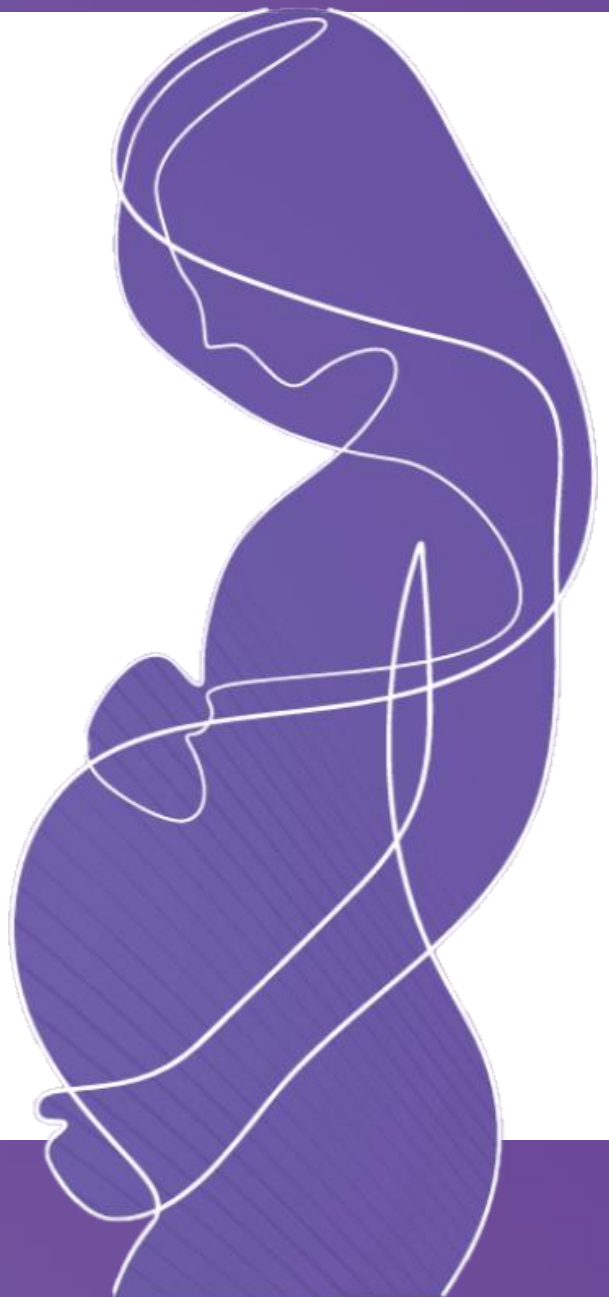
Operationalization of the subnational Certification of Mother to Child Transmission (MTCT) of HIV, syphilis and hepatitis B in Brazil

Leonor Henriette de Lannoy
General Coordination of Surveillance of Sexually Transmitted Infections - CGIST
HIV, Aids, Tuberculosis, Viral Hepatitis and Sexually Transmitted Infections Department - DATHI
Health and Environment Surveillance Secretariat - SVSA
Ministry of Health - Brazil

SUBNATIONAL CERTIFICATION OF ELIMINATION OF VERTICAL TRANSMISSION OF HIV, SYPHILIS, HEPATITIS B, HTLV AND CHAGAS DISEASE AND TIERS OF GOOD PRACTICES



BRASIL SAUDÁVEL Unir para cuidar
BRASIL BEM CUIDADO MAIS SAÚDE PARA QUEM MAIS PRECISA
SUS
MINISTÉRIO DA SAÚDE
GOVERNO FEDERAL BRASIL UNIÃO E RECONSTRUÇÃO

