## MEASLES SITUATION UPDATE(EPIDEMIOLOGICAL SITUATION)

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## 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:

## 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

## 2. Control stage

The cases are sporadically present and measles outbreaks are rare

## 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

Results

## 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)



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



## Measles vaccination coverage (AHS 2018)



## Measles Cases By Location

Measles cases by location (2021)


Measles cases by location (2022)


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

Measles Deaths by age category and gender in 2022


## \%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 age category and gender in
2022


Age category

Measles Deaths by Gender in 2022


## 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

