidemiology and Surveillance Unit (RESU) and the Epidemiology Bureau (EB).
6. Surveillance of Adverse Events among Dengvaxia vaccinees (AEDV Surveillance) shall follow the existing Philippine Integrated Disease Surveillance and Response (PIDSR) system of detection, notification, reporting and data management (collection, consolidation, analysis and interpretation) mechanisms following AO 2007-0036, unless otherwise stated in this Administrative Order.

VI. SPECIFIC GUIDELINES

A. Surveillance

1. Detection and Reporting

a. Responsibility of Detection and Reporting

The following shall be responsible for the detection and/or reporting of cases:

a. 1. All health facilities providing clinical treatment of ill and admitted Dengvaxia vaccinees.
a. 2. Schools who have noted ill students who have received Dengue vaccine.
a. 3. Researchers, investigators and research laboratories involved in clinical studies or field trials.
a. 4. Individuals who received the vaccine, got ill and were admitted can report to any health professional. In cases of minors, parents or guardians can report the same.
a. 5. All health professionals, community members, school staff, relatives or individuals who know of any Dengvaxia vaccinee who has died for any reason.

b. Case Detection

The following Surveillance of Adverse Events among Dengvaxia vaccinees (AEDV Surveillance) case definition shall be used in identifying reportable individuals:

An individual who received at least one dose of Dengvaxia who:
• **became ill and was admitted to a health facility for any reason; or**
• **died for any reason.**

c. Timing and Flow of Reporting

c. 1. All reportable cases who are admitted or who died for any reason shall be reported to the next higher Epidemiology and Surveillance Unit (ESUs) level and to the Department of Health within 24 hours of admission through the fastest means possible (**Annex A**). Initial notification can be thru a text message/calls to the ESU Hotline (**Annex D**). This is to notify the next higher level that an in-depth case investigation is warranted.

c. 2. The following information shall be provided for initial notification of deaths and admitted cases:

i. Name
ii. Age
iii. Sex
iv. City/Municipality & Province
v. Hospital where patient is admitted
vi. Date admitted
vii. Admitting diagnosis
viii. Status of patient (still admitted, discharged alive, died)

c. 3. A Dengvaxia Case Report Form (CRF) **(Annex B)** shall be filled out with necessary information about the case.

c. 4. All Dengvaxia Case Report Forms shall be encoded, and the database shall be submitted to the MESU/CESU/PESU weekly.

c. 5. If the Dengvaxia case is suspected to have Dengue (based on the PIDSR case definition), fill out the Dengue CRF as well.

c. 6. If Dengvaxia case is suspected to have any other disease in PIDSR, fill out appropriate PIDSR forms accordingly.

2. Case Investigation

a. Verify and investigate all deaths and/or admitted Dengvaxia cases using the Dengvaxia Case Report Form (CRF).

b. Obtain copies of the medical chart (admission sheet, physical examination sheet) or medical abstract and laboratory results of the case. These shall be attached to the Dengvaxia CRF upon submission.

c. Case investigation is the primary responsibility of the City/Provincial Health Offices or ESU. In instances when the LGU needs assistance, the Regional ESU shall provide technical assistance.

d. Complete investigation shall be conducted within 48 hours upon receiving a report of a Dengvaxia case who is admitted or has died.
e. The completed Dengvaxia CRF together with all supporting documents shall be submitted immediately after completion of investigation or within 48 hours to the RESU for review.
f. For reported deaths among Dengvaxia vaccinees, RESU shall immediately submit case details and supporting documents to EB.

3. Laboratory Confirmation

a. Cases with fever of 1-5 days shall be tested for Dengue NS1 RDT. Cases with >5 days of fever shall use other diagnostic procedures, and include at least a dengue serologic test, to determine cause of the fever (**Annex C**).
b. Blood samples (3cc of serum) shall be collected twice (1st – during admission, 2nd – prior to discharge) from all admitted patients with fever, and submitted to the Research Institute for Tropical Medicine (RITM) for confirmatory testing of Dengue. Labeled specimens shall be submitted together with a copy of the filled-up Dengvaxia CRF.
c. Additional biological samples may be collected from Dengvaxia cases and sent to RITM for laboratory confirmation if they fit the PIDSR case definition for other reportable diseases.