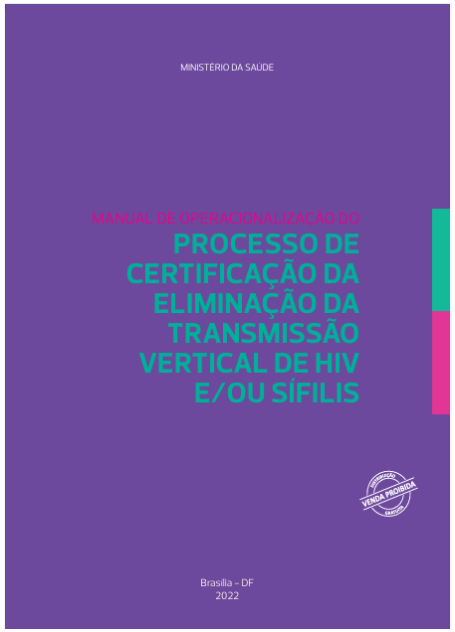
Elimination of MTCT Certification Guide

- Intended for certifications of municipalities over or equal to 100,000 inhabitants as well as Federal States
- Description of the steps of the process and criteria for validating the plea at all stages
- Presentation of impact and process indicators for elimination and/or for tiers (gold, silver and bronze) of good practices towards elimination
- Description of the additional requirements for certification, according to each of the four thematic areas (4 pillars)
- Guidance on the application for maintenance certification
- Supplement with essential components for the construction of the certification application report

Elimination of MTCT Certification Guide

The supplement is a document adapted from the World Health Organization (WHO) guidelines for the context of the Unified Health System (SUS) of Brazil.

It is composed by validation tools that integrate the criteria checklist for preliminary analysis of Federal States and municipalities with population equal or greater than 100 thousand inhabitants



This Operational Manual contains guidelines about the process of Certification of Elimination of MTCT of HIV and/or syphilis and it is for technicians(s) of the Ministry of Health and members of the National Validation Team (ENV) and the National Validation Commission (CNV)

Information systems for care management and health surveillance

Notifiable Diseases Information System (1975):

- AIDS in children under 13 years (1983);
- Congenital syphilis (1986);
- Pregnant woman living with HIV/AIDS and HIV exposed children (2000);
- Syphilis in pregnant women (2005)

Mortality Information System (SIM)

Information System on Live Births (SINASC)

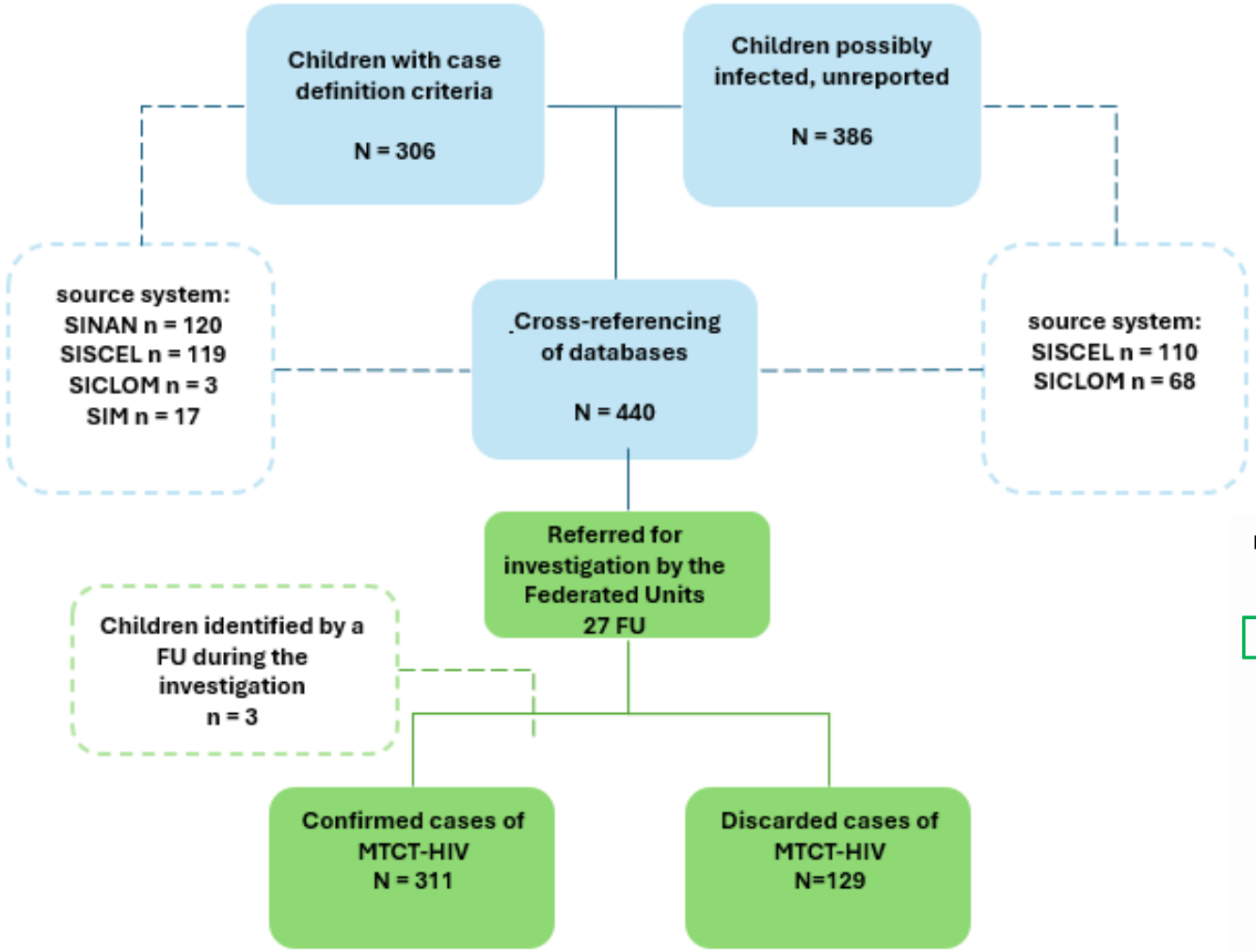
Laboratory Tests Control System (SISCEL)

