



School platforms for vaccination status checks and catch-up opportunities

10 May 2023

Kirsten Ward
U.S. Centers for
Disease Control and
Prevention

Grace Eddy Amewu
Ghana Health Service, Family
Health Division

Ye Jiakai
Yu Wenzhou
Lance Rodewald
Li Li
China CDC, NIP



An introduction to school vaccination checks

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Kirsten Ward, U.S. Centres for Disease Control and Prevention

Definitions



School-based immunization – delivery of one or more routine vaccines in the school setting



School-based health screening / prevention – screening for health conditions or delivery of preventative health interventions conducted on the school premises



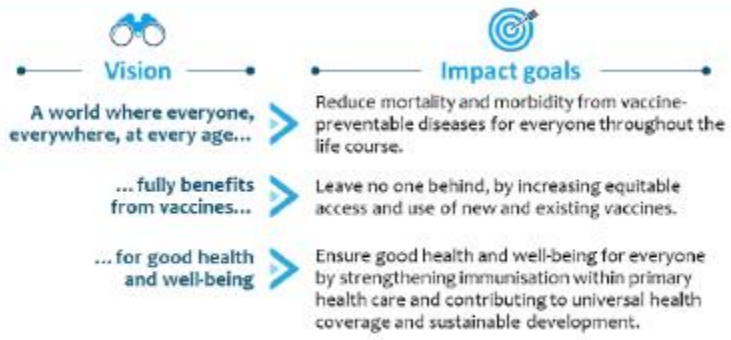
School vaccination checks (“school screening”) – checking school-age children’s written vaccination history to determine if they are missing recommended vaccines & providing missed doses



School vaccination requirements – proof of vaccination is required for entry into formal childcare or school. Specific exemptions may be permitted, these will vary.

Checking vaccination status at entry to, or during, school is a recommended strategy globally & regionally

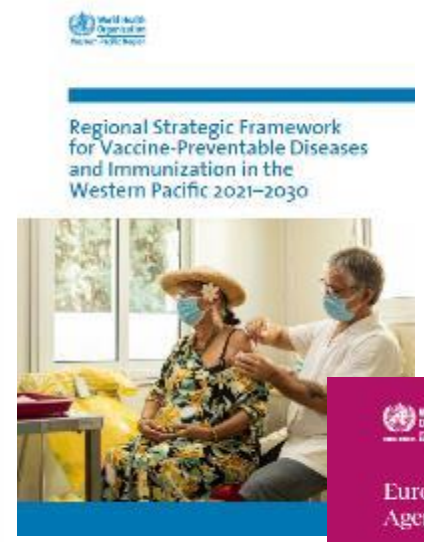
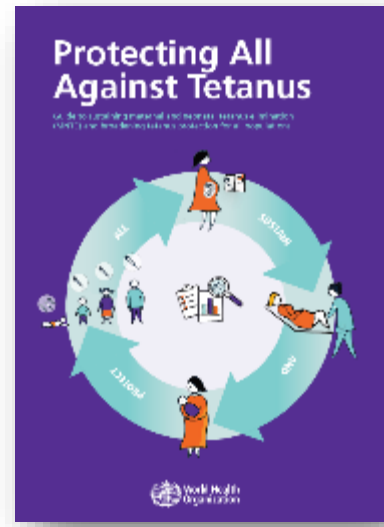
Immunisation Agenda 2030 (IA2030) At a Glance



Strategic priorities



Core principles



supplementarily (MCV0), routine (MCV1 and MCV2) and campaign doses. Children should be screened for their measles vaccination history at the time of school entry, and those lacking evidence of receipt of 2 doses should be vaccinated with any missing doses.



21 to 24 June 2022
Manila, Philippines hybrid

Checking vaccination status at school can provide an important opportunity to.....

- Identify children that have been missed by the immunization program and provide them an opportunity to received missed vaccines
- Enhance population immunity to vaccine-preventable diseases
- Improve completeness of immunization data and immunization information systems
- Promote home-based record retention
- Build cooperation between health, education and early childhood sectors
- Improve health and vaccination literacy in schools, both for teachers and students
- Create a healthy school environment



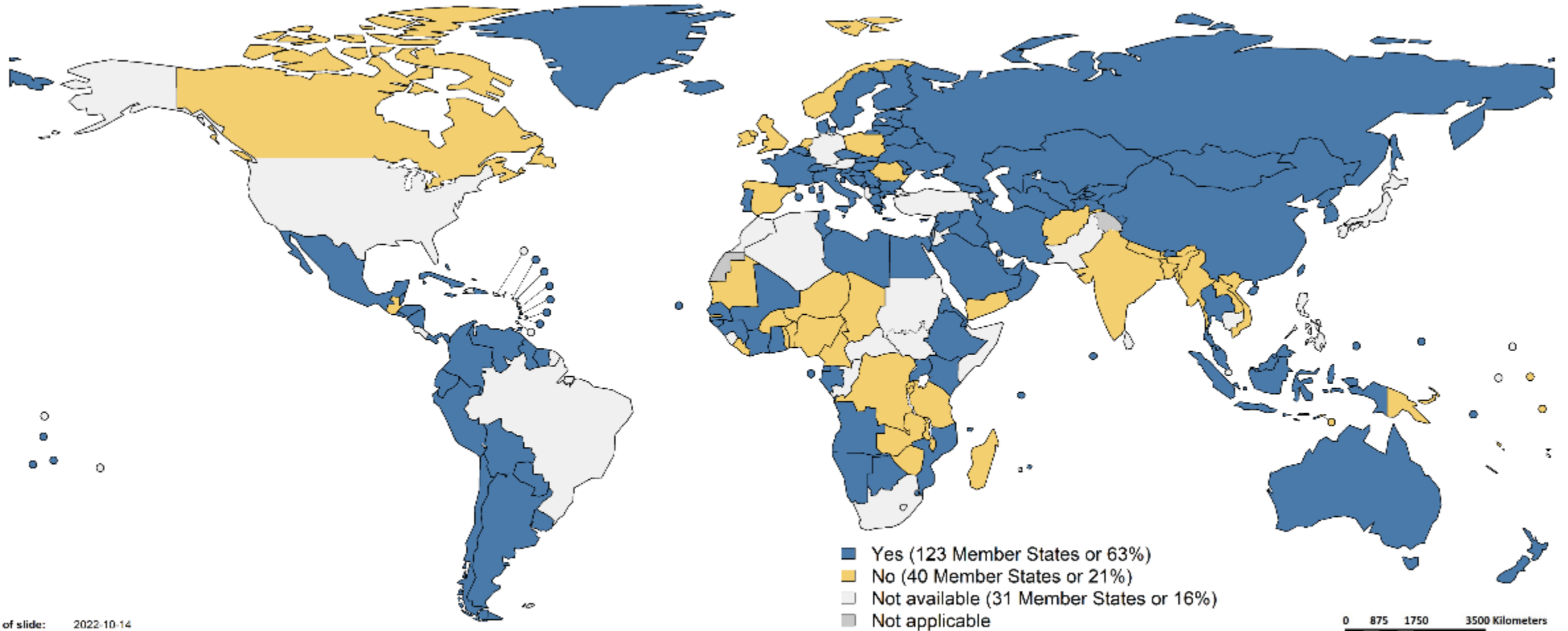
School vaccination checks vs. school entry vaccination requirements