4. Data Management, Analysis and Reporting

a. The Epidemiology Bureau shall consolidate all AEDV Surveillance reports submitted by the RESU.
b. Regular data reconciliation shall be conducted between RESU and the Epidemiology Bureau.
c. The Epidemiology Bureau and different RESU shall regularly release a nationally reconciled AEDV Surveillance update.
d. Data analysis shall be carried out by all Epidemiology and Surveillance Units of the different levels. Detection of increasing number Dengvaxia admitted cases or deaths and Dengue cases and deaths should immediately be investigated and reported.
e. All information collected from the AEDV Surveillance shall be kept secure and confidential. Measures to ensure data security and confidentiality shall be put in place by ESU at all levels.

5. Feedback

a. There shall be a regular and timely feedback within and between levels of the health delivery system on investigation results, completeness and timeliness of reporting, results of data analysis, and the functionality of the AEDV Surveillance, among others.

B. Monitoring and Evaluation

1. AEDV Surveillance shall be monitored regularly based on the following criteria:
   a. The data reported by AEDV Surveillance (reporting rate, number of cases reported)
   b. Timeliness, completeness and accuracy of reporting
   c. Timeliness, completeness of investigations

2. AEDV Surveillance shall be evaluated and improved based on recommendations from experts.

C. Access to Patient's Medical Records

1. AEDV Surveillance and the need to obtain medical documents pertaining to cases fall under the Department of Health's statutory mandate as a public authority. In accordance to the Implementing Rules and Regulations (IRR) of Republic Act No 10173- "Data Privacy Act of 2012" Rule II, Section 5d, *"The Act and these Rules shall not apply to the following specified information, only to the minimum extent of collection, access, use, disclosure or other processing necessary to the purpose, function, or activity concerned: Information necessary in order to carry out the functions of public authority."* In addition, Rule V, Section 21f of the Data Privacy Act IRR, states that processing of personal information is allowed if *"processing of information is necessary for the fulfillment of the constitutional or statutory mandate of a public health authority."*
2. Therefore, hospitals and other health facilities shall provide the Department of Health and its local counterparts with Dengvaxia case information necessary for disease surveillance. These may include but are not limited to parts of the patient's medical chart (admission sheet, physical examination sheet, and laboratory results) or a medical abstract clearly narrating the case's medical history, course of admission, laboratory results and final diagnosis.

VII. ROLES AND RESPONSIBILITIES

A. Epidemiology Bureau (EB) shall:

1. Oversee the national implementation of AEDV Surveillance.
2. Collate and secure necessary medical records of Dengvaxia cases.
3. Maintain the National AEDV Surveillance database and regularly conduct data reconciliation with RESU.
4. Conduct comprehensive data analysis and provide updates to DOH.
5. Assist in case investigation and provide technical assistance when needed.
6. Provide technical assistance or training to develop/enhance capacity of regional/local surveillance units.

B. Research Institute for Tropical Medicine (RITM) shall:

1. Provide laboratory supplies and specimen collection kits for AEDV Surveillance.
2. Conduct confirmatory testing of samples sent from Dengvaxia cases and provide EB and RESU with results.
3. Provide technical assistance or training to develop/enhance laboratory capacity of regional / local surveillance units.
4. Maintain the database of all received and tested samples and conduct data reconciliation with RESUs and EB.

C. DOH Regional Offices shall:

1. Oversee the regional implementation of the AEDV Surveillance.

2. Provide technical assistance and logistics for AEDV Surveillance, case investigations and response.
3. Organize an investigation team when needed and take the lead in the investigation.
4. Complete the collation of necessary medical records of Dengvaxia cases and submit to EB.
5. Maintain the AEDV Surveillance database and regularly conduct data reconciliation with local ESU and EB.
6. Submit the updated AEDV Surveillance database to EB on a weekly basis.
7. Analyze and interpret surveillance data, and respond accordingly.
8. Report hospitals and related facilities that fail to comply with the AEDV Surveillance and PIDSR reporting requirements to EB.

D. Provincial / City / Municipal Health Offices shall:

1. Provide timely feedback to the Local Chief Executives (governor/mayor).
2. Conduct investigation of reported AEDV Surveillance cases.
3. Complete the collation of necessary medical records of Dengvaxia cases and submit to RESU.
4. Submit and maintain database of all reported Dengvaxia cases.
5. Analyze and interpret surveillance data, and respond accordingly.
6. Report hospitals and related facilities that fail to comply with the AEDV Surveillance and PIDSR reporting requirements to the DOH Regional Offices.