Drug logistics Control System (Siclom)

Panel of Vaccine Coverage

Available at:
https://infoms.saude.gov.br/extensions/SEIDIGI_DEMAS_VACINACAO_CALENDARIO_NACIONAL_MENU_COBERTURA/SEIDIGI_DEMAS_VACINACAO_CALENDARIO_NACIONAL_MENU_COBERTURA.html

Flowchart of epidemiological investigation towards MTCT-HIV cases in Brazil, 2021-2022



Is it a child living with HIV? (N = 440)

Variable	n	%
Yes	311	70,68
Not	81	18,41
In research	27	6,14
Duplicity	21	4,77

Notification in the Sinan

- 214 (68.81%) YES
- 70 (22.51%) No
- 27 (8.68%) Uninformed

31 (9.97%) were cases discarded in Sinan

14 (4.50%) evolved to death

12 (3.86%) were considered loss of follow-up

04 (1.29%) were not vertical transmission

Results of epidemiological investigation towards MTCT-HIV cases in Brazil, 2021-2022

Cases of MTCT-HIV by year of birth, sex and origin of **Information system**, Brazil, 2021-2022 (N=311)

Distribution of cases by year of birth (N=311)

2021

171 (49,7%)

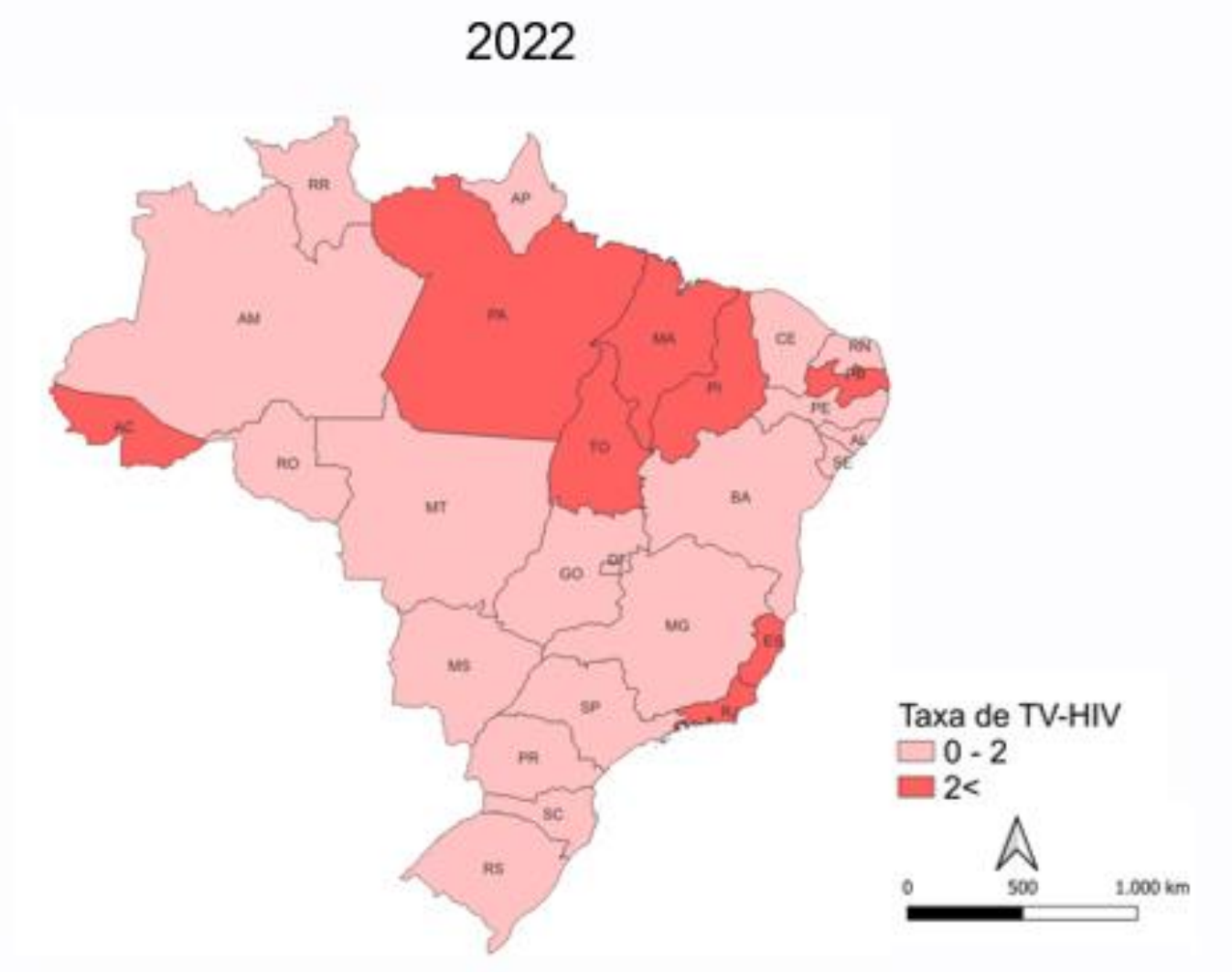
2022

140 (40,8%)

Distribution of cases by source SIS (N=311)

Sinan	Siscel	Siclom	SIM
114 (36,66%)	165 (53,05%)	23 (7,40%)	09 (2,89%)

Results of epidemiological investigation towards MTCT-HIV cases in Brazil, 2021-2022



- Mother-to-child transmission of HIV, according to UF, Brazil, 2022 (N=140)
- HIV MTCT Rate in Brazil 2022 = 1,66

Indicator and General Data of Vertical transmission – Digital Panel

