What is measles?
Measles is a highly contagious disease caused by a virus. Measles can occur in a person who has never had measles and has no immunity against it. It occurs among humans and no animal reservoir exists.

Who is at risk?
Any non-immune person who has not been vaccinated - or was vaccinated but did not develop immunity - can become infected and is at highest risk of measles and its complications, including death.

Current situation of measles transmission in Myanmar
Due to the accumulation of susceptible children that missed routine immunization, outbreaks of measles occur every three or four years. A total of 34 outbreaks were detected in 2011 and outbreak continued in 2012. A mass measles campaign was conducted in March of that year after which this outbreak was contained. However, other outbreaks that continued to the next year attacked younger age groups and spread to the border and remote areas where immunization coverage was low, or not implemented for some years, and deaths were recorded. Member countries of WHO South East Asia region set the goal of elimination of measles by the year 2020.

Findings from measles-rubella (MR) surveillance
Surveillance of outbreak of suspected measles was started in 2001 by outbreak investigation and testing of five to ten samples of outbreak cases. Case-based MR surveillance or fever with rashes surveillance was initiated in 2009. The age distribution of measles cases by age group showed that the proportion of measles cases above ten years ranged from 20 to 60 per cent.
Why it is necessary to conduct wide age group MR mass campaign in Myanmar?

Myanmar can now control measles by routine immunization with two doses of measles, the first at 9 months and the second dose at the age of 18 months.

However, there remain unprotected older age groups that have missed the routine and supplementary immunization in previous years. To protect those children and young adults it is necessary to conduct wide-age range immunization.

In the same manner, after the introduction of MR into the routine immunization schedule, wide age range immunization will cover the unprotected children and young adults, raising the population immunity. The World Health Organization recommended that the wide age range catch-up immunization should be conducted before the introduction of rubella vaccine into the routine immunization schedule. Utilizing the resources for accelerated measles control, the control activities of rubella and congenital rubella syndrome can be integrated into it.
Prevent Rubella very soon

What is rubella?

Rubella is an acute, contagious viral infection transmitted through the respiratory route in children and young adults. Average incubation period is 18 days and ranges from 12 to 23 days. The virus is present in the discharges from nose and throat one week before the appearance of a rash and two weeks after. The highest number is present one to five days after the rash appears. When primary rubella infection occurs in a pregnant woman, the virus can infect the placenta and fetus.

While the illness is generally mild, its public health importance is due to the potentially devastating outcomes of infection during pregnancy, for both mother and unborn child.

Infection during pregnancy can result in miscarriage, fetal death or infants born with congenital malformations, known as congenital rubella syndrome (CRS). CRS commonly manifests as congenital heart disease, eye cataract, purpura, microcephaly and deafness.

What is the burden of rubella in Myanmar?

Past and recent studies showed that the majority of women of child bearing age in Myanmar were infected by rubella. Before the introduction of rubella vaccine the incidence of congenital rubella syndrome was 0.1 to 0.2 per 1000 live births and 0.8 to 4 per 1000 live births in epidemic years.

Active surveillance of congenital rubella syndrome in eleven sentinel hospitals in Yangon detected cases of the congenital rubella syndrome and the rate of laboratory-confirmed CRS was 0.1 per 1000 live births in endemic years.

A study of female school children in one township in central Myanmar showed the presence of rubella antibodies (IgG) in sera of 84 per cent of school children aged 11 to 12 years.

Rubella vaccine

Rubella vaccines induce sero-conversion rates of approximately 95% or higher after a single dose and confer lifelong immunity. Rubella vaccines are available as combinations with vaccines against measles (MR).
As of December 2012, a total of 132 (68%) WHO Member States had introduced rubella-containing vaccine (RCV); four out of eleven SEAR countries have introduced rubella vaccine. Member States with RCV in their schedule account for 59% of the global population in 2012, up from 31% of the global population in 2000.

A total of 94,030 rubella cases were reported to WHO in 2012 from 174 Member States, an 86% decrease from the 670,894 cases reported in 2000 from 102 Member States. Two out of six WHO regions have achieved the goal of elimination of measles.

An opportunity that should not be missed

In 2011, an updated WHO rubella vaccine position paper was published with guidance on the preferred strategy for Member States who have not yet introduced RCV into the routine immunization schedule with an initial wide age-range vaccination campaign.

The position paper also recommends that all Member States “Take the opportunity offered by accelerated measles control and elimination activities to introduce RCVs” as a platform for advancing rubella and CRS elimination.

As per the MR Initiative and the objectives of Global Vaccine Action plan, there is a window of opportunity of the Global Alliance for Vaccine and Immunization (GAVI) to support the wide-age range catch-up campaign for measles-rubella before rubella is introduced into the routine immunization schedule.

This will protect the non-covered age group and raise the population immunity.
How will measles-rubella mass immunization campaign be implemented?

The national MR mass immunization campaign will be conducted in two phases with an interval of about three weeks between each one. The first phase will be school based and will cover government schools, primary, middle and high school students, as well as monastic and private schools up to the age of fifteen years. Vaccinations will be given at school immunization posts.

The second phase will be community-based and take place in wards, villages and settlements and cover children aged 9 months to five years and children 5 to under 15 years of school-going age who did not attend school or dropped out of school, as well as students who are enrolled in school but missed the school-based immunization phase.

Who is eligible for immunization?