- School entry checks of vaccination status can be used to enforce laws or policies requiring proof of vaccination for entry into formal childcare or school (here forth, school)
- However these checks can be implemented without such a policy (i.e. without intent to exclude) – **to identify and provide catch-up opportunities**

	SCHOOL VACCINATION CHECK	NO SCHOOL VACCINATION CHECK
VACCINATION <u>REQUIRED</u> FOR SCHOOL ENTRY	Checking vaccination status as a strategy to implement mandate – can lead to exclusion from school if child is not vaccinated	Law or policy ONLY – no guidance and/or enforcement of implementation
VACCINATION <u>NOT REQUIRED</u> FOR SCHOOL ENTRY	Checking vaccination status solely for public health purpose – no exclusion*	

*except in cases where unvaccinated children may be excluded from school during outbreak situations.

Reported implementation of school vaccination checks in 2021 (n=163 countries)



Date of slide: 2022-10-14

Map production: Immunization, Vaccines and Biologicals (IVB), World Health Organization (WHO)

Data source: IVB database at 14 October 2022

Disclaimer:

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.
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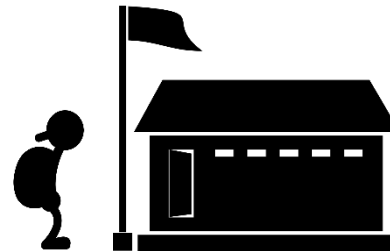
Opportunities to check vaccination history at different stages of education system



**Entry into
childcare/daycare
(0-3years of age)**



**Entry into formal pre-
primary school
(pre-school, pre-k and/or
kindergarten)*
(4-6 years of age)**



**Entry into primary school
(5-7 years of age)**



**Entry into
secondary school
(9-13 years of age)**

DURING childcare/pre-primary/school

- school-based delivery of any scheduled EPI vaccines
- VPD outbreaks
- campaign doses
- health screening programs

** Education system structures and ages at which children start formal schooling vary between and within countries. In general pre-primary includes the years of formal schooling prior to commencing formal (compulsory) primary school. Not all pre-primary school is compulsory.*

Feasibility considerations for school vaccination checks

- **Support of Ministry of Education** and other relevant sectors of Government
- **School enrollment rate** (% of population attending school)
- Availability of **home-based records of vaccination**
- Existing **laws or policies** (Immunization laws, catch-up policy...)
- Available **health and education workforce** and their roles and responsibilities
- System for **forecasting vaccines and supplies**
- **Approach to delivering missed doses** (i.e. referral? administer at the school? consent?)
- Existing **school health activities** (i.e. health screening, school-based immunization)



Facilitating factors for school vaccination checks

- **Strong collaboration** between ministries of health and ministries of education with clear roles and responsibilities for each
- Availability of **sufficient funding and staff time** to carry out activities on an annual basis
- Legislation requiring the **collection of vaccination history** during school enrollment and a **well-defined catch up policy**
- **Clear implementation guidance and standard operating procedures (SOPs)**
- Availability of **up-to-date home-based records** (paper-based or electronic) that summarize the vaccination history on one page for easy reference
- **Public outreach and sensitization** to promote cooperation from the community
- **Routine monitoring of processes, outputs & outcomes** supported by existing information systems



Barriers to success

- **Insufficient support and consensus** from health & education sectors
- Lack of clear and permissible **catch up vaccination policy/guidance** for children in target age groups
- **No detailed standard operating procedures/guidance** including roles and responsibilities
- Low availability of home-based vaccination records (paper or electronic)
- No process or responsibility for **follow up of children** to ensure they receive missed vaccine doses
- **Limited evidence to guide planning, implementation and monitoring**, especially in LMICs
- **Not designing the strategy for sustainability** – should become part of the fabric of the immunization program and school health platform





Thank you!

Merci!

School Health in Ghana

Presented by Grace Eddy Amewu
Programme Officer, School Health
Ghana Health Service, Family Health Division

10th May 2023



Ghana Education
Service (GES)

