**Training Module Syllabus:  Introduction to immunization systems**

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*[*[*Download Word document of this training syllabus*](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CRI%20training%20curriculum.docx)*]*

# About this training module

 The purpose of this training is to provide a step-by-step introduction to global routine immunization (RI) systems.

This training covers the following main areas:

1.       Overview of immunization systems worldwide

2.       Critical components of the immunization system

3.       Common challenges, research areas and key solutions to implementing an immunization system

4.       Global historical performance of immunization systems

5.       Global strategic frameworks for implementing immunization systems

6.       Global organizations supporting immunization systems, including key formal and informal groups organized to share knowledge, guide policymaking for immunization and key meetings

# How to use this training module

This training module is organized such that there is a core curriculum you should start with to become familiar with the world of immunization services.  The curriculum is listed so that each section builds on the previous one.  If you are very short on time, I recommend covering sections 1 to 6 and thoroughly reading the following three guides[:  Immunization essentials](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C1-immunization-essentials-book.pdf), [Immunization in Practice](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CImmunization-In-Practice%5CIIP-Module1.pdf) and [The RED guidelines](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C3-AFRO-RED-Guide_2008_FINAL.pdf). Additionally, a new [Core References document](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5CCore%20references%5CEPI%20core%20ref%20materials%20-%20%28updated%2009Febr2019%29.docx) from WHO and partners was just released and provides a nice overview of key resources by topic area as well as a new [Immunization Resources Database focused on Immunization Coverage & Equity](https://www.technet-21.org/index.php?option=com_resources&task=downloadTrlFiles&id=7095).

# CORE CURRICULUM

About:  The following training modules are the minimum you should cover to get a basic understanding of how global immunization systems work.

