

[DOH ADMINISTRATIVE ORDER NO. NO. 2012-0003, February 08, 2012]

GUIDELINES ON STRENGTHENING LABORATORY CONFIRMATION OF SUSPECTED MEASLES CASES

I. BACKGROUND AND RATIONALE

In 2005, the countries of the Western Pacific Region of the World Health Organization (WHO) adopted the goal of measles elimination. To achieve this, the WHO recommends that countries strengthen three areas of their Expanded Programme for Immunization. These areas are: 1) universal high population immunity through increased coverage; 2) high case-based quality surveillance; and 3) adequate laboratory support for confirmation of diagnosis.

World Health Organization guidelines in support of the goal of measles elimination state that any person satisfying the suspect case definition of measles must be immediately reported, investigated and a blood specimen collected to confirm whether the suspected case is indeed a case of measles. Effective surveillance for measles entails establishing case-based surveillance that includes investigation and laboratory testing of specimens from all suspected cases. Such surveillance system will also identify rubella cases through laboratory confirmation. As the country progresses towards measles elimination, reporting of rubella cases will be implemented and incorporated into the measles surveillance system.

The laboratory plays an important role in measles surveillance. In the elimination phase, it is well established that surveillance based on clinical recognition of cases is inaccurate and that laboratory confirmation of all suspected cases is critical for effective surveillance and proper program planning. It is in this light that confirmation of suspected measles cases through laboratory testing needs to be enhanced.

1. Monitoring and verifying virus transmission:

- Confirmation of suspect cases/ outbreaks: confirm the clinical diagnosis, especially in the early stages of an outbreak
- Identification of measles and rubella virus strains and genetic characteristics of viral isolates
- differentiate endemic or imported cases: monitor circulation of wild genotypes to define pathways of transmission/importation.

2. Monitoring susceptibility profile of the population

- determination of the age distribution of susceptibility to measles and rubella in order to assess population at risk and appropriate intervention to reduce

risk.

- evaluation of the impact of the immunization campaigns

Quality measles surveillance requires laboratory confirmation of at least 80% of the reported suspected measles cases. However, **during elimination phase, all suspected measles cases require laboratory confirmation.** This shall serve as the evidence of the country's achievement and maintenance of the elimination status.

II. OBJECTIVES

A. General Objectives:

This administrative issuance sets the guidelines for strengthening laboratories in support of the goal of measles elimination.

B. Specific Objectives:

- a. To strengthen measles case-based surveillance
- b. To strengthen detection of rubella cases through measles surveillance and laboratory confirmation
- c. To evaluate impact of the measles and rubella routine and supplemental immunization activities in interrupting measles transmission and achieving control of rubella through efficient laboratory confirmation
- d. To establish the use of dried blood spot (BDS) and nasopharyngeal swab (NPS) as other methods of confirming suspect cases
- e. To implement standards for the collection, handling, storage and transport of DBS and NPS samples

III. SCOPE AND COVERAGE

This issuance shall apply to the entire health sector, to include public and private health facilities both at the national and local government units involved in disease surveillance and response activities (refer to AO. No. 2007-0036: Guidelines on the Philippine Integrated Disease Surveillance and Response).

IV. DEFINITION OF TERMS, ABBREVIATIONS & ACRONYMS

CASE INVESTIGATION FORM (CIF)	- Refers to reporting form that allows collection of standard information to acquire
-	epidemiological study of disease incidence and disease patterns
CLUSTER	Defined as two or more persons presenting with manifestations of a suspect measles case that are

	detected with onset of illness within a period of 7 to 21 days and in the same geographical area and/or are epidemiologically linked
CONTACTS	Are all persons living in a household of other close quarters with the case during the infectious period (5 days before to 5 days after the onset of rash)
DISEASE REPORTING UNIT	(DRU) This includes all health facilities (rural health units, hospitals, laboratories, seaports and airport are considered DRUs)
EPIDEMIOLOGICALLY-LINKED MEASLES CASE	Defined as a suspected measles case who was not discarded and who: <ul style="list-style-type: none"> - had contact with a laboratory confirmed case or another epidemiologically-linked case within 7-21 days before rash onset and - the other epidemiologically-linked or laboratory confirmed case was infectious at the time of contact (i.e. contact was 5 days before and 5 days after rash onset)
IMMUNOGLOBULIN CLASS M (IgM)	An antibody detected to confirm suspect measles cases
PROVINCIAL EPIDEMIOLOGY AND SURVEILLANCE UNIT (PESU)	Refers to the unit established in the Provincial Health Offices that provides services on public health surveillance and epidemiology
PHILIPPINE INTEGRATED DISEASE SURVEILLANCE AND RESPONSE (PIDSAR)	Refers to the Philippines process of coordination, prioritizing, and streamlining of core surveillance activities (e.g., data collection, reporting, laboratory and epidemiological confirmation, analysis and feedback), support functions (e.g., training, monitoring, financial and logistics) and response (e.g., epidemic investigation) with the aim of making the system more efficient and effective in providing timely, accurate and relevant information for action

REGIONAL EPIDEMIOLOGY AND SURVEILLANCE UNIT (RESU)	Refers to the unit established in the Centers for Health Development or the DOH regional offices that provide services on public health surveillance and epidemiolog
RESEARCH INSTITUTE FOR TROPICAL MEDICINE (RITM)	It houses the Department of Virology which is the national measles reference laboratory
RURAL HEALTH UNIT (RHU)	Refers to the unit established in the rural health units that provides services on public health surveillance and epidemiology
SUSPECTED MEASLES CASE	Any individual, regardless of age, with history of fever (38°C or more) or hot to touch, generalized non-vesicular rash of 3 or more days duration; and at least one of the following cough, coryza, or conjunctivitis

V. DECLARATION OF POLICIES

A. Global Immunization Vision Strategy (GIVS) proposed a new measles mortality reduction of 90% by 2010 with the following major challenges: (i) measles mortality reduction activities in several large countries with high measles burden, (ii) enhanced efforts are needed to improve immunization systems to ensure that at least 95% of infants are vaccinated with measles before their first birthday, (iii) continue conduct "follow-up" SIAs every 3-4 years until their routine system are capable of providing two opportunities for measles immunization to >90% of every birth cohort, (iv) disease surveillance at district, provincial and national levels need to be strengthened to enable case-based surveillance with testing of clinical specimens from suspected cases in the laboratories. This was endorsed in the World Health Assembly 2005

B. In 1996, the Regional Office of the Western Pacific (WPRO) established a "Plan of Action (POA) for Accelerated Measles Control". By 2003, the region's vision had moved to elimination with the publication of the "Western Pacific Regional POA for Measles Elimination", that covered the years 2003-2005. The Regional Office published the Field Guidelines for Measles Elimination in 2004 and in 2005, a second Regional Committee (RC) resolution established 2012 as the target date for measles elimination

C. In light of the proven efficacy and safety of the Regional Advisory RA 27/3 bases rubella vaccine, WHO recommends its use in all countries where control or elimination of Congenital Rubella Syndrome (CRS) is considered a public health priority. Current efforts in global measles control shall be used as an opportunity to