



AIRA
AMERICAN IMMUNIZATION
REGISTRY ASSOCIATION

Discovery Session

IIS 101:

Build Your Foundation
Refresh Your Knowledge

April 6, 2026 | 4:00 p.m. ET



Today's Presenters

- **Rebecca Coyle, MEd**, Executive Director, AIRA
- **Mary Beth Kurilo, MPH, MSW**, Senior Director of Health Informatics, AIRA



Overview



Foundational Knowledge

Definition and core functionalities of an IIS



Stakeholder Value

Benefits for programs, providers, individuals, and public health



Future Outlook

The future evolution and direction of IIS.



Public Health Integration

How IIS operates within the broader public health landscape



AIRA Support

How AIRA supports IIS, and the role of standards and measurement.



What is an IIS?

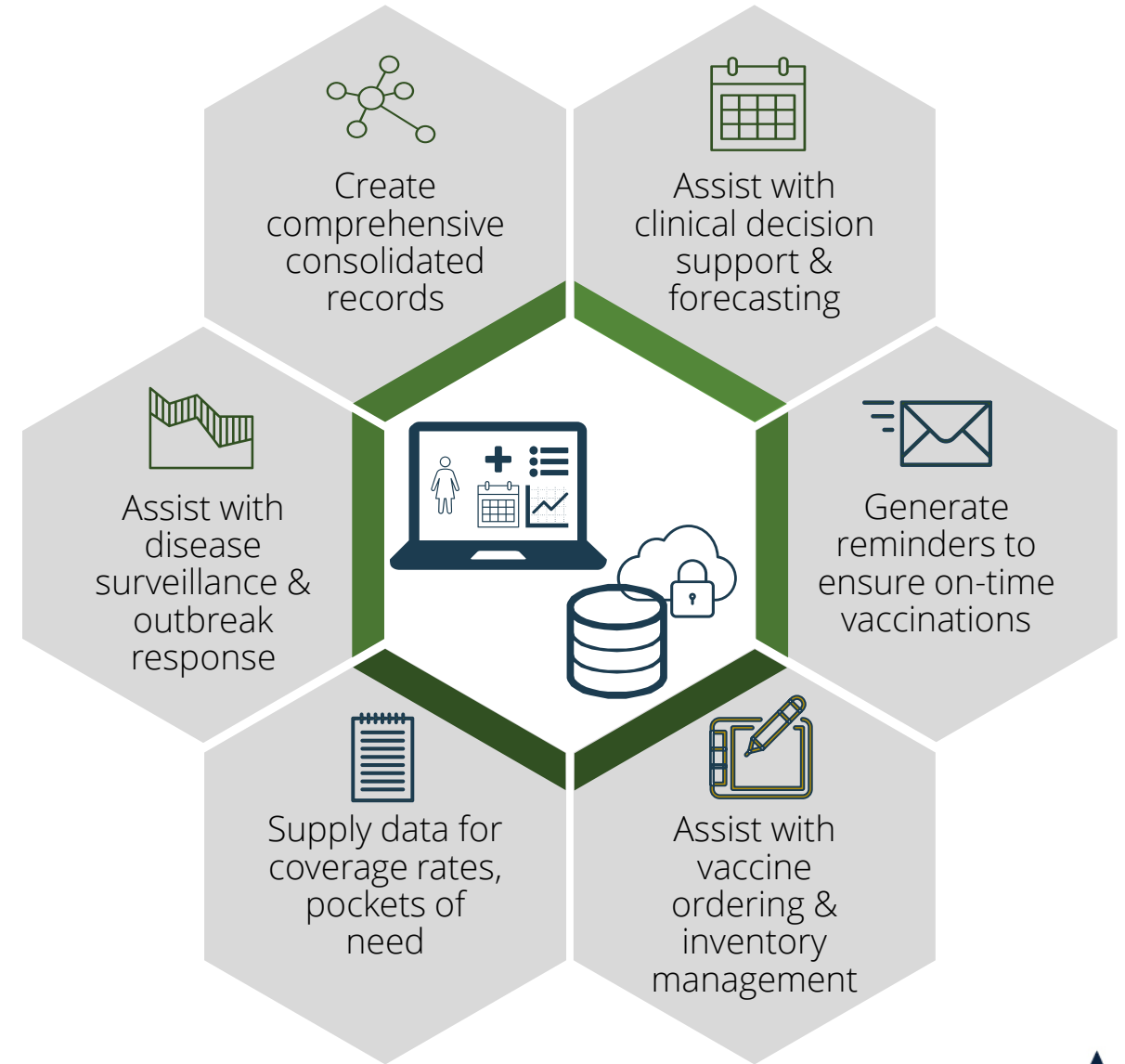


IIS are...

