**Abstract**

**Evaluation of Measles surveillance System, Grand Bassa county, 2018.**

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**Introduction:**

Measles is a highly contagious viral infection that affects the respiratory system. it is endemic in Liberia. Globally approximately 12 million cases, 550,000 deaths due to measles occur annually, with sub-Saharan Africa having the highest morbidity and mortality 70%. It occurrence is all year round according to Liberia weekly and yearly Epi bulleting, despite measles routine and supplemental immunization coverage. The frequent outbreaks of measles in Grand Bassa County prompted the need for the evaluation of the measles surveillance system.

**Methods:**

We interviewed stakeholders, conducted record review of the measles surveillance data from 2015 – 2017 and adapted the 2001 CDC guidelines for Evaluating Public Health Surveillance Systems for Early Detection of Outbreaks, to assess the systems attributes and its usefulness. Data analyzed using Microsoft Excel.

**Results:**

According to the Stakeholders, the measles surveillance system was useful and acceptable. Case definitions are simple and understood by all the operators. There was high knowledge and awareness (100%) among the screeners on the measles surveillance system. Out of the 586 suspected cases over the three-year period 447 cases were confirmed giving an aggregate estimated Positive Predictive value of 60.1%. Data was 76.8% of good quality and 90.4% timely for report submission. The system detected six major epidemic over the six-year period and thresholds were set for the district. The system was simple, flexible, stable, acceptable, representative and useful.

**Conclusion:**

The measles surveillance system in Grand Bassa is achieving its objective, it is useful, acceptable, simple, flexible and representative. The system provide good data for public health action that is been used for improving the system, with alert and epidemic thresholds set for it to achieve its objective. Reporting was Timely and somewhat complete.

**Key words:** Measles, Epidemic, Threshold, Grand Bassa.

**Keywords:** Measles; Surveillance; Evaluation; Liberia