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| **#** | **Training category** | **Title**  | **Learning objectives** | **Assigned document & location** | **Additional reading** | **Presentation video** | **Related orientation videos** | **Related online courses** |
| 1 | Global overview  | The global effort to vaccinate children | Broad introduction to the Expanded Program on Immunization | Presentation: [Crash course on the global effort](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5C1-Other%20VPD%20Crash%20Course.PPTX) | ·         [Immunization essentials Chapter 1](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C1-immunization-essentials-book.pdf)·         [Immunization In Practice (IIP) section 1](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CImmunization-In-Practice%5CIIP-Module1.pdf) | To be completed | * [2021 webinar on the new Immunization Agenda 2030 global strategy & vision](https://www.youtube.com/watch?v=W7x1lMqVvH4)
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| 2 | Global Performance | Historical performance of immunization programs worldwide | Become familiar with global and regional immunization program coverage performance | Presentation:     [WHO presentation on 2020 immunization program performance](https://cdn.who.int/media/docs/default-source/immunization/wuenic---progress-and-challenges-15-july-2021.pdf?sfvrsn=b5eb9141_5&download=true)  | ·         [2020 MMWR on global immunization coverage & progress](https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6945a7-H.pdf)  | To be completed |  |  |
| 4 | Global Action Plans | Immunization Agenda 2030: The global strategic plan for immunization work 2021 -2030 | Become familiar with major goals of the global immunization partnership   | Document:  [Immunization Agenda 2030 strategic plan](https://www.immunizationagenda2030.org/images/documents/VisionStratagiy/BLS20116_IA_Visual-ID-DesignLayout_spread_009_WEB.pdf) | ·          IA2030 website has additional key documents: [Link](https://www.immunizationagenda2030.org/) |  | * [IVAC-hosted panel on IA2030 with WHO colleages](https://www.youtube.com/watch?v=W7x1lMqVvH4)
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| 5 | Overview of the routine immunization system components | Introduction to the immunization system  | overview of the global immunization system and immunization system components | Presentation: [Orientation to routine immunization systems (GID presentation)](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5C2-Orientation_to_RI_Part-1_10APRIL2012.pptx) | ·        [Immunization essentials Chapter 2](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C1-immunization-essentials-book.pdf)·         [Immunization system diagram handout](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5CRI%20System%20Diagram%5CRI-System-Diagram.docx) #1·         [Immunization system diagram handout](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5CRI%20System%20Diagram%5CEPI-framework.pdf) #2  | To be completed |  |  |
| 6 | RI system: Monitoring | Monitoring and evaluation for immunization systems | Become familiar with common immunization monitoring tools and evaluation activities  | Presentation: [Monitoring & evaluation for routine immunization](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5C3-Orientation_to_RI_Part-2_10APRIL2012.pptx) | ·         [Immunization essentials Chapter 4](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C1-immunization-essentials-book.pdf)·         [Examples of monitoring tools handout](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CRI-toolexamples-handout.pdf)·         [MLM Module 5: Monitoring the immunization system](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CMLM-HQ%5CMLM-Module5.pdf) | To be completed |  | * [Immunization Academy: Monitoring coverage at the health facility level](https://learn.immunizationacademy.com/en-US)
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| 7 | RI System: Microplanning | Microplanning for routine immunization | In depth review of microplanning for routine immunization | Document:  [WHO guide on microplanning for routine immunization](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CRED-Microplanning-Guide_WHO.pdf) | ·          [WHO presentation on microplanning and supervision – for COVID-19 vaccination, but generically covers any vaccination situation](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C4%20May%20ECHO%20Microplanning%20and%20supportive%20supervision%20template_4%20May.pdf) | Not applicable | ●WHO video [overview on microplanning and supportive supervision](https://www.youtube.com/watch?v=ghQgHpSPaQo) (in COVID-19 context but generic info)[●IA: Mapping the health facility catchment area](https://watch.immunizationacademy.com/en/videos/7) |  |