Regardless of the previous immunization status of measles or rubella vaccine or whether the children have got measles or rubella, the children and young adults aged between nine months to 15 years are eligible for mass MR immunization. Since the dose given during the mass campaign is a supplementary dose, those children who are due for routine doses of measles at the age of nine months or 18 months are immunized four weeks prior to or after the date of the mass immunization. Routine immunization doses are given separately according to the age of the routine immunization schedule.

Time schedule of MR mass immunization campaign

First phase or school-based immunization will be conducted in January 2015 at school immunization posts and all school enrolled students will be immunized. Second phase immunization will be conducted in February 2015 at health centres and ward or village immunization posts covering the remaining target children.

How will the target children be recorded and registered?

Four weeks prior to the mass immunization campaign, house to house visits will be made by teams composed of ward and village administrators in charge, volunteers and basic health workers, and members of social organizations who will record the children eligible for immunization and enter their names into the grand master list. The children are asked about their school enrollment status and the information is recorded.

When should the MR vaccine be not given?

MR vaccine should not be given to children who have a history of allergy or reactions to measles vaccines. Immunization is deferred for children with high fever and/or symptoms of other serious illness. Mothers and caregivers should consult a doctor before proceeding further.

Where will mass immunization be given?

In the first phase in January 2015, the immunization posts will be stationed at primary schools, post-primary, middle schools, high schools, monastic schools, and private schools. In the second phase in February 2015, the immunization posts will be located at village or ward administrative office, religious halls, monasteries, private homes or school, and others.
Roles and Contribution Requested to Related Departments in the Implementation of National Measles-Rubella Mass Immunization Campaign

State and Region Governments
Request is made to lead and provide instructions for the implementation of the national MR mass immunization campaign.

General Administration Department
Request is made to give down the line instructions and guidance to lead and organize the implementation of national MR mass immunization campaign.

Immigration and Manpower Department to share the population data for the estimation of eligible population data for national MR mass immunization campaign.

Department of Basic Education No. (1), Department of Basic Education No. (2), Department of Basic Education No. (3) and Department of Education Planning and Training Department are requested to contribute in the listing of the schools and the registration of school children enrolled in the schools, informing the parents, preparation of school immunization posts and helping in the immunization posts located at high, middle, post primary, monastic and private schools in the month of January 2015.

Department of Border Areas and the Development of Indigenous Races is requested to coordinate and organize the leaders of the national races and organizations to conduct immunization activities reaching all areas and community in border areas and self-administrative regions.

Myanmar Airways, Ministry of Transportation is requested to expedite the airfreight of the vaccines to reach remote areas in a timely manner.

Department of Road Transport Administration is requested to transport the vaccines and other logistics by trucks along the national roads.

Inland Transport Corporation is requested to transport the vaccine and logistics by steamers in a timely manner.

Myanmar Railways Corporation is requested to urgently transport the vaccine and communication materials by train in timely manner.
Ministry of Defense is requested to airfreight the vaccines and devices to very far and hard to reach areas by helicopters.

Director, Defense Medical Corps is requested to kindly arrange the immunization of children at the local regiments throughout the country.

News and Periodicals Enterprise is requested to publish the advertisement, notifications, news and articles on the national immunization campaign in newspapers, journals and magazines to create public awareness and demand for immunization.

Department of Information and Public Relations is requested to advertise the information on national immunization campaign at the public library and advertising boards of the department.

Myanmar Radio and Television Department is requested to broadcast the information on mass immunization campaign through interviews, discussion and radio and TV talks and to coordinate with private radio and TV channels to produce and broadcast or telecast notifications, short drama and interviews.

Myanmar Electricity Corporation is requested to continuously supply electricity to cold rooms and township hospitals where vaccines are stored in the cold-chain system.
Ministry of Health urges the health-related ministries and departments, Regions and State governments and departments, community-based organizations, and non-governmental organizations to participate in the movement of the nation-wide immunization campaign, contributing in their respective roles and responsibilities.

The national MR mass immunization campaign will be conducted in the first phase as a school-based immunization strategy targeting 5 to 15 years of age in January 2015. The second phase in February 2015 will be a community-based strategy at health centers, wards and village immunization posts targeting children aged 9 months to under five years in the community and school-going age drop outs (5 years to under 15 years).

Regardless of immunization status for measles or rubella or having a history of getting measles or rubella, children aged between 9 months up to 15 years will be immunized with MR vaccine.

The Central Executive Committee is making policy directions, selection of appropriate strategies, supervision and supporting the subcommittees.

The World Health Organization, UNICEF and other UN agencies, national and international non-governmental organizations are requested to fully participate for the successful implementation of national MR mass immunization.

To create public awareness of the campaign print media will publish reports and radio and television will broadcast or telecast notifications, talks, interviews, discussion and drama, with the participation of celebrities, singers and actresses, and other means of communication so that the community is fully aware of the purpose, time and schedule and the target group for the mass campaign, and interest and active demand are created.

We urge each and every responsible person to play his/her role hand-in-hand with partners and sympathizers.

- Under the direction of the Central Executive Committee, sub-committees should implement the targeted activities in a timely manner.
- Related ministries should support the respective departments and sectors in the implementation of the mass immunization campaign.
- Region and State working committee will support or facilitate the preparation status of township level implementation committee for successful implementation of the mass immunization campaign.
- Members of community-based organizations are requested to urge parents and care givers to bring the eligible children to immunization posts.
- International non-governmental organizations should be requested to make use of their own resources and human infrastructure to arrange transportation of vaccines and other logistics to immunization posts in the remote areas and assist the basic health staff and immunization team to perform the vaccinations and to collect the data of eligible children in their work.