To assess the efficacy of immunization for vaccine-preventable diseases (VPDs), highly qualified surveillance and laboratory diagnosis activities are crucial. The course is organized to acquire the standardized laboratory technique and knowledge of quality control/assurance through hands-on training, towards the effective control of VPDs, including polio, measles, and rubella.

### Objective
At the end of the course, participants will acquire both WHO-standardized technique and quality control/assurance for laboratory diagnosis on vaccine-preventable diseases through hands-on training course.

#### Outcome
1. To enable participants to maintain cell lines for virus isolation, and quality control/assurance of the cells, based on the standard procedure by themselves, and to share technical points with other staff.
2. To enable participants to isolate and identify viruses based on the standard procedure by themselves, and to share technical points with other staff.
3. To enable participants to understand biosafety regulations and to improve laboratory management and maintenance of the equipment and facilities, and to share the relevant information with other staff.
4. To enable participants to perform molecular diagnosis and serological diagnosis by themselves, and to share technical points with other staff.
5. To understand the roles for local and global infectious diseases surveillance system, to understand the roles and functions of the National Laboratory in global polio eradication, measles/rubella elimination, and control strategies of vaccine-preventable diseases.

### Target Countries
<table>
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<tr>
<th>Target Countries:</th>
<th>Polio-endemic or high-risk countries, measles/rubella-endemic countries</th>
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### Target Organization / Group
- **National Laboratory under the WHO laboratory network related to vaccine-preventable diseases to improve WHO National Laboratories in the countries.**
- **Laboratory technicians engaged in laboratory diagnosis for the control of vaccine preventable diseases at National Laboratory, have a minimum of 1 year experience in virological diagnosis and be expected to continue to work in the same field.**

### Contents
1. **Preliminary Phase: Formulation and submission of Country Report**
2. **Core Phase in Japan:**
   - (1) According to WHO standard manual for laboratory diagnosis, virus isolation, identification, and quality control/assurance, using polioviruses and measles/rubella.
   - (2) Lectures, practices, and group discussion for bio-safety regulations and the maintenance of laboratory facilities for laboratory management.
   - (3) Lectures and group discussion for the laboratory management and maintenance of the equipment and facilities.
   - (4) Lectures or practices for molecular diagnosis and serological diagnosis methods.
   - (5) Lectures for infectious disease surveillance system, and on site visit to local public health institute to understand the reference system for infectious diseases agents in Japan.
   - (6) Presentation, discussion, and lectures to share the information on current status of global polio eradication, measles/rubella elimination, control strategies of vaccine-preventable diseases.

### Course Period
2018/01/10 ～ 2018/02/10

### Department in Charge
Human Development Department

### JICA Center
JICA Tokyo (Human Dev.)

### Cooperation Period
2016～2018

### Implementing Partner
National Institute of Infectious Diseases

### Remarks and Website
National Institute of Infectious Diseases (http://www.nih.go.jp/niid/en/)