CERTIFICATION OF
ELIMINATION OF VERTICAL TRANSMISSION OF
HIV, SYPHILIS, HEPATITIS B, HTLV AND CHAGAS
DISEASE AND TIERS OF GOOD PRACTICES

Indicadores e Dados Básicos de Transmissão Vertical nos Municípios Brasileiros

Baixar dados de todos os municípios

Abrangência dos Dados

Dados Regionais e Nacionais

Subcategoria

Brasil

Baixar Dados

Tabela 1 - Taxa de incidência (por 1.000 nascidos vivos) de crianças infectadas pelo HIV devido à transmissão vertical por ano de nascimento.

Transmissão vertical em crianças	Total	2019	2020	2021	2022	2023
Casos de Crianças infectadas	882	270	218	174	129	91
Taxa de incidência	-	0,1	0,1	0,1	0,1	0,0

FONTE: MS/SVSA/DATHI/SINAN. NOTAS: (1) Dados até 30/06/2024; (2) Dados preliminares para os últimos 5 anos.

Tabela 2 - Taxa de transmissão vertical de HIV (por 100 casos de HIV em gestantes) por ano de nascimento.

Transmissão vertical em crianças	Total	2019	2020	2021	2022	2023
Casos de HIV em gestantes	41.034	8.374	8.168	8.293	7.922	8.277
Casos de Crianças infectadas	882	270	218	174	129	91
Taxa de Transmissão Vertical	-	3,2	2,7	2,1	1,6	1,1

FONTE: MS/SVSA/DATHI/SINAN. NOTAS: (1) Dados até 30/06/2024; (2) Dados preliminares para os últimos 5 anos.

Available at: https://indicadorestransmissaovertical.aids.gov.br/

Tabela 3 - Cobertura de gestante vivendo com HIV em uso de TARV no pré-natal por ano de diagnóstico.