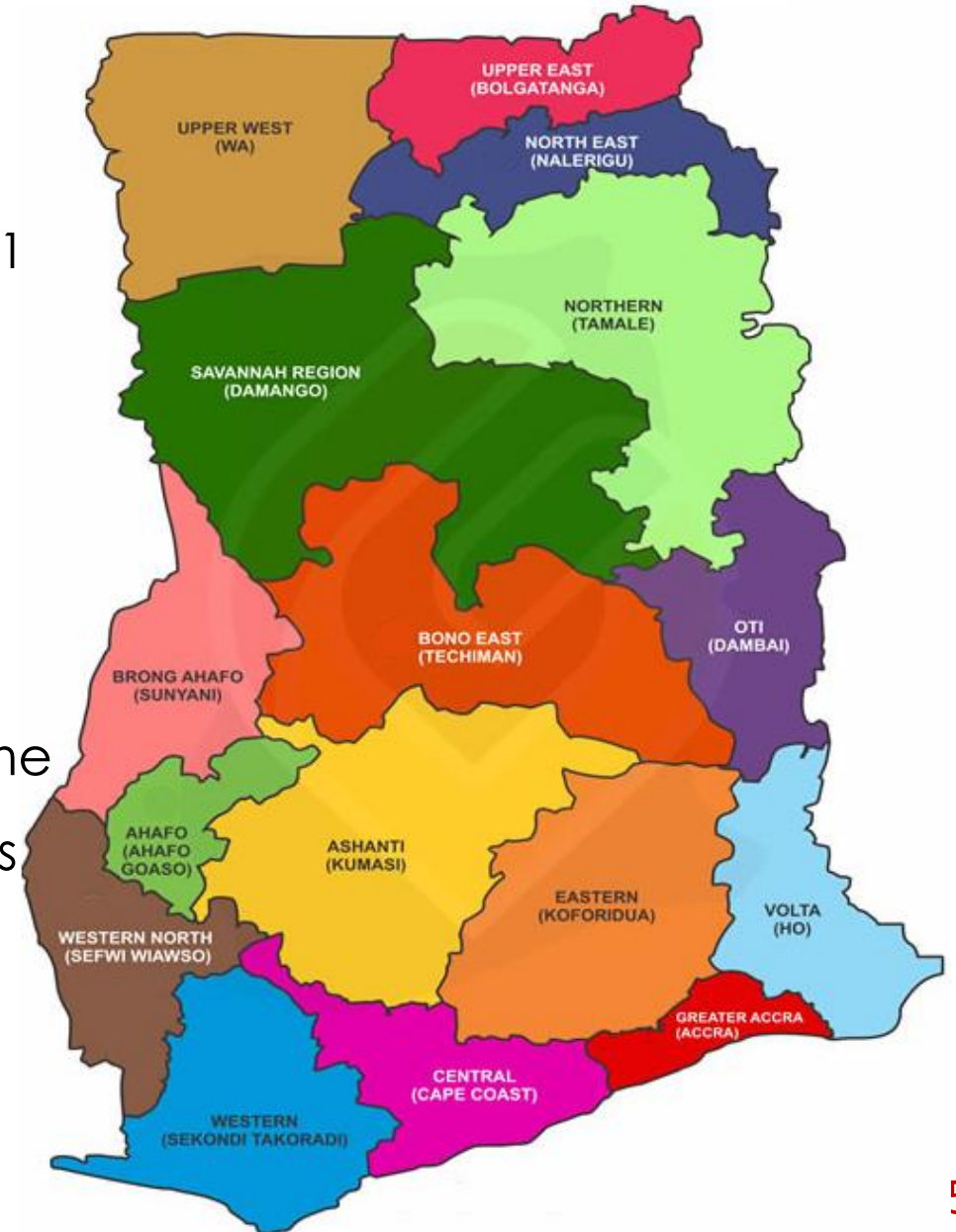
Outline

- Background to Ghana
- School Health in Ghana
- Introduction of health screening for new entrants, 2018
- Key results from an evaluation of checking immunization status for new entrants in 2019
- Challenges
- Way forward
- Acknowledgments



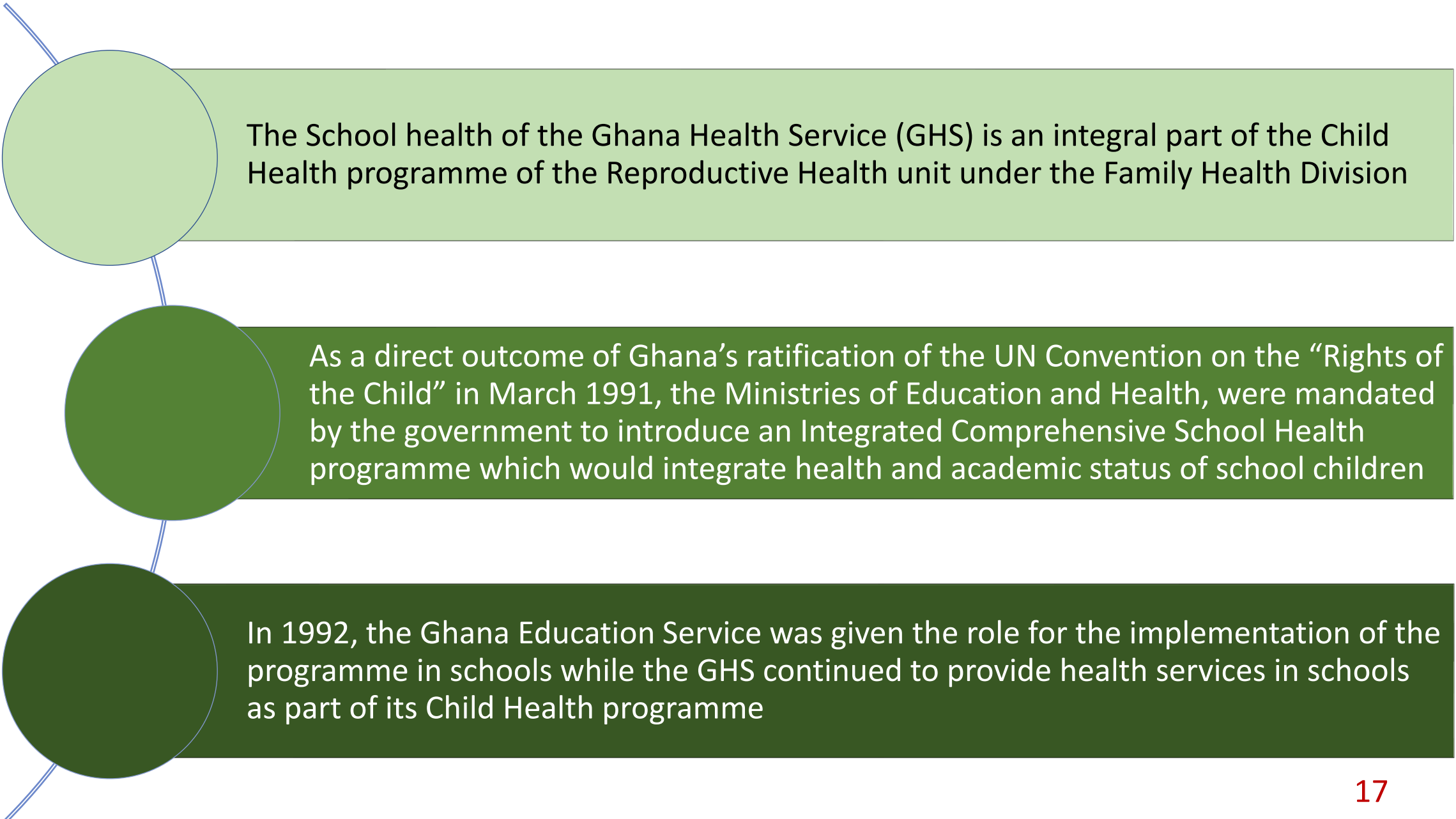
Background to Ghana

- Population of 30.8 million (median age of 21 years)¹
- Under five population of 6.4 million
- Student population of 424,940
- 16 regions divided into 261 total districts, most with <75,000 people
- Health Insurance: National Health Insurance Scheme and private health insurers cover 69% of Ghanaians
- Public and private schools