E. Hospitals shall:

1. Detect and immediately report all cases to Epidemiology and Surveillance Units.
2. Facilitate case investigation and specimen collection as needed.
3. Provide access of investigation teams to the medical records of cases.
4. Clinically manage cases.

F. Schools shall:

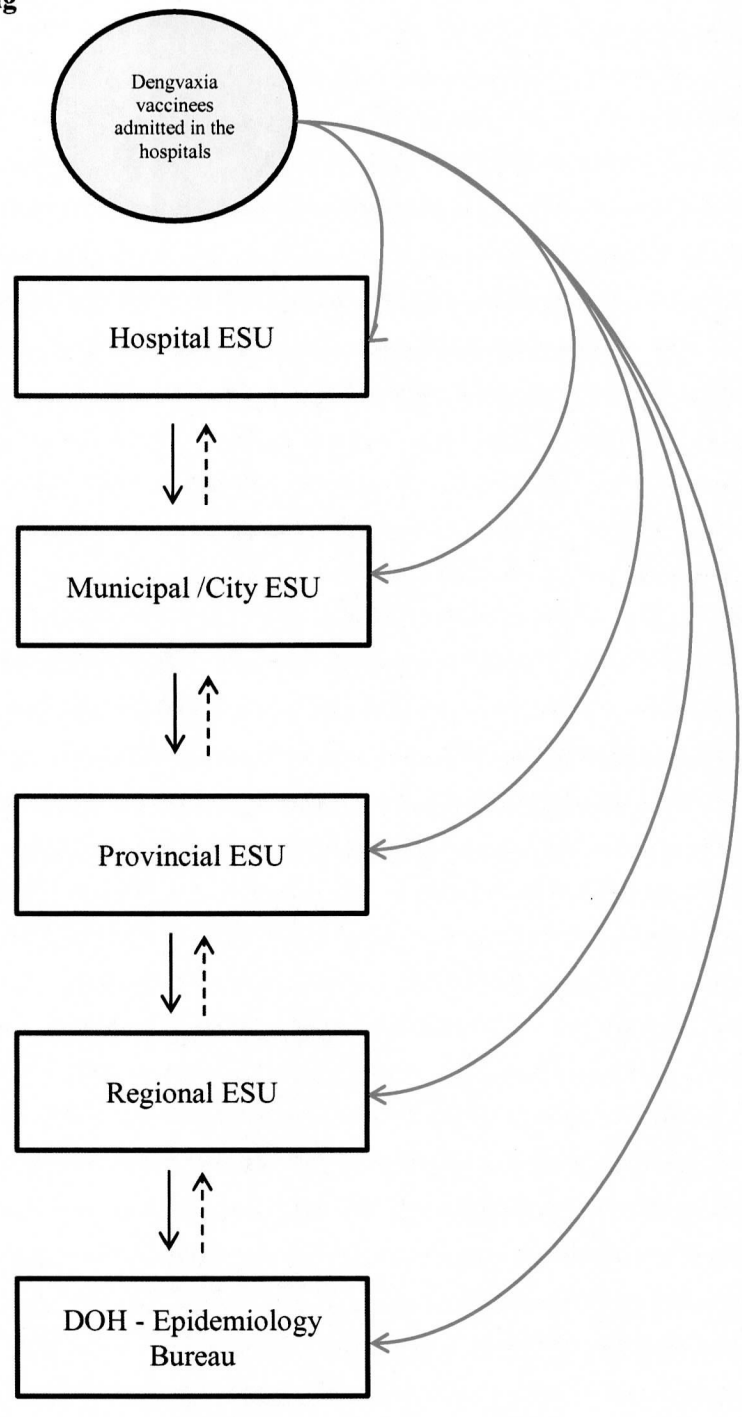
1. Refer Dengvaxia vaccinated students who are ill to the local health centers or hospitals for appropriate medical management.

VIII. EFFECTIVITY

This Order shall take effect immediately.