| 8 | RI System:  Surveillance | The vaccine preventable disease surveillance system in developing countries | In depth review of VPD surveillance systems | Presentation[:  Integrated disease surveillance](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CIntegrated%20Disease%20Surveillance.ppt)  | ·         [Immunization essentials Chapter 8](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C1-immunization-essentials-book.pdf)·         [Global Framework for Immunization Monitoring and Surveillance](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C15-WHO-GFIMS-2007.pdf)·         [MLM Module 8:  Making disease surveillance work](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CMLM-HQ%5CMLM-Module8.pdf)  | To be completed |  |  |
| 9 | RI System:  Supervision | Guidelines for supportive supervision | In-depth understanding of supportive supervision activities in immunization | Presentation: [WHO presentation on microplanning and supervision – for COVID-19 vaccination, but generically covers any vaccination situation](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C4%20May%20ECHO%20Microplanning%20and%20supportive%20supervision%20template_4%20May.pdf)Read:  [Guidelines for Supportive Supervision](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C8-Guidelines_for_Supportive_Supervision%5B1%5D.pdf) | ·         [MLM Module 4:  Supportive Supervision](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CMLM-HQ%5CMLM-Module4.pdf)   | Not applicable | ●WHO video [overview on microplanning and supportive supervision](https://www.youtube.com/watch?v=ghQgHpSPaQo) (in COVID-19 context but generic info) | * [Immunization Academy: Supportive Supervision](https://learn.immunizationacademy.com/en-US)
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| 10 | RI system: Supply chain | The immunization supply chain (cold chain overview) | Become familiar with how the vaccine supply chain works | Presentation:  [the vaccine supply chain](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5C7-Cold%20chain%20logistics%20and%20issues.ppt) | ·         [Immunization essentials Chapters 5,6](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C1-immunization-essentials-book.pdf)·         [Immunization in Practice Section 3](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CImmunization-In-Practice%5CIIP-Module3.pdf)  | To be completed |  |         [Immunization Academy: Keeping vaccines safe in the health facility cold chain](https://learn.immunizationacademy.com/en-US) |
| 11 | RI system:  outreach | The outreach approach for increasing access to immunization services | Gain in-depth understanding of outreach services | Read:  [Sustainable Outreach Services](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C7-Sustainable-Outreach-Services.pdf) | ·           | Not applicable |  | ●IA: [Creating fixed and outreach session plans](https://watch.immunizationacademy.com/en/videos/8) |
| 12 | RI system:  Demand generation | Partnering with the community for immunization services | Gain in-depth understanding of how to increase demand for vaccinations in the community | Read:  [MLM Module 2 – partnering with the community](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CMLM-HQ%5CMLM-Module2.pdf) Read:  [IIP Module 8 – Building community support for immunization](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CImmunization-In-Practice%5CIIP-Module8.pdf) |  | To be completed |  |  |
| 13 | challenges & solutions to high vaccination coverage | Common immunization system challenges and solutions (including an introduction to the RED strategy) | Provides an overview of common challenges to high immunization coverage and key strategies to overcome challenges | Presentation: [Common Problems & Solutions to High Routine Immunization Coverage](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5C4-Orientation_to_RI_Part-3_10APRIL2012.pptx) | ·         [Immunization essentials Chapter 3](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C1-immunization-essentials-book.pdf)  | To be completed |  |  |
| 14 | challenges & solutions to high vaccination coverage | Strategies for improving coverage at the district and facility level | Further introduction to the RED approach and other sub-national approaches | Presentation: [RED strategy](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5C5-Introduction-to-RED-strategy.pptx) | ·         [AFRO RED guidelines](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C3-AFRO-RED-Guide_2008_FINAL.pdf) | To be completed | [●IA: Identifying solutions to overcome barriers to vaccine access](https://watch.immunizationacademy.com/en/videos/38)●[IA: Identifying solutions to overcome barriers to vaccine utilization](https://watch.immunizationacademy.com/en/videos/39) |  |
| 16 | PRACTICE! | A case study on visiting health facilities and reviewing the routine immunization system as a supervisor / monitor | Excellent overview of what to do when visiting a health facility in regards to supervision/monitoring/assessment of routine immunization services | Read:·  [Routine Immunization Case study (Facilitator Version)](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5CRoutine%20Immunization%20case%20study%5CRI%20CASE%20STUDY%20FACILITATOR_ENGLISH_STOP%2049%20FINAL.docx)  | ·           |  |  |  |

