

National Protocol on

**SENTINEL SURVEILLANCE
OF ACUTE RESPIRATORY
ILLNESSES**

CONTENTS

- Respiratory illnesses surveillance in Oman
- Rationale for proposed surveillance
- Method and responsibilities

RESPIRATORY ILLNESSES SURVEILLANCE

- Surveillance for communicable diseases was launched in March 1992
- Diseases grouped in A, B & C
- Influenza was included in Group C
- Case definition non-specific, hence data were not comparable
- In 2005 revision, case definition was stated and ILI was included along with influenza
- Observed variations in reporting ILI from regions, hence these data were neither comparable nor could be used as a baseline

RESPIRATORY ILLNESSES SURVEILLANCE

- ⦿ Laboratory surveillance (virological) was established at three sentinel sites in 2005
 - Virus isolation and identification
- ⦿ Strong need felt for data on ILI and severe respiratory illnesses due to the SARS and the avian flu scare
- ⦿ SARI surveillance launched at three sentinel sites in collaboration with NAMRU-3
- ⦿ Then the pandemic H1N1 in 2009
- ⦿ Data compiled on ILI and admissions due to respiratory illnesses from sentinel hospitals for the pandemic trend on weekly basis

THE PANDEMIC EXPERIENCE

- ◎ The H1N1 pandemic was a **blessing in disguise**
 - The entire health care system realized the importance of the information on ILI and on the admissions due to respiratory illnesses
 - The system of sample collection was well established including...
 - Collection of throat/NP swab, use of VTM, storage and transport of the samples
 - Laboratory testing routines and reporting

RATIONALE: WHY? SURVEILLANCE

- ◎ The importance of SARI surveillance to monitor and predict influenza activity in the community is crucial:
 - Surveillance of respiratory illnesses is a useful epidemiological tool
 - Hence a decision was taken to continue to monitor the respiratory illnesses as a follow-up action after the second pandemic wave in Oman as a routine surveillance activity
 - It was also decided to conduct the routine surveillance initially at four sentinel sites in the country

WHY? SENTINEL SURVEILLANCE

- Ideally to be done at all major health institutions within the country
- A long term activity: Needs commitment and motivation
- Limited resources
- No need to do surveillance everywhere to know the trend or the warning signs
- Looking at quality than quantity

BROAD APPROACH

- ⦿ Two components will be under surveillance at the selected sentinel sites
 - Influenza-like-illnesses (ILI) and
 - Hospital admissions due to ARI
- ⦿ Constraints faced during SARI surveillance were utilized to modify the existing protocol to include all admissions due to respiratory illnesses for surveillance purpose
- ⦿ ILI data would be compiled from the information available in the computerized system (certain ICD-10 codes)

ACUTE RESPIRATORY ILLNESSES SURVEILLANCE

- On admission to sentinel hospital all respiratory illnesses will be documented in the Medical and Paediatric wards
- Those satisfying the definition of acute severe respiratory infection will be further investigated
 - Blood sample for bacterial infection will be taken
 - Throat/NP swab will be taken (two sets) for virological investigation
- A **weekly report** will be generated describing total admissions, admissions due to respiratory illnesses, those that were severe and from whom samples were collected

METHOD

◎ **Responsibility:**

- The HoD of Medical and Paediatric department are primarily responsible for the surveillance
- All staff working in the Medical and Paediatric wards are involved and must participate in this activity
- The Infection Control Nurse acts as a coordinator for this activity
- A focal point in the Directorate will be responsible for surveillance and reporting

ACTIVITIES

- ⊙ Eligibility & filling form
 - Clinician
- ⊙ Sample collection
 - Clinician
- ⊙ Sample storage/records
 - Ward nurse
- ⊙ Sample forwarding/records
 - Ward nurse & laboratory
- ⊙ Results dissemination & coordination
 - Infection control nurse
- ⊙ Data management & weekly reports
 - Focal point in the Directorate

QUESTIONS TO THE EXPERT AUDIENCE...

- **How do we know** that new respiratory pathogens are causing increased morbidity and mortality?
- **How do we asses** increased influenza activity in the community?
- **How do we know or predict** the impending outbreak due to a novel influenza/or other viruses?

OR

...should we just wait for another disaster to happen

...and then to manage it to the best of our abilities and resources????