FRANCISCO T. DUQUE III, MD, MSc
Secretary of Health

Annex A – Flow of Reporting



Legend:

→ Weekly/regular reporting
- - -> Feedback
→ Immediate notification (deaths)

Annex B – Dengvaxia Case Reporting Form

Dengvaxia Case Reporting Form	Reporting Period : (inclusive dates)	Page Number:

Region: ____________________ Province: ____________________ Municipality/City: ______________________________

Name of Health Facility: ____ Type: ☐RHU ☐Gov't Hospital ☐Private Hospital ☐Private Clinic

Address: ____

VACCINEE CODE	PATIENT'S FULL NAME Last name, First name, Middle name	Age/Sex	Date of Birth	COMPLETE ADDRESS House/Building #, Street, Barangay, Municipality/City, Province	Admitted?	Diagnosis	Date admitted	Date onset of illness	Number of Dengvaxia Doses	Date first dose received	Date last dose received	Region where the Dengue Vaccine was given	Province where the Dengue vaccine was given	Place the Dengue Vaccine was given	NS1	IgG	IgM	Brand of Dengue screening kit (NS1, IgG, IgM) used	Past history of Dengue	Fever	Clinical Classification	Outcome
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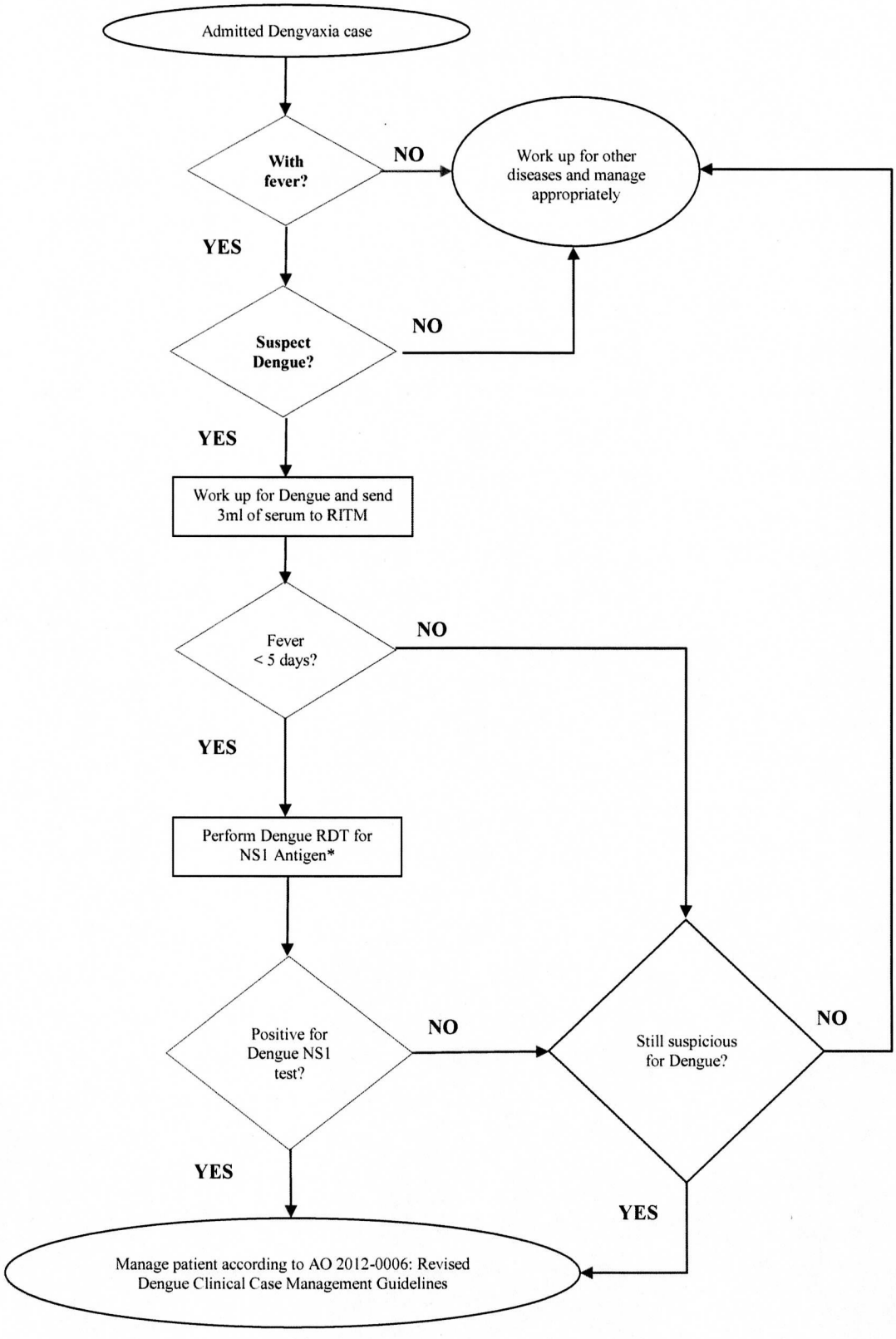
Indicate vaccinee code based on Dengvaxia Masterlist	Indicate Last Name, followed by First name, and Middle name	Age: D-Days M-Months Yr-Years Sex: F-Female M-Male	MM/DD/YY	Specify House or Building number, Street, Barangay, Municipality/City, Province	Y - Yes N - No	Indicate diagnosis at the hospital	MM/DD/YY	MM/DD/YY	Indicate how many doses the case received (1, 2 or 3)	MM/DD/YY	MM/DD/YY	Indicate the region where the vaccine was given	Indicate the province where the vaccine was given	S-School, H-Health facility or P-Private clinic	P: Pos N: Neg I: Indeterminate	P: Pos N: Neg I: Indeterminate	P: Pos N: Neg I: Indeterminate	Indicate brand of Dengue screening kit (NS1, IgG, IgM) used	√: Yes	√: Yes	N: No warning signs W: With warning signs S: Severe Dengue	A: Alive D: Died (specify date of death)