# ADVANCED CURRICULUM: IN-DEPTH MODULES ON IMMUNIZATION SYSTEM COMPONENTS

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| **#** | **System category** | **Topic** | **Learning objective** | **Assigned document & location** | **Additional reading** | **Presentation video** | **Related training video** | **Related online courses** |
| A | Overview | The partners of the global immunization world  | Become familiar with the general structure of the global immunization world | Presentation: [Partners, alliances and meetings presentation](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5C9-Parters-alliance-meetings.pptx) | ·           | To be completed |  |  |
| A1 | challenges & solutions to high vaccination coverage | Risk factors for under-immunization | Become familiar with common risk factors for under-immunization | Paper: [peer-reviewed literature review  of common risk factors for under-immunization](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5C12-CDC_UNVACC_REPORT_FINAL_v2.pdf) | ·         Paper:  [Grey literature review of common risk factors for under-immunization](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5C12-ImmBasics_Epid_unimm_Final_v2_0.pdf) |  |  |  |
| A2 | challenges & solutions to high vaccination coverage | Evidence for strategies to increase immunization coverage | Become familiar with published evidence on strategies for strengthening routine immunization services | Read the following articles:·         [Batt et al: cost effectiveness of strategies to increase coverage](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5Carticles%5C13-Costs_Effects_CostEffectivenessofStrategies.pdf)·         [Ryman et al:  strategies to increase coverage](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5C13%20-%20Strategies%20for%20Strengthening%20RI.pdf)·         [Briss et al, Reviews of evidence regarding interventions to improve coverage](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5C13-ReviewsofEvidenceRegardingInterventions.pdf) | ·         NA |  |  |  |
| A3 | challenges & solutions to high vaccination coverage | Strategies to Strengthen immunization coverage at the health facility level | Become familiar with ways health workers can use their data for decision making | Document:  [increasing immunization coverage at the health facility level  (WHO](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C6-IncreasingImmunCoverageatHFlevel.pdf)) |   |  |  |  |
| A4 | challenges & solutions to high vaccination coverage | Missed opportunities for vaccination | Become familiar with reasons why children miss being vaccinated even when they show up at the facility | Presentation: [Overview of missed opportunities for vaccination – why they happen, how to address them.](https://cdc-my.sharepoint.com/personal/ccu7_cdc_gov/Documents/Projects/Missed%20Opportunities/Cambodia/Cambodia%20MOV%20Workshop_%20Introduction_Part1_Background%2C%20types%2C%20SAGE%20statement.pptx?web=1)  | ·         [Systematic review of missed opportunities for vaccination (2014)](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CMOVsystematicReview_Shridar.pdf)·         [Planning Guide to Reduce Missed opportunities for Vaccination (2017)](http://www.who.int/immunization/programmes_systems/policies_strategies/MOV_Planning_webdraft.pdf)·         [Presentation: Lessons from MOV assessments](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5CCambodia%20MOV%20Workshop_%20Introduction_Part2_Lessons%20from%20MOV%20pilot%20countries.pptx.pptx)  | To be completed | * [Recognizing Common Reasons for Missed Opportunities for Vaccination](https://watch.immunizationacademy.com/videos/630)
* [Interventions to Reduce MOV: Health System Issues](https://watch.immunizationacademy.com/videos/634)
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| 15 | RI system:  Immunization safety  | The basics of immunization safety | Learn about how to ensure vaccinations are given safely and how to manage vaccine wastage | Read: [MLM Module 2 – immunization safety](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CMLM-HQ%5CMLM-Module3.pdf) | ·         [Immunization in Practice Section 4](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CImmunization-In-Practice%5CIIP-Module4.pdf) |  |  |  |
|  A6 | RI system:  vaccination session planning | Planning immunization sessions to reach every infant |   | Read[:  Immunization in Practice – Section 5](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CImmunization-In-Practice%5CIIP-Module5.pdf) | ·           |  |  |  |
| A7 | RI system:  vaccination session implementation | The basics of holding an immunization session |   | Read:  [Immunization in Practice – Section 6](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CImmunization-In-Practice%5CIIP-Module6.pdf) | ·           |  |  |  |
| A1 | challenges & solutions to high vaccination coverage | Strategies for using supplementary immunization activities to improve routine immunization activities | Become familiar with specific SIA-RI synergy activities | Presentation:  [Campaigns and routine immunization services](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5C6-Campaign%20and%20RI%20Services.pptx) | ·         [Nine opportunities to strengthen routine immunization during campaigns](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C14-NineOpportunities%5B1%5D.pdf) | To be completed |  |  |

# ADVANCED CURRICULUM:  IN-DEPTH MODULES ON GLOBAL SYSTEM TOPICS

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| **#** | **System category** | **Topic** | **Learning objective** | **Assigned document & location** | **Additional reading** |
| B1 | Global action plans | CDC’s strategic immunization action plan | Overview of CDC’s strategic framework for improving immunization programs globally | Read:  [CDC Global Immunization strategic framework 2021-2030](https://www.cdc.gov/globalhealth/immunization/docs/global-immunization-framework-508.pdf) |   |
| B2 | Monitoring & evaluation | Overview of EPI review methodology | Become familiar with how to conduct an EPI review | Presentation:  [How to conduct an EPI review](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5COrientation_to_EPI_Reviews.pptx)Document:  [AFRO EPI review guidelines](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5CEPI_review_guide_May2012_final.doc) |  |
| B3 | Monitoring & evaluation | The EPI coverage survey | Become familiar with the WHO method for coverage surveys | Read:  [MLM Module 7 – The EPI coverage survey](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5CMLM-HQ%5CMLM-Module7.pdf) [Read: Draft revision of the WHO Immunization coverage survey guidelines](http://www.who.int/immunization/monitoring_surveillance/Vaccination_coverage_cluster_survey_with_annexes.pdf) |  |
| B4 | GID strategic planning | GID routine immunization research agenda report | Become familiar with research areas in routine immunization | Read:  [GID routine immunization research agenda article on gaps in research on routine immunization](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-presentations%5Cvaccine-research-review-paper.pdf) |  |
| B5 | New vaccines | Introduction to new vaccines and technologies |   | Read:  [Immunization essentials, Chapter 11](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C1-immunization-essentials-book.pdf) |   |
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| **#** | **System category** | **Topic** | **Learning objective** | **Assigned document & location** | **Additional reading** | **Presentation video** | **Related training video** | **Related online courses** |
| B6 | Global Action Plans | WHO Vision and Mission in Immunizations and Vaccines (2015-2030) |  | Read: [WHO Vision and Mission 2015-2030](http://www.who.int/immunization/documents/general/WHO_Mission_VIsion_Immunization_Vaccines_2015_2030.pdf?ua=1) |  |  |  |  |
| B7 | Global Action Plans | Global Measles and Rubella Strategic Framework 2021-2030 |  | Read: Global [MR Strategic Plan 2021-2030](https://s3.amazonaws.com/wp-agility2/measles/wp-content/uploads/2020/11/measles_rubella_initiative_final_print.pdf) |  |  |  |  |
| B8 | Global Action Plans | Polio Endgame Strategic Plan 2019 - 2023 |  | Read: [Polio Endgame Strategy 2019 - 2023](http://polioeradication.org/wp-content/uploads/2019/06/english-polio-endgame-strategy.pdf) |  |  |  |  |
| B9 | Global Action Plans | Global Routine Immunization Strategies and Practices (GRISP) | A companion piece to the GVAP, focused on routine immunization strategies | Read: [GRISP Plan](http://apps.who.int/iris/bitstream/10665/204500/1/9789241510103_eng.pdf) |  |  |  |  |
| B10 | Global Evaluation Methods | GAVI Joint Appraisals | GAVI Joint appraisals are conducted annually in GAVI supported countries to identify key areas for investment and potential partners to support those investments | Read: [How to plan and conduct a joint appraisal](http://www.gavi.org/library/gavi-documents/guidelines-and-forms/how-to-plan-and-conduct-a-joint-appraisal/)[Frequently Asked questions](http://www.gavi.org/library/gavi-documents/guidelines-and-forms/frequently-asked-questions-about-the-joint-appraisal/) |  |  |  |  |

