PHILIPPINE PEDIATRIC SOCIETY INC.
PEDIATRIC INFECTIOUS DISEASE SOCIETY OF THE PHILIPPINES

PPS-PIDSP JOINT POSITION STATEMENT ON MEASLES IN THE COMMUNITY: GUIDANCE FOR HEALTHCARE PROVIDERS

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In light of the increase in cases of measles throughout the country, the Philippine Pediatric Society (PPS) and the Pediatric Infectious Disease Society of the Philippines (PIDSP) call on all healthcare providers and the public to intensify all efforts to mitigate the spread of measles by enhancing disease recognition, reinforcing infection control measures, increasing vaccination coverage rates, and participating in disease surveillance efforts of the Department of Health. Community education and advocacy are needed to protect our population from this public health threat.

Background

Measles remains a significant public health concern in the Philippines and globally despite the availability of effective vaccines. It is a highly contagious viral disease that can lead to severe complications and even death. A high population immunity with 95% coverage rate is needed to prevent measles outbreaks and to protect infants below the age of vaccination. The COVID-19 pandemic brought disruption to healthcare delivery systems including routine immunization services. This, coupled with growing vaccine hesitancy, reduced measles immunization coverage in recent years and left millions of children vulnerable to infection. In the Philippines, children who received two doses of measles-containing vaccines (MCV) comprised only about 55% of the target population in 2021 and 64% in 2022. In a recent report by the Department of Health (DOH), measles cases nationwide have surged by nearly 400% from 2022 to 2023. As of March 21, 2024, a measles outbreak in the Muslim-majority region was declared. Bangsamoro Autonomous Region of Muslim Mindanao (BARMM) has recorded 592 cases and 3 deaths due to measles across the region since January. According to the Epidemiology Bureau (EB), the highest number of cases are in children less than 5 years of age (69%) while an estimated 31% of the cases are aged 5-10 years old. Other regions that have reported a surge in cases from 2022 to 2023 by >200% are Regions III, VI, X, XII, CAR, and Caraga.

Call to Action

Due to the sustained increase in the number of measles cases in the country, the PPS and PIDSP reiterate the urgent need to address this public health threat and recommend the following:

1. Enhance Disease Recognition and Clinical Management

Measles is a highly contagious disease caused by Rubeola virus. It is mainly transmitted via airborne route but can also be spread by contact or droplet (coughing or sneezing). Transmission can occur from four days prior to the onset of the rash to four days after the rash has appeared. It is one of the most infectious diseases such that one infected patient can infect 9 out of 10 susceptible contacts. The virus can remain active and contagious in the air up to two hours; thus, it can be transmitted in public spaces, even in the absence of person-to-person contact.

Measles Signs and Symptoms

Measles is considered in any patient presenting with fever, rash, and clinically compatible symptoms especially in settings of recent exposure to a person with similar illness or outbreaks in the community. Recognizing the characteristic signs and symptoms of measles is essential for early identification and prompt containment by healthcare workers and parents alike.

Typical Clinical Features:

1. Prodromal phase: fever, cough, coryza (runny nose) and conjunctivitis (i.e., the “3 C’s”)
2. Koplik’s spot (pathognomonic enanthem): small, white grain-like spots on the inner cheek mucosa near the molars occurring 48 hours prior to the onset of the exanthem. These begin to slough when the exanthem appears.
3. Exanthem phase: A maculopapular rash appears approximately two to four days after fever onset. The rashes typically are red, raised and blotchy, and spreads from head to trunk to the lower extremities. Clinical improvement usually occurs within 48 hours of the appearance of the rash. After three to four days, the rash darkens to a brownish color and begins to fade, followed by fine desquamation in the more severely involved areas. The rash usually lasts six to seven days and fades in the same order it appeared. Other symptoms include lymphadenopathy, pharyngitis, and conjunctivitis.
4. Modified measles may occur in individuals with pre-existing measles immunity, manifesting with milder clinical symptoms of shorter duration.

5. Complications are common and include diarrhea, pneumonia, encephalitis, otitis media and corneal scarring. The risk of complications is increased in resource-limited settings. Those at higher risk also include immunocompromised patients, pregnant women, individuals with Vitamin A deficiency or poor nutritional status, and individuals at extremes of age. Long term complications include Subacute Sclerosing Panencephalitis (SSPE), a rare but fatal neurologic disease that develops some 7 to 10 years after a person had measles. The risk for SSPE is particularly higher if a person develops measles before the age of 2 years.

Although the diagnosis of measles is clinical, it can be confirmed with serum measles IgM. Nevertheless, the absence of laboratory testing should not delay prompt initiation of treatment and reporting to local health authorities. Healthcare providers must coordinate with the City Epidemiology and Surveillance Unit (CESU) for measles IgM testing.

Management of Disease

There is no specific antiviral therapy for measles. Treatment is mainly supportive including antipyretics, fluids, and treatment of superimposed bacterial infections and other complications. Vitamin A may reduce disease severity and risk of complications, and dosing consists of oral administration of the following once daily for two days:

Infants <6 months of age: 50,000 international units
Infants 6 to 11 months of age: 100,000 international units
Children ≥12 months: 200,000 international units
*Note: a 3rd dose of Vitamin A may be given 4-6 weeks later if with signs of Vitamin A deficiency

Hospitals and primary healthcare settings must ensure availability of sufficient supplies for the diagnosis and management of measles cases requiring hospitalization. Facilities should be adequately equipped to recognize and isolate measles cases early, institute appropriate management and infection control measures, provide measles vaccinations and supportive treatment including Vitamin A.

