

**Ministry of Health, Wellness, Human Services and Gender Relations, Saint Lucia**

**Primary Health Care (Community Health Nursing Service)**

**Expanded Program on Immunization (EPI)**

**Measles Mumps Rubella (MMR) Vaccination Coverage Survey**

**Terms of Reference for Data Analysis and Report Writing**

**Background**

The Expanded Program on Immunization (EPI) commenced in Saint Lucia in 1977 and committed to procuring its vaccines through the Pan American Health Organization (PAHO) EPI Revolving Fund. The government provides the budget for all the implementation components of the EPI.

Immunization is delivered primarily at the Maternal and Child Health clinics through 36 Primary Care facilities by the Community Health Nurses of Family Nurse Practitioners in the public sector. There has been a well-established school vaccination program where children are vaccinated at the schools they attend integrated with other health interventions. Immunization is also offered at six private physician offices. One private hospital procures a limited supply of vaccines by individual order mainly for adults.

Measles Mumps Rubella vaccines are administered to children at 1 year and a booster dose at 4 - 5 years prior to school entry. Vaccination coverage of MMR1 has been 95% and above, whilst the reported coverage MMR2 has ranged from 60% to 80% for the past ten years.

In 2011, Saint Lucia completed the verification and documentation of measles, rubella and Congenital Rubella Syndrome (CRS) elimination in keeping with PAHO's Directing Council Resolution CSP27.R2 of 2007. Consequently, countries are urged to maintain high MMR vaccination coverage of 95% and above, for two doses, in every community and district, and to improve surveillance for the detection and management of cases and outbreaks of these diseases in a timely fashion.

**Goal**

The primary purpose of this survey is to determine the level of immunity against measles and rubella in children born in 2004 to 2009 through assessment of coverage of MMR1 and MMR2 vaccines.

**Objectives**

- 1) To assess MMR2 vaccination coverage by region, sex, grade and cohort
- 2) To assess timeliness of receipt of the MMR2 vaccine
- 3) To assess coverage of other vaccines recommended for children <5 years of age
- 4) To assess factors related to incomplete vaccination schedules

- 5) To determine the main reasons parents or guardians give for not having their children up-to date with their vaccination schedule
- 6) To assess the proportion of children being vaccinated in the private sector
- 7) To assess the level of retention, completeness and quality of the health passport
- 8) To assess the knowledge and attitudes of parents and guardians regarding vaccines and immunization services
- 9) To assess the knowledge and attitudes of school principals and selected teachers regarding immunization and its requirements for school entry
- 10) To compare parental/guardian recall with documented MMR2 vaccination (health passport or clinic record)
- 11) To compare MMR2 vaccination information in the health passport vs. clinic record for selected situations (e.g. doses given outside the recommended age, particularly earlier than 4 years of age).

### **Brief Methodology**

Using schools as the sampling frame, a total of 2 students per grade from grades K through 5 in public and private schools as well as children born in 2004 to 2009 in special needs schools will be selected to be surveyed for a total sample size of some 1,000 children. Sampling will be conducted by health regions and parental/guardian interviews and data collection done through home visits. Data will be collected using paper based questionnaires and transcription of vaccination data from the health passports will be done during the home visit. Data will be double entered in a program designed for this effect.

Individuals not currently employed in the health sector will be selected and trained to conduct interviews of caregivers of the selected children and Public Health Nursing Supervisors will be expected to facilitate obtaining the listings of children for participant selection and conduct the interviews with principals and teachers at the schools. Interviewing teams will be supervised by an assigned Public Health Nursing Supervisor (PHNS).

The final products from this survey will be a report of the MMR2 coverage for the study population by sex, grade and birth cohort; one or more reports with the results of the secondary data analyses (secondary objectives 2-11); one or more publications in peer-review journals; and a clean database for further analyses by the Ministry of Health as it so chooses.

### **Scope of Work**

A consultant will be contracted to conduct the data analysis of the survey and prepare the technical report as well a scientific paper on the survey. In fulfilling the terms of the contract, the contracted officer:

- Liaise with the statistician, Ministry of Health, St. Lucia for the timely receipt of the cleaned database and data tables

- Liaise with the statistician, Ministry of Health to ensure validation of the data as needed
- Prepare draft and final reports of the survey findings for review and acceptance by the Ministry of Health in collaboration and PAHO
- Draft scientific paper for peer review publication. This paper (or papers) should have MOH St. Lucia as the first author.
- Present survey findings at dissemination meeting with stakeholders

### **Qualifications Required**

- At least a Master's Degree in a health related field
- A sound knowledge of Research methodology and data analysis
- At least five years' experience in the field of public health and research
- Proficiency in the use of statistical packages
- Be knowledgeable of the health and educational system in St. Lucia
- Be familiar with the vaccination schedule of St. Lucia
- Excellent report writing and presentation skills
- Excellent interpersonal and communication skills

### **Deliverables**

- Proposed analytical plan to be finalized with the Steering Committee and PAHO. The plan should include all outputs expected, and shells for proposed tables and graphs.
- Proposed timelines for the data analysis, prioritizing the analyses related to the survey main objectives.
- Draft (Preliminary) report of the survey
- Documented statistical code used to analyse the survey
- Final report of the survey in both print and electronic format
- Draft scientific paper on the survey

### **Time Frame**

Start date: July 2015

End date: September 2015

A total of 8 person weeks.

### **Reporting**

The officer will be contracted by the Ministry of Health St. Lucia and report directly to the Steering Committee overseeing the survey. Day to day liaison will be with the technical officer so designated by the Permanent Secretary and or the Chief Medical officer.

For specific technical and logistical support the officer will liaise with the PAHO Sub-Regional Advisor for EPI and the National EPI Manager of St. Lucia