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# Summary List of Priority Global Immunization Reading Materials

# Immunization Implementation Guidelines

1. [Immunization Essentials (Guide](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C1-immunization-essentials-book.pdf)lines): *The "bible" of the immunization world; how to implement immunization services. Covers all components, activities, strategies etc. in a comprehensive manner*
2. [Immunization in Practice](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-readings%5C1-IMM-IN-Practice_complete_EN.pdf) (Guidelines): *The "other bible" of the immunization world. This guide is focused more at the health worker and discusses how to implement sessions, how to plan for sessions, gives great details on injection practices, injection safety etc.*
3. [Reaching Every District (RED) Guide](http://www.who.int/immunization/programmes_systems/service_delivery/AFRO-RED_Aug2008.pdf)lines (African Region): *Main strategy for strengthening routine immunization services*
4. [Increasing Immunization Coverage at the Health Facility Level](file://cdc.gov/project/CGH_GID_Active/ISB/AU%20Team/Non-Region_Team_Activities_and_Ideas/RI%20Training%20Module/Course-readings/6-IncreasingImmunCoverageatHFlevel.pdf): *WHO handbook for strategies which shows how health workers can use their “data for action".*
5. [Guidelines for Supportive Supervision](file://cdc.gov/project/CGH_GID_Active/ISB/AU%20Team/Non-Region_Team_Activities_and_Ideas/RI%20Training%20Module/Course-readings/8-Guidelines_for_Supportive_Supervision%5B1%5D.pdf): *Detailed description of how to conduct supportive supervision for immunization*
6. [India Immunization Program - medical officer's guide for managing an immunization program](http://www.nihfw.org/pdf/NCHRC-Publications/ImmuniHandbook.pdf) *: A very nicely done handbook covering all the basics for being a district health officer. Made for India, but applicable for everywhere.*
7. [India Immunization Program Facilitator's guide for training medical officers on managing immunization programs](http://www.nihfw.org/pdf/NCHRC-Publications/ImmuniFacGui.pdf)  *: A very nicely done handbook covering all the basics for being a district health officer (facilitator version)*