Gestantes em TARV	Total	2019	2020	2021	2022	2023
Casos de HIV em gestantes	41.034	8.374	8.168	8.293	7.922	8.277
Casos de gestantes em TARV	28.548	5.787	5.803	5.726	5.409	5.823
% Gestantes em TARV	69,6	69,1	71,0	69,0	68,3	70,4

FONTE: MS/SVSA/DATHI/SINAN. NOTAS: (1) Dados até 30/06/2024; (2) Dados preliminares para os últimos 5 anos.

Tabela 4 - Casos de sífilis congênita em menores de um ano de idade e taxa de incidência (por 1.000 nascidos vivos) por ano de diagnóstico.

Sífilis congênita em menores de um ano	Total	2019	2020	2021	2022	2023
Casos	127.060	25.281	23.364	27.054	26.435	24.926
Taxa de Incidência	-	8,9	8,6	10,1	10,3	9,8

FONTE: MS/SVSA/DATHI/SINAN. NOTAS: (1) Dados até 30/06/2024; (2) Dados preliminares para os últimos 5 anos. (2) Considerados casos de nascidos vivos.

Tabela 9 - Número* de crianças por ano de nascimento, com pelo menos 2 cargas virais detectáveis no SISCEL ou em uso de TARV no SICLOM.

Detecção de crianças no SiSCEL e SICLOM	Total	2019	2020	2021	2022	2023
Crianças com pelo menos 2 cargas virais e/ou em TARV	862	171	177	185	169	160

FONTE: SISCEL e SICLOM. * O número de crianças corresponde àquelas com 2 CV detectáveis qualquer valor e/ou identificadas em uso de ARV para tratamento.

Available at: https://indicadorestransmissaovertical.aids.gov.br/

HIV indicators of the municipalities of Rondônia and Rondônia State

Dados Gerais					HIV		Indicadores de impacto		Indicadores de processo				Sinan	Certificação
UF	Cod UF	Cod Mun	Nome Municipio	População 2023	Nº Crianças HIV 2022	Nº Gestantes HIV 2022	Taxa de incidência de crianças infectadas pelo HIV devido à transmissão vertical em 2022	Taxa de transmissão vertical do HIV 2022	Cobertura mínima de quatro consultas no pré-natal 2022	Cobertura mínima de quatro consultas no pré-natal 2023	Cobertura de gestantes infectadas com HIV em uso de terapia antirretroviral (TARV) 2022	Cobertura de gestantes infectadas com HIV em uso de terapia antirretroviral (TARV) 2023	Criança exposta HIV 2022	Potencial selo 2025
RO	11	110002	ARIQUEMES	107677	0	13	0,0	0,0	97,0	96,4	92,3	88,9	10	Eliminação
RO	11	110012	JI-PARANA	138274	0	5	0,0	0,0	95,7	96,0	100,0	100,0	4	Eliminação
RO	11	110020	PORTO VELHO	511343	1	35	0,1	2,9	82,0	82,0	51,4	67,4	39	Não se aplica
RO	11	110030	VILHENA	106700	0	5	0,0	0,0	96,1	95,4	100,0	100,0	4	Eliminação