School Health in Ghana



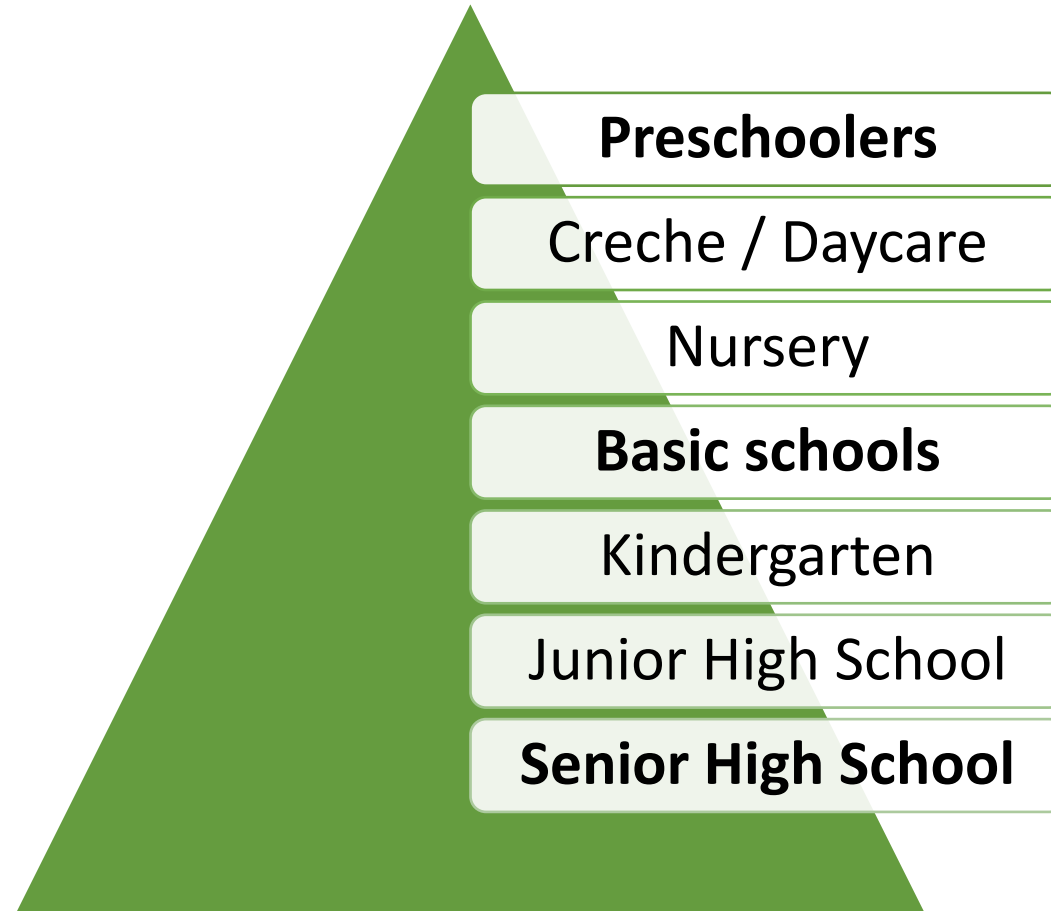


The School health of the Ghana Health Service (GHS) is an integral part of the Child Health programme of the Reproductive Health unit under the Family Health Division

As a direct outcome of Ghana's ratification of the UN Convention on the "Rights of the Child" in March 1991, the Ministries of Education and Health, were mandated by the government to introduce an Integrated Comprehensive School Health programme which would integrate health and academic status of school children

In 1992, the Ghana Education Service was given the role for the implementation of the programme in schools while the GHS continued to provide health services in schools as part of its Child Health programme

Target for School Health



Objectives of School Health

1. To ensure that every school child is as fit as possible, so that each may get the maximum benefit from his/her education
2. To ensure early diagnosis of diseases and recognition of any disability for early, timely, effective and appropriate management to avoid complications.
3. To make the school a healthy place for learning and play
4. To promote growth and development among learners
5. To ensure timely/prompt referral of learners to the right specialist care or level of care
6. Promote quality of care for learners in the school and community setting
7. To assist teachers and community health nurses in identifying learners with learning problems
8. To assist in prevention of diseases among learners in the school, home and community
9. To improve knowledge, skills and attitudes of learners, caregivers, teachers and health workers through health promotion

Minimum School Health Package

- General physical examination
- **Immunization and Vitamin A status assessment**
- Hearing assessment
- Speech assessment
- Growth assessment
- Assessment of intellectual disability
- Provision of first aid and treatment of minor ailments including dressing of wound, cuts, sores etc
- Provision health education and counselling
- Referrals and follow up

Implementing Agencies of School Health Services

- Though various agencies collaborate in the provision of School Health , the three agencies that play key roles are:
 - Ghana Health Service (GHS)
 - Ghana Education Service (GES) and
 - Ministry of Local Government and Rural Development (MLGRD)
- Teachers are with pupils every day, and as such they have the daily responsibility for ensuring that health needs are cared for, and problems are referred to health workers for further management
- Ghana Health Service staff on the other hand will pay scheduled visits to schools for specific activities such as general physical examination, vision, oral, immunization and Vitamin A status assessment
- The environmental health officer has the responsibility of ensuring a healthy environment in schools.