- Confidential, population-based systems
- Collects and consolidates immunization data across providers
- Creates a lifespan record (not just pediatric)

Purpose

- Support clinical decisions at the point of care
- Support the functions of immunization programs





Core Functions

Include

- Clinical decision support (CDS)
- Forecasting
- Coverage assessment
- Data exchange



Every state operates an IIS



IIS are also located in cities:

- New York City
- Philadelphia
- Washington D.C.

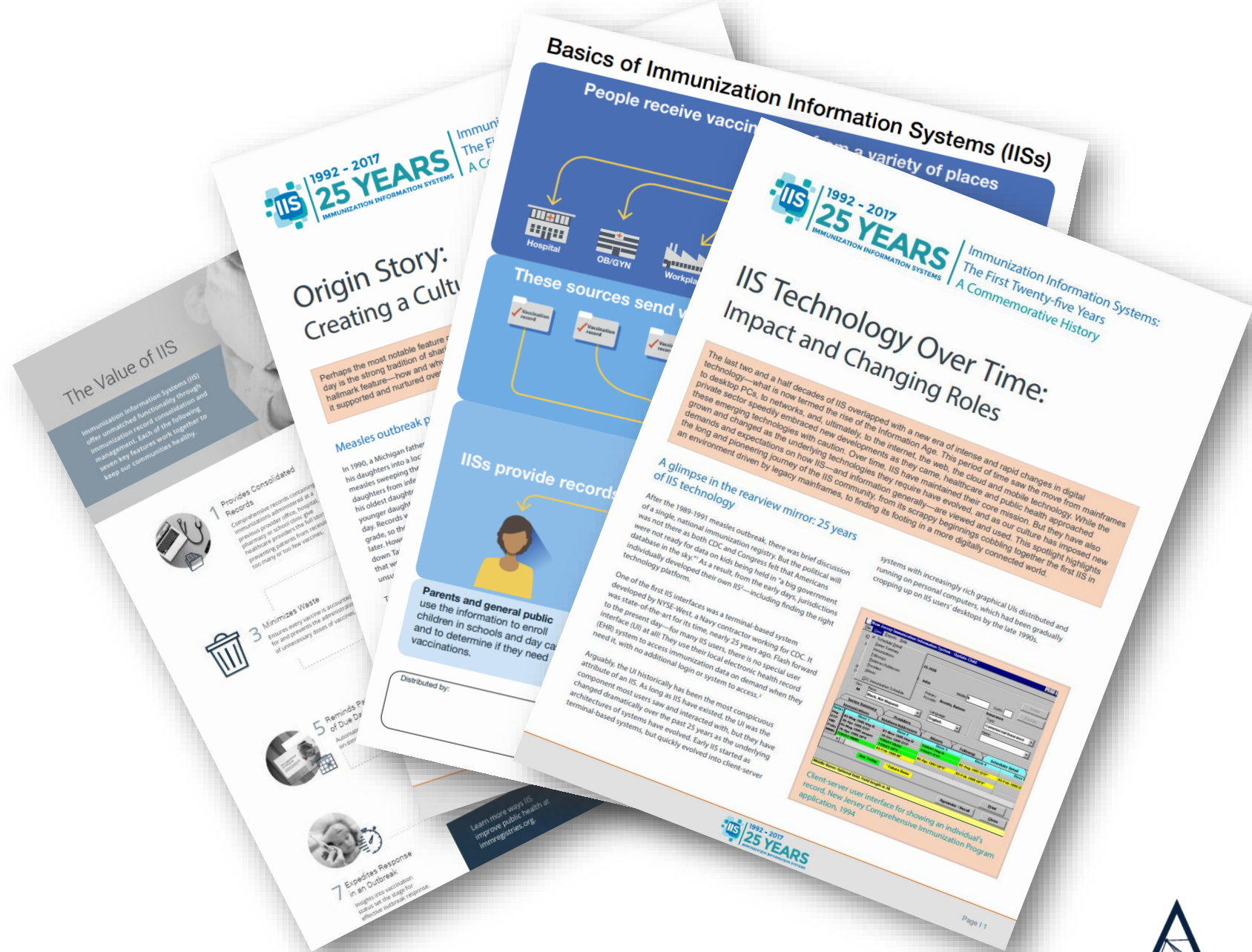
And territories/freely associated states:

- American Samoa
- Guam
- Marshall Islands
- Micronesia
- North Mariana Islands
- Palau
- Puerto Rico
- U.S. Virgin Islands



History of IIS

IIS today represent nearly 30 years of development



IIS as Part of the Public Health Ecosystem



IIS Within the Public Health Landscape

- Connects providers, pharmacies, public health, schools, and HIEs
- Enable secure, real-time data exchange
- A shared source of truth for consolidated records
- Support coordinated care and public health action



Data Sources



Healthcare Providers



Pharmacies



Hospitals



Long Term Care
Public Health,
Occupational
Health, Urgent
Care, etc.

Most use
electronic
systems

Sources send & receive
vaccination records

Healthcare Providers

Use information to see
which vaccinations their
patients have had and
may need

State and Local Public Health Authorities

Use data to develop programs to increase vaccination coverage, decrease harm from VPDs (e.g., manage outbreak response), manage vaccine, etc.



IIS-IIS Exchange Automated send & receive
data to complete vaccination records

Jurisdictional Immunization
Information System (IIS) or
Registry



IIS consolidates records from
multiple sources

De-identified
records

Identified
records

Parents, Patients, and General Public

Use records to enroll children in schools and daycare and determine when they need vaccinations. (e.g., through a consumer access portal)

<**95%** of data
comes from
data
exchange

Federal Government

(e.g., CDC) uses data
to assess vaccination
coverage rates and
vaccine inventory

Health Payers

request data in bulk
to assess their
member population
for HEDIS, Quality
Measures, etc.

IIS as Infrastructure

Like essential infrastructure, IIS enable:

- **Coordination Across Systems**
- **Rapid Response** (outbreaks, vaccination campaigns, and other public health emergencies)
- **Policy Implementation**

Without robust IIS:

- **Duplication:** Redundant data collection and efforts across different systems
- **Gaps:** Missing information leading to incomplete picture of population health
- **Inefficiencies:** Wasted resources and time due to fragmented or manual processes



The Value of IIS



Value to Healthcare Providers

- Complete Immunization History
Access consolidated vaccination records
- Support Decisions Making
Utilize accurate forecasting and historical data to make informed recommendations
- Increased Accuracy
Minimize over-vaccination and prevent missed opportunities
- Enhance Workflow Efficiency
Streamline processes and reduce manual data entry
- Meet Reporting Requirements
Facilitate compliance with essential programs like HEDIS and VFC
- Enable Reminder/Recall
Support reminder/recall and population health initiatives
- Promote Interoperability
Integrate with EHRs for real-time, bi-directional data exchange



Value to Individuals & Families



Access to personal
immunization
records



Reduce missed or
duplicate
vaccinations



Documentation for
school, work, and
travel



Provide reminders
for upcoming or
overdue vaccines

Enables informed health decisions for individuals and caregivers



Value to Public Health



- Support population-level coverage tracking
- Identify gaps and disparities
Pinpoint underserved populations to address inequities
- Support outbreak responses and surveillance
Provide timely data
- Enable program evaluation and policy decisions
Offer data-driven insights to inform public health policies
- Strengthen data exchange across systems
Facilitate seamless information flow between public health and stakeholders



AIRA and the IIS Community




Who we are

AIRA /air-uh/ Noun, singular: An organization focused on the success of Immunization Information Systems (IIS)

Established in 1999 as a convening body for immunization registry programs

Our Mission promote and support the use of immunization information to ensure healthy communities.