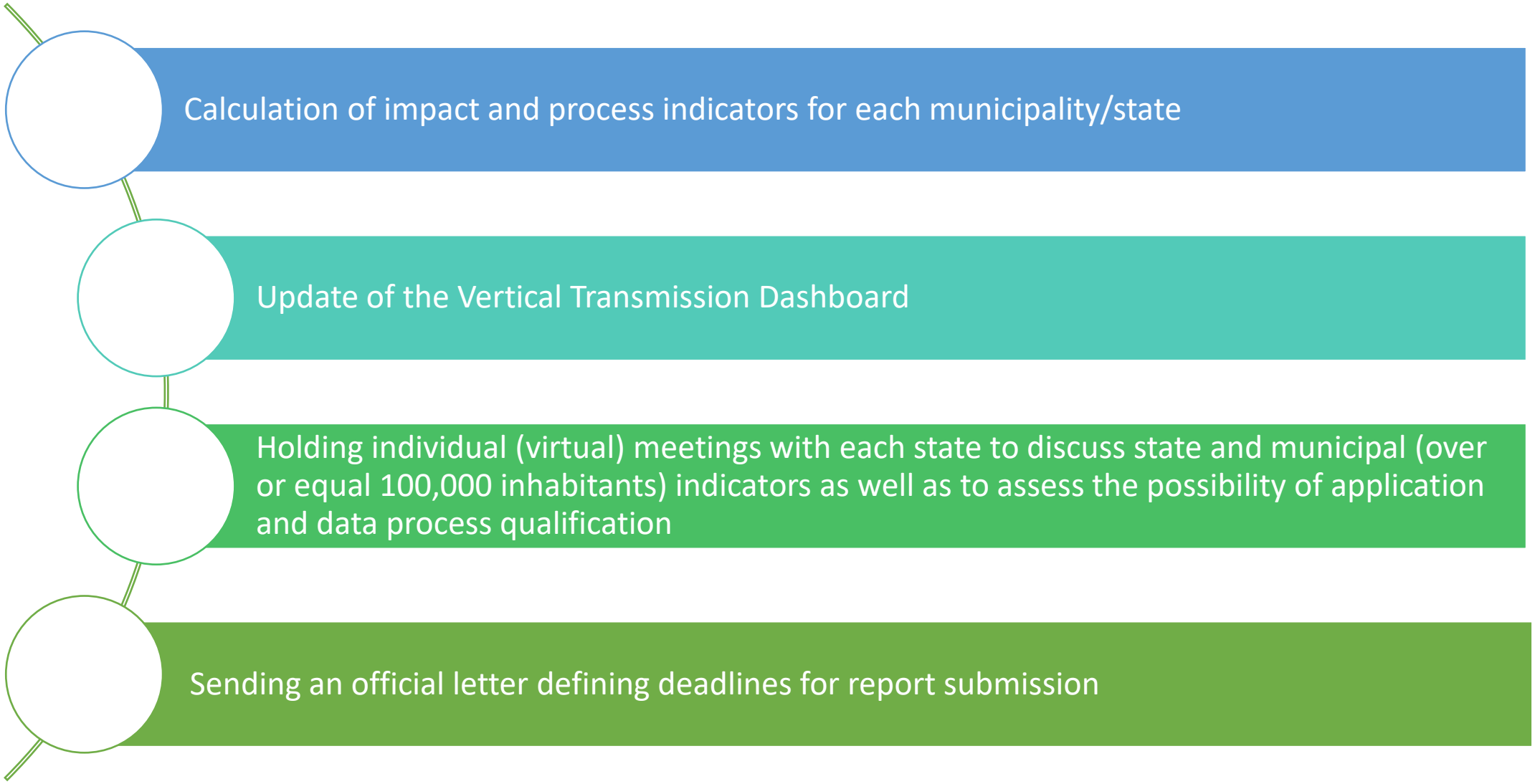
Possible adjustments

HIV indicators of State of Rondônia

Identificação			Indicador de processo		HIV						
Cod UF/ região	Nome Estado/Região/Brasil	Nascidos Vivos 2023	Cobertura de quatro consultas no pré-natal 2022	Cobertura de quatro consultas no pré-natal 2023	Nº Crianças HIV 2022	Taxa de incidência de crianças com HIV devido à transmissão vertical em 2022	Taxa de transmissão vertical do HIV 2022	Nº Gestantes HIV 2022	Cobertura de gestantes HIV em uso de TARV 2022	Nº Gestantes HIV 2023	Cobertura de gestantes HIV em uso de TARV 2023
11	Rondônia	23912	91,0	91,8	1	0,04	1,3	76	**71,1**	83	**75,9**

Possible adjustments

Institutional support in the application process - for both States and municipalities