Introduction of Health Screening for New Entrants

- Introduced and piloted in the year 2018
- Done annually at the beginning of the academic year
- For first entrants into the educational system
 - Kindergarten

Purpose

- To assess and have a data base on the health status of learners enrolled for the first time in school

Process for planning and implementing school health screening in Ghana

- Inception meetings – GHS, GES, Partners, Academia, MMDAs
- Preparatory meetings – draw plans, review training materials/modules
- Orientation/Sensitization – health workers, staff of education, parents, partners, learners community members etc
- Capacity building – regional, district, facility and screening teams
- Piloting of screening tools
- Screening of learners
- Monitoring – during and after screening exercise
- Entry, cleaning and analyzing data
- Validation and writing of report
- Dissemination – results from the screening exercise

Process involved in screening learners in Ghana

- Create a list of names of learners to be screen
- Notification note on the screening is given to each learner to give to their parents/guardians
- A screening form is allocated to each learner – kept in the school with the class teacher
- Learners' biodata is collected and filled on the form accordingly – class teacher , health workers.
- Each learners Maternal and Child Health Record Booklet (MCH RB) is collected and thoroughly checked for status of immunization – health team
- Learners found to miss a vaccine are given missing vaccines and recorded appropriately in the MCH RB – either at the screening site/school, referred to the appropriate health facility

Sample of screening form and learner's biodata

Immunization and Vitamin A Supplementation

Age	Vaccine	Date Given	Batch Number	Place Given	Name & Signature	Date of Next Visit
At Birth	BCG	/ /	V: D:			/ /
	OPV 0	/ /	V:			/ /
	Hepatitis B	/ /	V:			/ /
6 Weeks	OPV 1	/ /	V:			/ /
	DPT/ Hep B/ Hib 1	/ /	V:			/ /
	Pneumococcal 1	/ /	V:			/ /
	Rotavirus 1	/ /	V:			/ /
10 Weeks	OPV 2	/ /	V:			/ /
	DPT/ Hep B/ Hib 2	/ /	V:			/ /
	Pneumococcal 2	/ /	V:			/ /
14 Weeks	Rotavirus 2	/ /	V:			/ /
	OPV 3	/ /	V:			/ /
	DPT/ Hep B/ Hib 3	/ /	V:			/ /
	Pneumococcal 3	/ /	V:			/ /
9 Months	IPV	/ /	V:			/ /
	Measles-Rubella 1	/ /	V: D:			/ /
18 Months	Yellow Fever	/ /	V: D:			/ /
	Measles-Rubella 2	/ /	V: D:			/ /
	Meningitis A	/ /	V: D:			/ /
	LLIN	/ /				/ /

DPT: Diphtheria, Pertussis, and Tetanus / Hib: Haemophilus Influenza b / IPV: Inactivated Polio Vaccine
V: Vaccine Batch Number / D: Diluent Batch Number

Progress made so far

- Fully implement in all 16 regions in 2019
- More than 500, 000 first entrants were screened in 2019/2020 academic year
- No screening in 2020/2021 due to COVID-19
- Screening for 2022/2023 academic year has resumed for Basic Schools
 - **Kindergarten**
 - Junior High School
- In three Districts in Western North region of Ghana
 - Sefwi Wiawso district
 - Aowin district
 - Sefwi Akuntumbra

Assessing immunization status and immunizing a Learner



**Key results from an evaluation of
checking immunization status for new
entrants in 2019**

Evaluation Objectives

1. Understand knowledge, attitude and practices for vaccination checking component of school health screening among health and education staff at district and service-delivery levels.

2. Assess short-term effect of checking vaccination status as part of school health screening on:

- identification of children with missed doses of childhood vaccines on Ghana's national immunization schedule
- receipt of missed doses of infant vaccines in the target population,
- change in immunization coverage in the target population for the evaluation

Methods

Collecting information on vaccination status of learners

- Visited homes of sampled children enrolled in the 82 selected schools
 - 1779 children in initial listing, 1934 children in final sample
- Child's vaccination history obtained via
 - Home-based record of vaccination (includes dates of vaccination), OR
 - Health facility immunization register (includes dates of vaccination), OR
 - Verbal report of caregiver (exclude dates of vaccination)
- Vaccination status (incl. vaccination dates) recorded on hardcopy questionnaire, later entered to electronic platform (RedCap)
 - photo of individual vaccination record card included in electronic record



Characteristics of 1884 sampled children from 82 schools, Aowin & Sefwi Waiswo, 2019-2020



Age at screening (1 Nov 2019)	Aowin district n (%)	Sefwi Waiswo district n (%)	TOTAL n (%)
24 – 59 months	496 (54%)	696 (72%)	1192 (63%)
<i>Median age (IQR)</i>	<i>47mths (40 – 53)</i>	<i>47mths (37 – 53)</i>	<i>47mths (39 – 53)</i>
≥ 60months	421 (46%)	271 (28%)	692 (37%)
<i>Median age (IQR)</i>	<i>69mths (64 –77)</i>	<i>66mths (63 –72)</i>	<i>68mths (63 –76)</i>



Summary of results from evaluation in 2019

Prior to implementation

- High baseline coverage for vaccines given in the first year of life – lower for vaccines given in second year of life
- **628 (33.3%) children missing vaccine doses baseline for which they could be “caught up”**

During implementation

- Array of challenges were reported to contribute to sub-optimal implementation of school health screening
- Written records of vaccination were available for most (99%) of the sampled children (all \geq 24months of age)

Following implementation

- Very few (n=28, 4.5%) children received missed vaccine doses during the intervention and follow-up periods
- Most common vaccine antigen “caught up” – IPV

Challenges

- Disruptions in school calendar due to COVID-19 pandemic
- Funding challenges
- Poor telecommunication
- Poor road network
- Poor appreciation of Ghana's vaccination catch up policy among HCWs
- Few parents refusing vaccination for their wards
 - reasons being too many injection and vaccines
 - belief child will build natural immunity
 - don't understand importance of vaccination
 - staff attitude to promotion and update of vaccines
- Few schools unwilling to be part of screening (immunization)
 - late or no prior notice of vaccination
 - parents blaming teachers for AEFI

Way forward

- Source for funds to help identify implementation gaps to improve the program
 - To train HCWs on vaccination status assessment SOP
- Orient and train community health nurses throughout the country on screening for learners
- Continue to improve operational guidance / SOPs
- Integrate screening into routine school health services
- Initiate collaboration and work with other agencies like social Welfare
- Share findings from 2022/23 evaluation and use to improve the strategy of checking vaccination status at school.