101


AIRA 101: The Basics

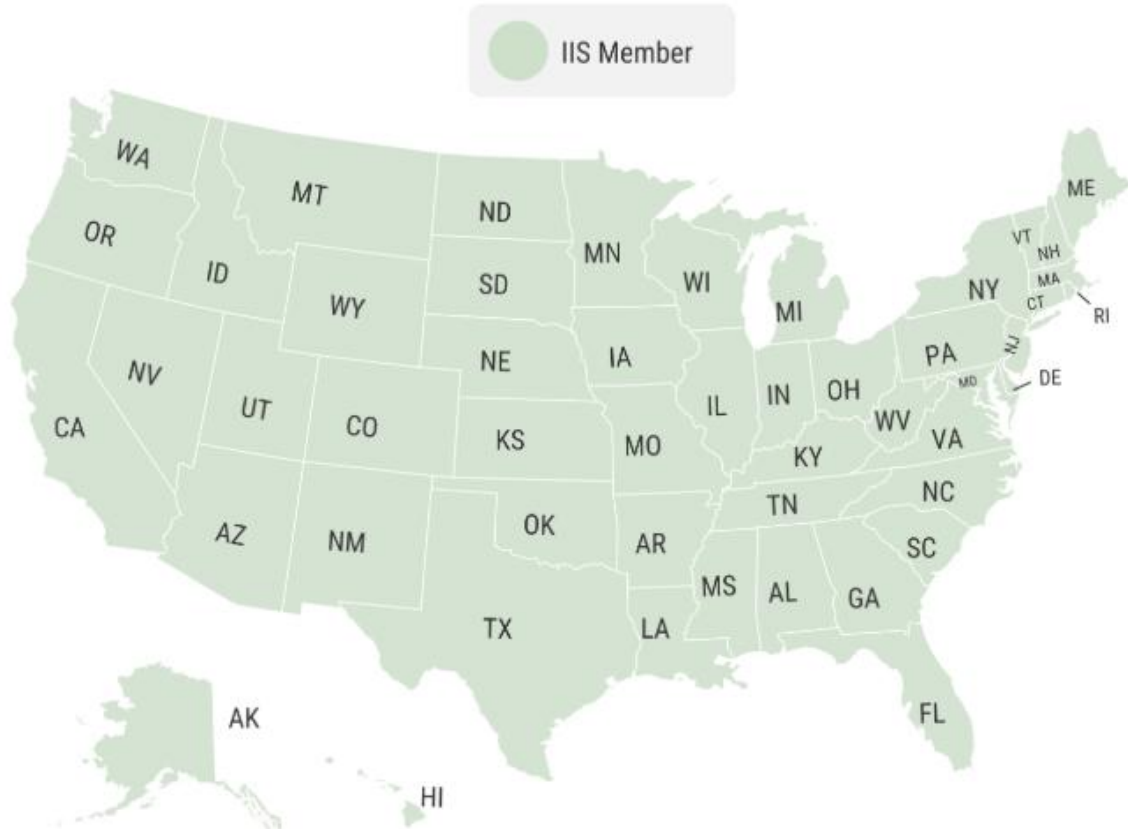
AIRA /air-uh/ Noun, singular: An organization focused on the success of Immunization Information Systems (IIS), the American Immunization Registry Association (AIRA) plays a critical role in the immunization landscape. AIRA connects stakeholders to increase the value and impact of IIS with a goal of ensuring healthy communities. The following are five ways AIRA makes the IIS community stronger:

- 1 Provides Insight for a Healthier Tomorrow**

With a vision for the future, AIRA pursues a forward-thinking approach to public health, rooted in stronger management of health information. As technology continues to advance, using IIS to the fullest will provide greater insight into public health through more accurate patient vaccination records, empowering patients, providers, and administrators to make informed decisions.
- 2 Advocates for Collaboration**

AIRA is a collective voice for the public health community on IIS. As an association of active members, AIRA advocates for the ongoing optimization and progression of IIS, collaborating with U.S. and international immunization leaders.





- U.S. Cities**
- Chicago
 - D.C.
 - Los Angeles
 - New York City
 - Philadelphia
 - San Joaquin County

- U.S. Territories**
- American Samoa
 - Guam
 - N. Mariana Islands
 - Puerto Rico
 - Micronesia
 - Marshall Islands
 - Palau
 - Virgin Islands

Members Are Central To Our Work

Officers/Executive Committee	Directors
<ul style="list-style-type: none"> • Marie Hartel • Miriam Muscoplat • David Crowell • Kim Gulliver • Steve Murchie* 	<ul style="list-style-type: none"> • Laura Barrett • Iris Cheng • Mandy Harris • Mary Woinarowicz • Mike Berry* • Shannon Coleman*
<p>*Non-IIS directors</p>	