Certification process for States and municipalities

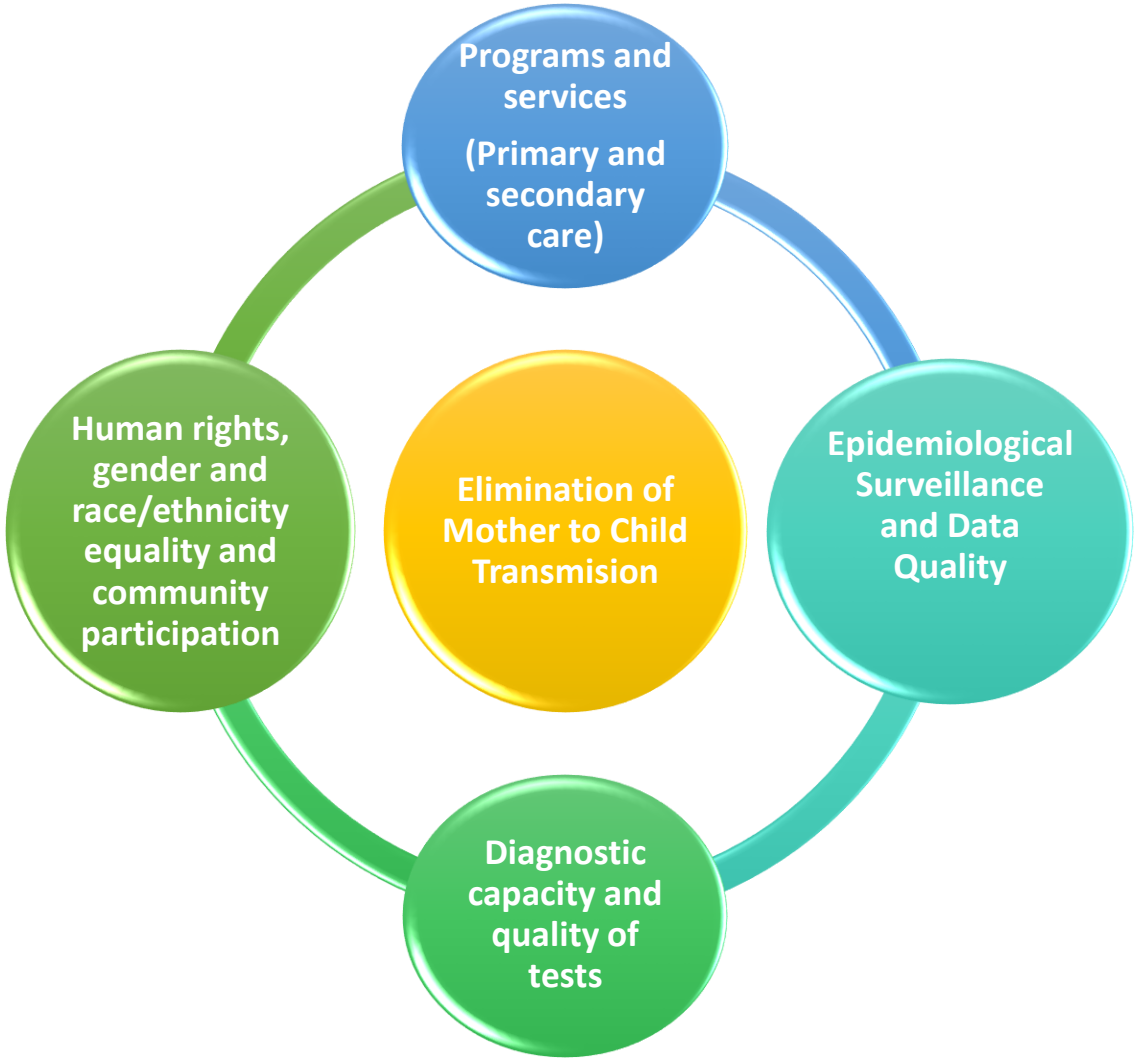
Ministry of Health	· The Ministry of Health contacts the states and municipalities to discuss the indicators based on the national database, and encourages adherence to the Certification process.
State Validation Commitee (MVC)	· Drafts a municipal report and fills in the validation instruments for the certification Guide and Supplementary material.
State Validation Commitee (SVC)	· Reviews the municipal report and the validation instruments. · Prepares a technical opinion and submits an official communication to the Ministry of Health.
Ministry of Health	· Analyzes the municipal report and the validation instruments, according to the criteria in the Certification Guide. · Takes action regarding the technical visit.
National Validation Team (NVT)	· Conducts the technical visit to verify the information in the report and validation instruments. · Drafts the technical visit report.
National Validation Commitee (NVC)	· Evaluates the municipal report, the validation instruments and the NVC's report. · Fills in and signs the Validation Form.
Ministry of Health	· Certifies the municipality, if the process is approved.