Conclusion

- The policy on health screening for new entrants has come stay
- Screening to be conducted annually at the start of every school year for all new entrants
 - Preschool (Creche, Day Care, Nursery)
 - Basic School (Kindergarten)
- Policy is a shared partnership

Acknowledgements

- Ghana Education Service
- AFENET
- UG-SPH
- US Centers for Disease Control and Prevention



Ghana Education
Service (GES)

THANK YOU



Ghana Education Service (GES)

Vaccination record checking at school entry in China

10 May 2023

Ye Jiakai

Associate Researcher,
China CDC,NIP

Yu Wenzhou

Chief Doctor,
China CDC,NIP

Lance Rodewald,

Senior Consultant,
China CDC,NIP

Li Li

Associate Researcher,
China CDC,NIP

Outline

Background

Current status

Experience

Effectiveness

Difficulties

Next steps



Background

Related laws and regulations

Project support

New rules



Relevant laws and regulations

Year	Organization	Name of the regulation	Working status
1984	MOH, MOE, China Women's Federation	Announcement of school entry checking policy (trial edition)	Required children to provide vaccination certificates when entering school. Those who do not have a vaccination certificate or have not been inoculated must be caught up on vaccination, otherwise they are not allowed to enter school. But most areas did not implement the policy, or the implementation was not very good
1989	National People's Congress	Communicable disease prevention law	
1991	MOH	The implementation guideline of China Communicable disease prevention act-Article 12	
2005	State Council	Regulation on the administration of vaccine circulation and vaccination- Article 27	
2005	MOH, MOE	Notification about school entry checking program	Gradually improved
2010	MOH, MOE	Health care management measures for nurseries and kindergartens-Article 15, item 6	
2015	China CDC	Technical guideline for school entry vaccination checking program (trial edition)	
2016	State Council	Regulation on the administration of vaccine circulation and vaccination (revised)	All provinces had documents or plans for school entry checking, and this work had been promoted nationwide. There were great differences in the organization, cooperation between departments and checking procedures. Implementation was imbalanced, which affected the checking results.
2019	National People's Congress	Vaccine Management Law-Article 47,48	
2021	MOH, MOE	Documents for school entry vaccination checking	Responsibilities of relevant departments were clarified

Project support

We received support from WHO in 2014

- Areas: Beijing, Jiangxi, and Ningxia province, and Dalian city
- Investigated the current status of school checking in 2014
- Explored methods to evaluate the vaccination rate of children enrolled in school and the implementation effect of school checking
- Made a nationally unified implementation plan for school vaccination checking, which provided the basis for the 《Technical Guidelines for School Entry Vaccination Checking Program (trial edition)》 issued by China CDC in 2015 and the documents for school entry vaccination checking issued by MOH and MOE in 2021

- In the process of revising the documents for school entry vaccination checking
- Supported by WHO



Our investigation in Enshi, Hubei in 2017



New rules

《Vaccine Management Law》

- The format of vaccination certificates is stipulated by the National Health Commission and unified throughout the country
- The National Health Commission and the Ministry of Education jointly formulated the record checking methods



Documents for school entry vaccination checking

- Clarified the responsibilities of health authorities, education authorities, CDCs, kindergartens, schools, and vaccination units
- Specific rules were made for the notification of checking students, assessment of the status of vaccination, catch-up vaccination, and data management and reporting
- Encouraged clinics to provide services for checking by means of information technology
- After the start of a new semester, the checking should be completed within **1 month**. Relevant materials should be placed into student health records and school health materials

Assessments of vaccination status and catch-up vaccination were integrated into vaccination certificates

入托、入学预防接种完成情况评估（一） Evaluation on Immunization Status for School Entry

<p>评估结果: Check of vaccination status</p> <p><input type="checkbox"/> 已完成入托/入学前免疫规划疫苗接种 All NIP vaccines have been received</p> <p><input type="checkbox"/> 未完成入托/入学前免疫规划疫苗接种 (需补种疫苗详见补种通知单) One or more NIP vaccines have not been received (For information on vaccines needed, refer to the vaccination clinic)</p> <p>日期: _____ 单位(盖章): _____ Date: _____ Verified by(Stamp): _____</p>	<p>评估结果: Check of vaccination status</p> <p><input type="checkbox"/> 已完成入托/入学前免疫规划疫苗接种 All NIP vaccines have been received</p> <p><input type="checkbox"/> 未完成入托/入学前免疫规划疫苗接种 (需补种疫苗详见补种通知单) One or more NIP vaccines have not been received (For information on vaccines needed, refer to the vaccination clinic)</p> <p>日期: _____ 单位(盖章): _____ Date: _____ Verified by(Stamp): _____</p>
<p>补种评估(Recheck of vaccination status):</p> <p><input type="checkbox"/> 已完成补种 All NIP vaccines received</p> <p>日期: _____ 单位(盖章): _____ Date: _____ Verified by(Stamp): _____</p>	<p>补种评估(Recheck of vaccination status):</p> <p><input type="checkbox"/> 已完成补种 All NIP vaccines received</p> <p>日期: _____ 单位(盖章): _____ Date: _____ Verified by(Stamp): _____</p>

Current status

Students and
units

Vaccines

Time

Process

Reporting



Checking students and units

Units for checking

- Nursery, kindergarten and primary school
- Local authorities can expand the scope as needed

Provinces Including high school: Beijing, Shandong, Guangdong

Students

- All children newly enrolled; all transferred to school

***For the first time, Nurseries were included in the checking. Nurseries are institutions providing care services for children under 3 years old**



Checking Vaccines

- **National Immunization Program (NIP) Vaccines:**
 - BCG、Polio、HepB、DTaP、MMR、MPV-A、MPV-AC、JEV、HepA、DT
- **Non-NIP vaccines that included an NIP vaccine component**
- **Provinces can increase the types of checking vaccines according to its local immunization program and immunization procedures**