2. Reinforce Infection Prevention and Control Measures

Airborne precautions must be employed when handling patients with suspected or confirmed measles. Patients must be isolated at least until four days after rash onset. Both patient and healthcare provider should wear appropriate personal protective equipment (PPE) with masks that can filter airborne particles (N95 mask or a respirator with similar effectiveness). Proper hand hygiene and waste management must be strictly enforced. In outpatient settings, the room occupied by a suspected or confirmed case of

measles must be cleaned and disinfected thoroughly and should not be used until 2 hours after the patient leaves. In addition, fever and rash screening for all patients and companions entering hospital premises (regardless of chief complaint) must be done in areas of reported outbreaks.

3. Increase Measles Vaccine Coverage

Measles vaccines are highly efficacious and remain the most effective tool to prevent infection. Measles-containing vaccine (MCV) in children is 93% effective after one dose and 97% effective after 2 doses. Healthcare providers must ensure that all eligible individuals receive two doses of MCV according to the recommended schedule. Special efforts should be made to identify and immunize susceptible populations, including unvaccinated or incompletely vaccinated individuals and those with unknown vaccination status or documented prior infection. In particular, cohorts born during the pandemic who have aged out of the public health system need to be targeted for catch up immunization campaigns for measles and other vaccine-preventable diseases.

The PPS and PIDSP strongly recommend that MCVs be made readily and consistently available in all vaccination centers, in both public and private healthcare settings.

As part of routine immunization, children ages 6 to 9 months should be given one subcutaneous dose of MCV or a monovalent measles vaccine. This dose is usually given at 9 months of age, but in outbreak situations declared by public health authorities, the vaccine may be given as early as 6 months of age.

After the initial dose given at 6 to 9 months of age, 2 doses of Measles Mumps Rubella (MMR) vaccine are recommended: the first dose is given at 12 to 15 months, and the second dose is usually given at 4 to 6 years of age but may be given at an earlier age, as long as with a minimum of 4 weeks interval between doses.

For programmatic purposes, the DOH National Immunization Program (NIP) provides MCV at 9 and 12 months of age.

If the monovalent measles vaccine is not available for infants less than 12 months of age, any MCV may be given instead. However, 2 more MMR doses must be given starting at 12 months of age, following the above recommended schedule.

For children whose vaccinations have been delayed, the vaccine series does not need to be restarted, regardless of time elapsed between doses. Children 7 to 18 years old who are unvaccinated should receive 2 doses of MMR with a minimum of 4 weeks interval between doses. Those who are incompletely vaccinated, i.e., have only received 1 dose, may receive their second dose anytime, provided at least 4 weeks from the first dose.

There are several formulations of measles-containing vaccines (MCVs) available: Monovalent measles vaccine, Measles Rubella (MR) vaccine, MMR vaccine, and MMR-V (Measles-Mumps-Rubella-Varicella) vaccine. Healthcare practitioners may refer to their product insert for more information.

The safety and efficacy of MCVs have been established for several decades. The most common adverse reactions are fever, a mild rash or swollen lymph nodes in the patient's neck which are minor and self-limiting. These reactions are minor compared to the considerable benefits gained from receiving the vaccine, including protection for the individual and measles elimination in countries that have maintained high vaccination rates. Contraindications to MCVs include severe allergic reaction after a previous dose of MCV, pregnancy, and certain immunodeficiencies.

Supplemental Immunization Activities (SIAs) with MCVs have been a regular component of measles control activities as these rapidly increase population immunity and interrupt measles virus transmission specially in outbreak settings. During SIAs, children are targeted to receive supplemental MCV regardless of previous history of measles vaccination. For unvaccinated and incompletely vaccinated individuals, a supplemental dose improves protection, whereas for those completely vaccinated, an additional dose may still be given as it is not associated with increased rates of adverse effects.

4. Participate in DOH and Local Government Surveillance Efforts

The PPS and PIDSP emphasize the need for a robust and effective surveillance system to promptly detect and investigate suspected cases. This entails active and full participation of all healthcare providers in case investigation and contact tracing efforts of the DOH and local government. Measles is a reportable disease, and healthcare practitioners are enjoined to report measles cases promptly to their local health authorities or through the Epidemic-Prone Diseases Case-based Surveillance Information System (EDCS-IS). Again, healthcare providers must coordinate with the City Epidemiology and Surveillance Unit (CESU) for measles IgM testing.

Need for Education and Advocacy in the Community

The PPS and PIDSP stress the need for full community participation to reduce the burden of this highly contagious, and at times fatal disease. All recommendations aforementioned are important, nevertheless, the PPS and PIDSP reiterate that measles is vaccine-preventable, and the burden of measles can thus be reduced by ensuring that all susceptible individuals are fully vaccinated. Public health campaigns and targeted education programs should be developed to raise awareness about the importance of

measles vaccination, dispel myths and misconceptions, and address vaccine concerns. Partnership with media outlets, community leaders, schools, and religious institutions is crucial to reach diverse audiences and foster a supportive environment for vaccination. The PPS and PIDSP call for collaborative efforts among healthcare professionals, government agencies, and the community to ensure the successful implementation of measles vaccination in public and private healthcare settings to protect the health and well-being of our population, especially children, across the Philippines.

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