#### MEASLES SITUATION UPDATE(EPIDEMIOLOGICAL SITUATION)

Presenter: Dr. Sayed Ataullah Saeedzai

#### **Outline of the presentation**

- Background and objectives of measles
- Objectives of presentation
- Measles strategies
- Results
- Questions for discussions
- Conclusion and recommendations

# Background

- Measles is one of the most contagious diseases globally
  - 1 person with measles can infect 12-18 people,
- In 2019, measles infected over 9 million people worldwide.
- Measles kills over 568 people a day, mostly children
- In Afghanistan, measles causes most of the outbreak

#### Goal and objectives of the measles program

#### **Goal of measles program**

• Reduce measles mortality by at least 95%

compared with 2000 estimates.

• Achieve national measles elimination goals

by the end of 2020.

**Objectives of measles program** 

- Immunization
- Surveillance with laboratory support
- Outbreak control
- Communication
- Research

## **Strategies for achieving the objectives**

There are different strategies for measles in the country:

#### Immunization

- Catch up, keep up and follow up
- Outbreak response and community involvement
  - Outbreak based or case based ( by which mechanism)
- Surveillance and early detection
  - In terms of the number of cases and vaccine coverage, countries are divided into three stages (Control stage, Outbreak prevention, Elimination stage)
- Research and studies

# Immunization

- According to the target, measles vaccine coverage was supposed to reach more than 90%.
- To achieve the target, three policies were identified:
  - Catch up (Routine immunization)
  - Keep up (Nationwide measles campaign for children aged less than 15)
  - Follow up (Conducting measles campaign each 2-4 years)
- The policy of Routine immunization has failed to increase the vaccine coverage even in areas with good access.

# **Outbreak response**

- Outbreaks are not responded in the early stages
  - Geographical area (aggressive vaccination)
- There is no clear policy for outbreak response in term of:
  - Outbreak base response or case based response
- Target papulation for vaccination based on age
  - 9 month or 18 months vaccination
- Relation of measles vaccination campaigns with vaccination coverage
  - Catch up, keep up and follow up- for Urzogan with 3 percent coverage and Bamyan 89% coverage

#### **Surveillance and early detection**

Countries are divided into three stages based on number of cases and vaccine coverage:

#### 2. Control stage

The cases are sporadically present and measles outbreaks are rare

#### 1. Outbreak prevention

The number of measles cases is endemic and the occurrence of measles outbreaks is usually reported i.e. more than 5 related cases in a month per 100,000 population. At this stage, reporting should be on weekly basis

#### 3. Elimination stage

A sustained measles incidence <1/100,0000 population (case based surveillance)

# Con...

Currently, there are three types of measles surveillance collecting data from three departments:

- NDSR/DEWS (Early detecting of measles outbreaks and timely response manner)
- HMIS (Measles data is collected and analyzed on monthly basis to evaluate the effectiveness measles vaccination programs.
- EPI ( case based surveillance, It should be performed in the elimination stage, not in the outbreak control stage, because due to resource limitation all cases can not be investigated.

#### **Objectives of the presentation**

- To present the current epidemiological situation of the measles in the country
- To present the current strategies and challenges of measles program in the country

#### **Measles information sources including surveillance**

#### Surveillance

- IBS: More than 500 sentinel sites
- EBS: From informal sources including community and privates sector
- HMIS: Monthly data from all the Health facilities across the country
- Household surveys



#### Measles cases by week (2021-2022)

Measles cases by weeks 2021 - 2022



#### Measles cases (2013-2022) (IBS)

Measles cases in last 10 years



## Measles outbreak by year (2007-2022)

Measles Outbreaks by years (2022 is till w16)



#### Number of Measles cases and deaths (EBS+IBS) by provinces in 2022



Provicnes

#### **Measles vaccination coverage (AHS 2018)**

Measles vaccination coverage



#### **Measles Cases By Location**



#### % of Measles deaths by age category and Sex - 2022

Measles Deaths by age category and gender in 2022



Age category

#### %Measles cases by age category and sex - 2022

Measles cases by age category and sex - 2022



#### Measles Deaths by Sex category (2022)



**Measles Deaths by Gender in 2022** 



Age category

#### **Questions for discussion**

- What is the Measles response strategy for:
  - Outbreak response or case based response?
  - Who should be vaccinated (6 or 9 months in routine immunization???)
  - What is the M&E strategy for vaccination to improve effective vaccine coverage
- Evidence based Decision making
  - Immunization strategy based on vaccination coverage (low and high coverage)
- Coordination mechanism with neighboring countries and sharing data

# Con..

- Current epidemiological trend of measles in the country versus outbreak definition, are these aligned?
- Catch up but the keep up and follow up are not implemented on timely bases.
  - Solutions????
- Do we need conduct measles national campaign in all provinces at the same time? Or based on vaccine coverage, it could be vary from province to province?
- Effectiveness of the implemented strategies

# Thank you