



Immunization Calculation Engine (ICE) WorldVista Meeting

February 27, 2026

Agenda

Item
1. The Immunization Calculation Engine “default immunization schedule”
2. Discussion: Evolving Immunization Landscape <ul style="list-style-type: none"><i>a. How is your organization reacting to the latest HHS/CDC/ACIP changes?</i><i>b. Are you considering adopting any of the recent HHS/CDC/ACIP updates?</i><i>c. What are implications and suggestions for ICE?</i>
3. Discussion: ICE Development Progress and Roadmap (time permitting) <ul style="list-style-type: none"><i>a. What topics and/or functionality are of interest to your organization?</i><i>b. What topics would you like to discuss in upcoming meetings?</i>
4. Wrap-Up and Close

Introduction: The “default immunization schedule”

*The ICE default immunization schedule follows best-evidence-based clinical guidelines, including those issued by the ACIP, the CDC, and professional medical societies.**

The schedule is further informed by the CDC CDSi project resources and input from ICE users and other immunization experts.

**E.g., AAFP, AAP, ACOG, and ACP*

- Issues: competing medical guidelines; potentially varying schedule requirements by different jurisdictions or organizations across the U.S.

Evolving Immunization Landscape

Recent Federal Updates

- **December 2025:** ACIP vote and CDC adoption, rescission of the universal hepatitis B birth dose recommendation
- **January 2026:** HHS Decision Memorandum and new HHS Child Immunization Schedule
 - RSV, meningococcal ACWY: routine to risk-based
 - Hepatitis A, hepatitis B: routine to SCDM and risk-based
 - Rotavirus, influenza: routine to SCDM
 - Meningococcal B: SCDM to risk-based
 - HPV: routine 2 or 3-doses to routine 1-dose

Medical Society and Health Organizations Response

- Medical and health organizations have rejected the HHS/ACIP/CDC changes
- Professional organizations highlighting recommended schedules and vaccine-specific recommendations/statements
 - **American Academy of Pediatrics**
 - 2026 Recommended Child and Adolescent Immunization Schedule (0 - 18y)
 - Endorsed by 12 medical and health organizations, including AAFP, ACOG, AMA, and IDSA, and others
 - **American Academy of Family Physicians:** 2025 Recommended Schedules for Children/Adolescents (0-18y) and Adults (19+)
- Vaccine Integrity Project: comprehensive evidence reviews

Jurisdictional Response

- [Kaiser Family Foundation](#), as of January 22, 2026
 - The number of states rejecting federal immunization changes increased from September 2025 to today
 - A majority of states (28) now depart from federal guidelines for some or all childhood vaccines
 - Almost all of these states (25 of 28) have announced that they will do so for all childhood vaccines
 - Most of these states have indicated that they will follow the recommendations of the AAP

Divergent Recommendations

<i>Vaccine Group</i>	<i>Medical Society / Previous ACIP</i>	<i>HHS/CDC/ACIP</i>
RSV	Routine	Risk-based
Meningococcal ACWY	Routine	Risk-based
Hepatitis A	Routine	SCDM and risk-based
Hepatitis B	Routine	SCDM and risk-based
Rotavirus	Routine	SCDM
COVID-19	Routine; SCDM for select population	SCDM
Influenza	Routine	SCDM
HPV	Routine: 2 or 3 doses	Routine: 1 dose
Meningococcal B	SCDM	Risk-based

ICE Response

- **No logic changes to the ICE default schedule based on recent federal updates**
- In progress
 - Improve configurability
 - Ability to include/exclude vaccine groups of interest
 - Ability to configure series and season parameters via YAML (configuration layer) instead of via source code edits
 - Ability to create and configure different schedules
 - Improve traceability between ICE output, ICE rules, and clinical guidelines
- Continued discussion of and technical investigation into options to support potential varied user needs

ICE Technical Development Progress and Roadmap

Recent Accomplishments

- Updated the ICE service to latest versions of Java and Drools
- Added support for operating under both Tomcat and Spring Boot (previously, just Tomcat)
- Added new configuration capabilities:
 - Include or exclude vaccine groups from evaluation/forecasting
 - Runtime settings to modify any Series or Seasons XML value on startup (*e.g.*
 - *change recommended age for dose 1 of HPV from 11 years to 9 years;*
 - *change season start and/or end dates*)
- Added non-routine vaccine groups (Cholera, Typhoid, Yellow Fever, Japanese Encephalitis); Rabies to be added in an upcoming release
- Streamlined ICE code base and build process

New Functionality - In Progress

- A refresh of the public ICEWeb tool currently at <https://cde.hln.com/iceweb> (*Available February/March timeframe)
 - Modern UI
 - Test cases may be saved, searched, etc.
- A comprehensive, full-featured Test Case Manager
 - User indicates expected outputs; can run batches of test cases at once
- Improved support for multiple immunization schedules
- Tools for users to configure their own immunization schedules (**may be command-line, web-based, or both*)
- Native FHIR support as well as continued support for the current API / format
- More to come

ICE Logic Considerations or Requests

- Support across different types of forecast recommendations
 - Was the Routine or Catch-up schedule was used?
 - Which schedule was used in the request? (*e.g.* - “Default”, “HHS/CDC”, “AAP/AAFP”, etc.)
 - Provide more information with Shared Clinical Decision-Making
 - Patient seeks protection
- Support for High-risk Series and Contraindications
- Others?

Open Forum

- ICE opportunities and future directions
 - Forecasting for shared clinical decision making recommendations (*i.e.*, dates with an ICE Conditional recommendation)
 - Adding support for high-risk recommendations based on additional patient factors
 - FHIR-based interface
 - CDS Hooks interface
- What other topics are of interest in relation to the ICE Default Immunization Schedule? (clinical, programmatic/operational, and/or technical perspectives welcome)

Wrap-up and Close

Thank You!

Please reach out to us at ice@hln.com with any questions or comments.

We look forward to continued collaboration.