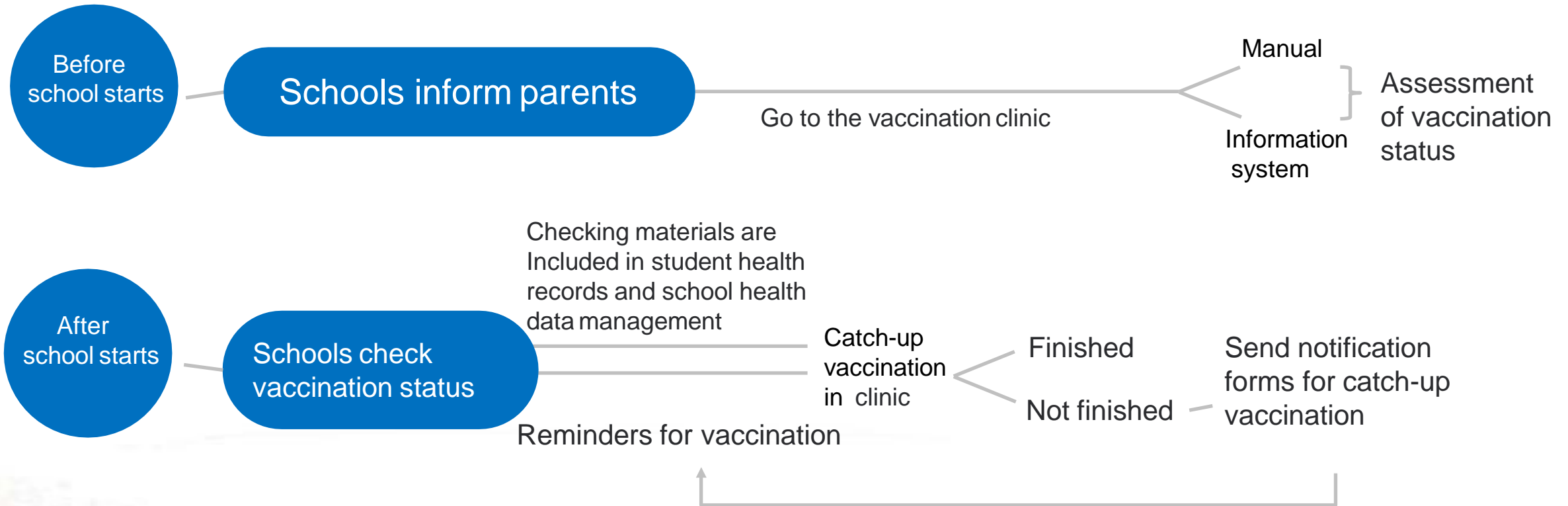
Checking Time

Spring and fall of each year

Local governments can determine the specific frequency and time of checking according to the needs of their local work

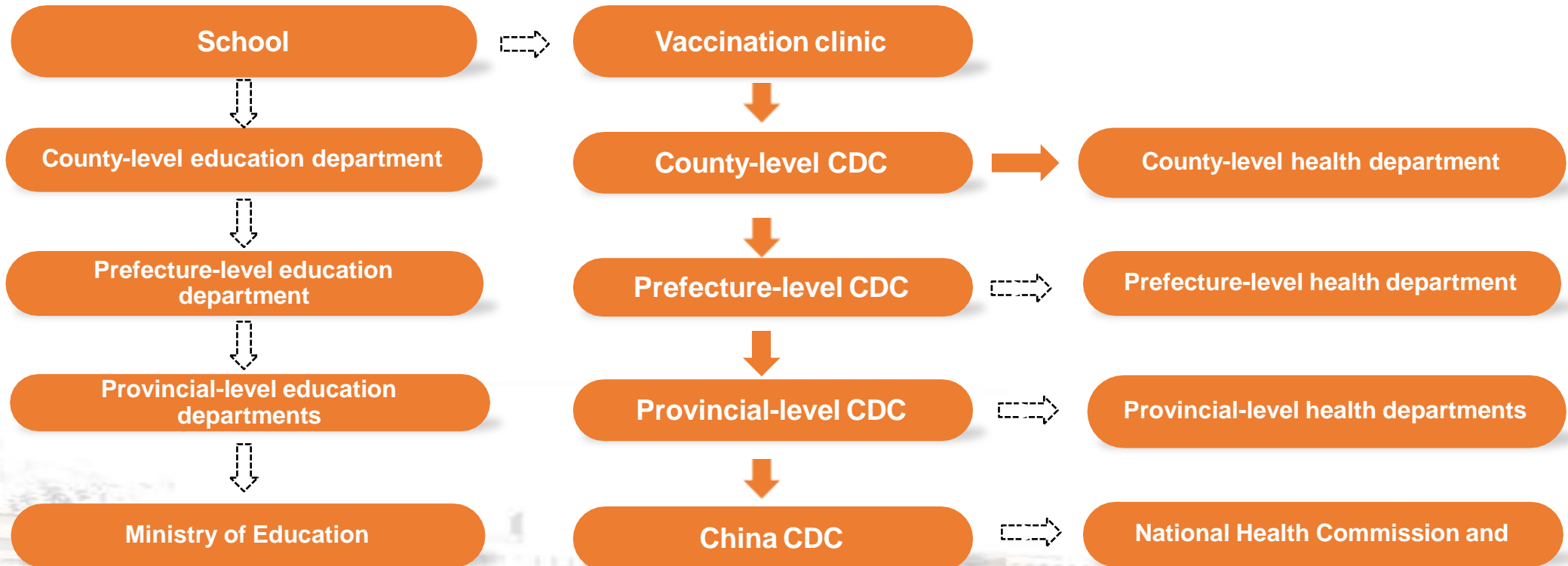


Checking process



Aggregate information reporting

School and vaccination clinic record checking information is aggregated and reported through the education system, the CDC system, and the health departments at all levels.



Experiences

Using
information
technology

In-depth
publicity

Organizing
training in time

Strengthening
supervision



Using **immunization information system(IIS)** to simplify the checking process

- Nearly 20 provinces used **IIS** to check the status of vaccination for children entering school
- More than 10 provinces have enabled parents to conduct assessment through mobile phone apps by themselves



➤ **In-depth publicity**

- Publicizing the school checking to parents and popularize the knowledge of vaccination through radio and TV media, WeChat groups, “4.25 Child Vaccination Day” and many other ways

➤ **Training**

- Local health and education departments formulate specific training plans, organize and carry out training on the school vaccination checking

➤ **Strengthening supervision**

- In some areas, health and education departments organized touring supervision to improve the work, in order to understand the school vaccination checking status in each region