Figure 1 – Operational flow of the municipal certifications process of mother-to-child transmission of HIV[a] and/or syphilis based on the responsibilities of the Ministry of Health, committees and validation team

2025 Certification Schedule

Schedule	Important deadlines
➢ **Individual meetings with CGIST/DATHI technical team and other areas involved with the states to disseminate the 2025 process of certification and presentation of municipalities that have the possibility to achieve indicators (eligible ones)**	To be scheduled with each state between February 26th and March 31st
➢ **Submission, by the State Coordination to the Ministry of Health, of the list of eligible municipalities that will be interested in applying for the certification process**	Until April10th
➢ **Submission, by the State Coordination to CGIST/DATHI, of municipal reports (including supplement filled) validated by CEV**	Until May 15th
➢ **Conducting municipal *in loco* visits**	From June to September
➢ **Official delivery of the certification by the Ministry of Health**	December 1st

Thematic areas evaluated in the Certification Process



Vertical Transmission Investigation Committee

CLICK ON THIS LINK

Analysis of municipal and state report

- Report submission
- Evaluation of available services, access, diagnostic flow and others
- Evaluation of the indicators impact and process
- Evaluation of the complementary indicators

2.2.4 Ações na APS para prevenção da transmissão vertical de HIV, sífilis e hepatite B

Perguntas		Sim	Não	Não sabe	Não se aplica	Comentários
i. São desenvolvidas ações para estimular o início precoce do pré-natal (até a 20ª semana de gestação)?						Quais?
ii. As unidades da APS realizam TR de gravidez?						
iii. Se não ofertam TR de gravidez, agendam a realização do teste laboratorial?						
Se sim, qual o tempo médio para o agendamento (em dias) do teste laboratorial de gravidez?		Tempo (em dias):				
iv. Qual o tempo médio para agendamento da primeira consulta de pré-natal com médico(a) ou enfermeira(o) (em dias)?		Tempo (em dias):				
v. Há realização de TR na APS para:	HIV?					
	sífilis?					
	hepatite B?					
	doença de Chagas?					
vi. Se a APS não realiza algum dos TR, explicitar qual deles não é realizado e o motivo:						
vii. Qual o percentual de unidades da APS no território que ofertam TR para:	HIV?					
	sífilis?					
	hepatite B?					
	doença de Chagas?					
viii. As unidades ds APS realizam TR na primeira consulta de pré-natal para:	HIV?					
	sífilis?					
	hepatite B?					
	doença de Chagas?					
Se algum TR não é realizado, explicar o momento da realização da sorologia:						
ix. É necessário agendar a realização de TR na APS?						
Se sim, qual o tempo médio para o agendamento (em dias)?						
x. Quais categorias profissionais realizam testagem rápida na rotina de atendimento?						
xi. A APS tem disponibilidade e acesso a exames laboratoriais para o diagnóstico de HIV e hepatites virais?		Se sim, especificar quais:				
Se não, qual a referência no município para esses exames?						

continua

Objectives of the technical (*in loco*) visits

- Check the report information and validation tools;
- Prepare a report of the visit that will be the document to be analyzed by the National Validation Committee

The technical visit allows:

1. Conduct interviews and check data in medical records;
2. Validate the information presented in the report and validation tools;
3. Analyze the functioning and quality of health programs and services, laboratory network and diagnostic capacity, epidemiological surveillance and respect for human rights, gender equality and community participation

The visit is divided into three moments:

1. The first, refers to the technical-political meeting for the presentation of teams and papers;
2. The second refers to on-site visits in health services.
3. The third, closing with the management and Municipal Validation Team (EMV) for return of the visit

Preparation of the certification report

- ✓ Daily summary, during the visit, to facilitate the compilation of the respective part in the report

- ✓ Structure the technical report of each thematic area, containing a summary of the assessments in the territory, recommendations and suggestions for improvement in strategies to control vertical transmission of HIV.

  If necessary, add other relevant points to the report in addition to those suggested in the roadmap

Lessons learnt

1. Certification is a continuing education process, not punitive or an audit

2. It is an action that qualifies the information of local systems and work processes and respects the local health care network

3. Most municipalities mobilize for the Technical Visit by articulating with the different departments, with managers, with civil society

4. It is an inductive process for the strengthening of the partnership between State and Municipality

5. It is an opportunity for exchanges of experience between the National Validation Team and municipal technicians

6. It is a time to MUNICIPALIZE the indicators

Thank you!

leonor.lannoy@aids.gov.br

cgist.certificatv@aids.gov.br