# Global Immunization Strategic Documents

1. [Global Vaccine Action Plan 2011-2020](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5Creports-guides-manuals%5CGVAP20112020.pdf) (Global Action Plan): *The global goals, objectives and major strategies endorsed by immunization partners* for the Decade of Vaccines; replaces the GIVS
2. [Global Measles and Rubella Strategic Plan 2012-2020 (Global Action Plan)](http://measlesrubellainitiative.org/wp-content/uploads/2013/06/Measles-Rubella-Strategic-Plan.pdf): Global goals, objectives and major strategies to eliminate and eradicate measles and rubella
3. [Global Eradication and Endgame Strategic Plan 2013-2018](http://polioeradication.org/wp-content/uploads/2016/07/2.8_8IMB.pdf): Global goals, objectives and major strategies to eradicate polio and use polio resources to strengthen health systems
4. [Global Routine Immunization Strategies and Practices (GRISP):](http://apps.who.int/iris/bitstream/10665/204500/1/9789241510103_eng.pdf)  a companion piece to the GVAP, focused on routine immunization
5. [WHO Vision & Mission in Immunization and vaccines 2015-2030](http://www.who.int/immunization/documents/general/WHO_Mission_VIsion_Immunization_Vaccines_2015_2030.pdf?ua=1): Strategic plan for immunizations from WHO
6. [WHO Core References materials list for all things related to immunization](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5CCore%20references%5CEPI%20core%20ref%20materials%20-%20%28updated%2009Febr2019%29.docx): excellent resource list by topic area, created in January 2019.

# Key Global Immunization Research Articles: Determinants of Immunization

1. Article: [Systematic](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5Carticles%5Cunvax_greylit.pdf) Grey Literature Review of why children are not vaccinated (Favin et al, 2012)
2. Article: Systematic Peer-[reviewed](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5Carticles%5Cunvax_peerlit.pdf) Literature Review of reasons related to non-vaccination and under-vaccination of children in low and middle income countries (Rainey et al, 2011)
3. Article: Systematic review of [vaccine](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5Carticles%5Cvaccinehesitancy_2014.pdf) hesitancy in the global context ( Larson, 2014)

# Key Global Immunization Research Articles: Immunization Strategies

1. Article: Systematic Review [of](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5Carticles%5CWallace_Integration_LitReview_2012.pdf) Integrated Service Delivery with Immunizations 2012 and 2009 (Wallace et al, 2012 and [2009](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5Carticles%5CWallace_integrationlitreview_2009.pdf))
2. Article: Systematic Review of urban-based [strategies](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5Carticles%5CVaccine_urbansystematicreview_2016.pdf) to strengthen urban immunization systems (Nelson et al, 2016)
3. [Article: Systematic review of strategies to improve routine immunization in low and middle income country settings](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5Carticles%5CRyman_Litreviewvaxstrategies.pdf) (Ryman et al, 2008)
4. [Article: Systematic review of strategies to improve routine immunization in any country settings](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5Carticles%5C13-ReviewsofEvidenceRegardingInterventions.pdf) (Briss et al, 2000)
5. [Article: Systematic review of costs, effects and C/E of strategies to improve routine immunization in low and middle income country settings](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5Carticles%5C13-Costs_Effects_CostEffectivenessofStrategies.pdf) (Batt et al, 2004)
6. [Article: Systematic review of strategies to improve routine immunization in low and middle income country settings, Cochrane Review](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5Carticles%5Ccochrane_2012_strategies.pdf) (2012)
7. [Article: Overview of WHO/ UNICEF global immunization coverage estimate processes and procedures](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5Carticles%5CWUENIC_overview_Burton.pdf) (Burton et al, 2009)
8. [Article: Global Measles and Rubella Research Priorities Meeting Report](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5Carticles%5Cmeaslesresearchreview2012.pdf) (Goodson et al, 2012)
9. [Article: Global Routine Immunization Research Priorities Meeting Report](file:///%5C%5Ccdc.gov%5Cproject%5CCGH_GID_Active%5CISB-copy%5CISB%5CAU%20Team%5CNon-Region_Team_Activities_and_Ideas%5CRI%20Training%20Module%5CCourse-supplementary-materials%5Carticles%5Cvaccine-research-review-paper.pdf) (2011)

# Important Routine Immunization Web Links

* [Technet-21](http://www.technet-21.org/): WHO-sponsored website with an excellent online community of immunization experts, excellent technical library of documents