Effectiveness

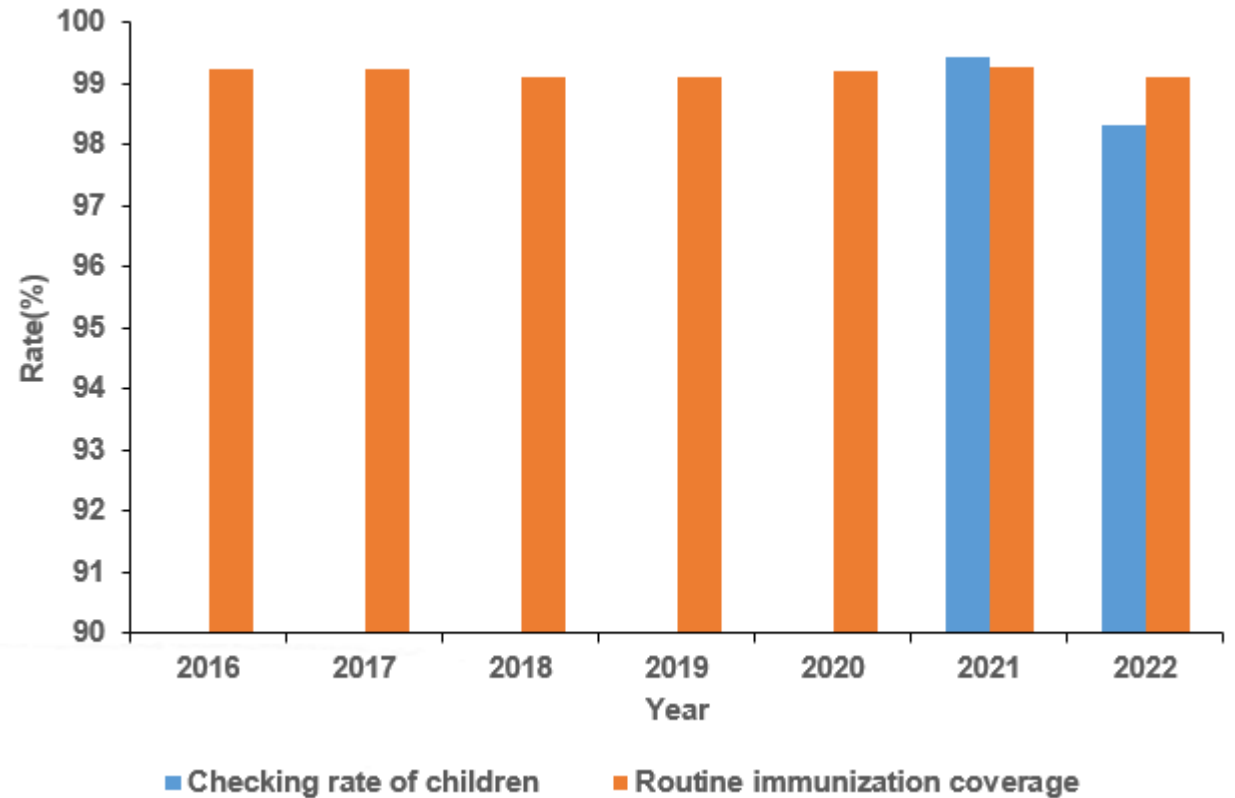
**Routine immunization
coverage**

**Emergencies of infectious
diseases**



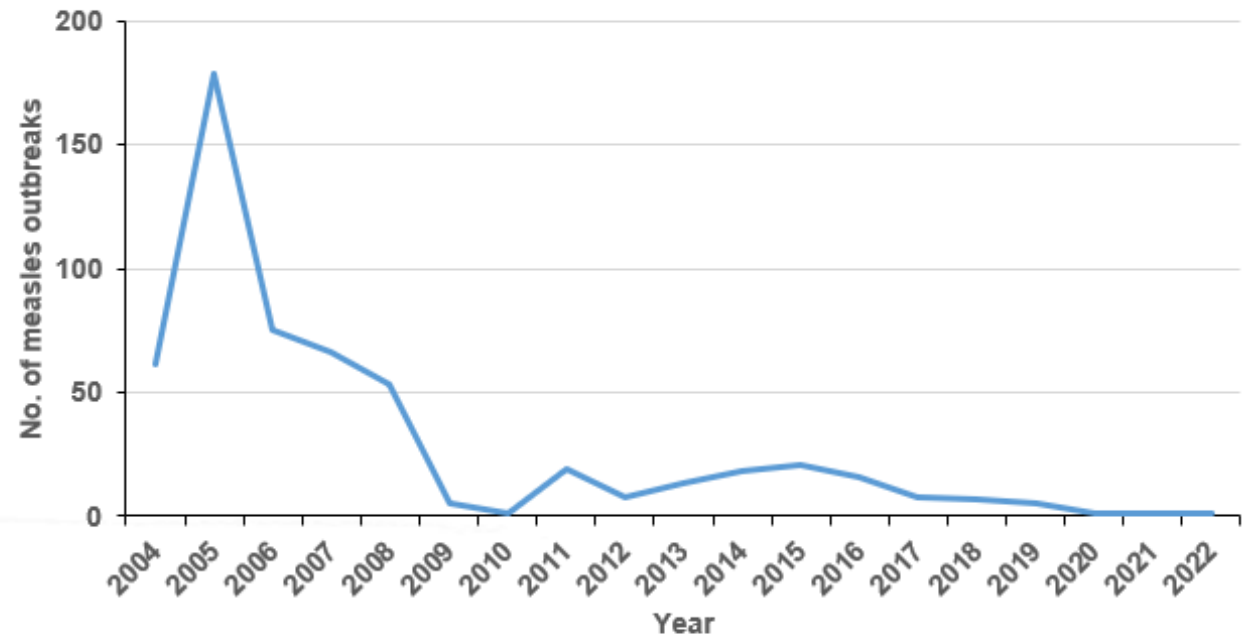
Routine immunization coverage is maintained at a high level in recent years

- Since 2021, we began to collect national checking reports, which show that the checking rate of children remained at a high level of more than 98%
- The checking rate increased further after the 2019 Vaccine Management Law was enacted



Vaccines against infectious diseases have been decreasing year by year

- Take measles for example
- Most measles emergencies occur in schools
- From the figure we can see that the number of measles emergency have been decreasing year by year



Data source: Public Health Emergency Reporting Information System



Difficulties

- **The mechanisms of vaccination certificate checking in some areas still needs to be improved**
- **It can be difficult to obtain some migrant children's vaccination records**
 - Many migrant children are missing vaccination information, and some do not have vaccination certificates
 - Original place of residence could not verify their vaccination history which made the work extremely difficult
- **Knowledge about catch-up vaccination protocols is not always consistent**
 - Some areas have a strict assessment criteria, children who were older than the starting age of vaccination and did not reach the age of catch-up vaccination are included in the target group, resulting in the low rate of catch-up vaccination

Next steps

- Continue to strengthen communication and coordination between the health and education administrations, and improve the degree of emphasis of the education administration attaches to this work
- Strengthen training
- Encourage the optimization of the checking process through information technology
- Formulate a reference standard for the evaluation of catch-up vaccination, to unify the understanding of catch-up vaccination in different places



Thank You



SP4

LIFE COURSE AND INTEGRATION



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