Annex C – Laboratory Algorithm for Admitted Dengvaxia Vaccinees with Fever



**Use of RDT must follow AO 2016-0043: Guidelines for the Nationwide Implementation of Dengue RDT*

Annex D - Summary of Specimen Collection, Storage, and Transport

Sample Type	Timing of Collection	Quantity	Storage prior to transport	Transport
Serum- Acute Phase	Less than 5 days after onset of fever (< 5 days)	3 ml	Refrigerator, 2 to 8°C	• Transport within 48 hours of collection* • Use the prescribed transport box and gel or ice packs
Serum- Convalescent Phase	More than 5 days from onset of fever (> 5 days)	3 ml	Refrigerator, 2 to 8°C	• Transport within 48 hours of collection* • Use the prescribed transport box and gel or ice packs

Storage and Transport

Label, pack and transport the specimen based on the existing surveillance and laboratory guidelines:

1. Label the sample container with patient's name, type of specimen, and date of collection.
2. Store the samples in 2 to 8°C or in refrigerator temperature until shipment
3. Place the sample container into a sealable plastic bag or pouches containing absorbent materials such as cotton to soak up any leakage that may occur.
4. The CRF shall be sealed in a separate plastic bag and enclosed within the shipping box.
5. Place the specimens in the transport box with frozen ice packs no less than 6 pieces fitted around the specimens.
6. Sample may be sent to:

Virology Department
Research Institute for Tropical Medicine
9002 Research Drive, Filinvest Corporate City Compound
Alabang, Muntinlupa City, 1781
Telefax Number: (02) 809-7120

7. Coordinate with the Regional ESU for the transport of specimen to RITM.

**Note: For samples that cannot be sent within 48 hours of collection, please contact the Surveillance and Response Unit (SRU) of RITM: (02) 994-1887, 0998-531-3590, ritmsu@gmail.com*

Annex E: Regional Epidemiology and Surveillance Unit Hotlines

Regional Office	Hotline
I	(072) 607-6413
II	(078) 304-0911
III	0921-368-8541
IV-A	0927-580-5551
IV-B	(02) 912-0195 loc 437
V	(052) 204-0040, (052) 204-0050 loc 106 or 509
VI	(033) 332-2326 loc 137
VII	0922-397-2334
VIII	0926-456-8087
IX	(062) 983-0933
X	0995-359-3201
XI	0939-614-7729
XII	(064) 421-45-83
ARMM	(064) 421-68-42
CAR	(074) 444-5255
CARAGA	0950-270-7769
NCR	0917-829-0007, (02) 535-1488