We support our Members and Partners through

Advocacy

A collective voice for the IIS community with policy makers and partners

Developing Standards

Leads and collaborates on the development of standards and best practices

Technical Assistance

Supports the community in advancing programmatic, policy, and technical goals

Convening

Bring the community together for trainings, informational sessions, meetings, and peer-to-peer sharing

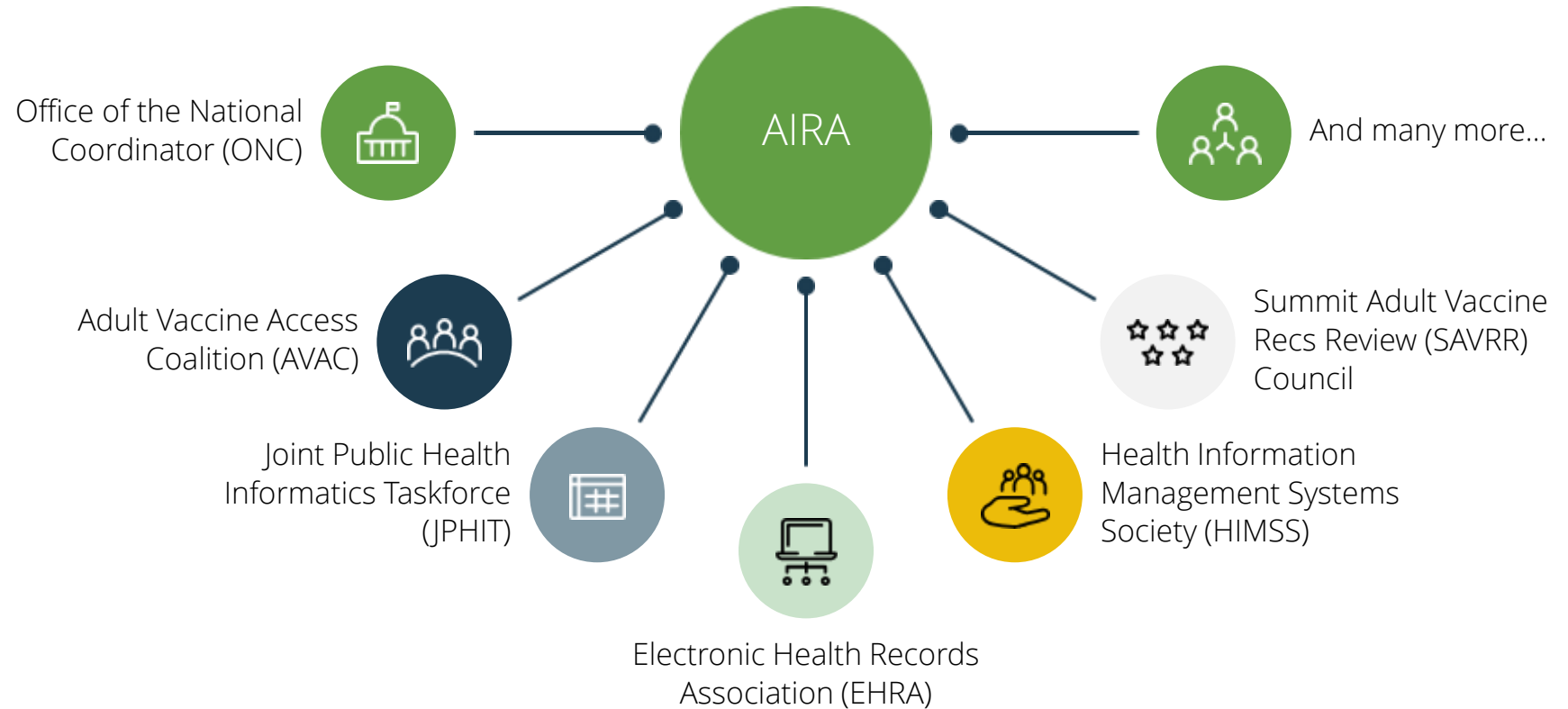
Measuring Standards Alignment

Measures the adoption and alignment with standards



Connecting IIS to the National Landscape

AIRA actively engages in advocacy and partnerships, representing the interests of its members and partners



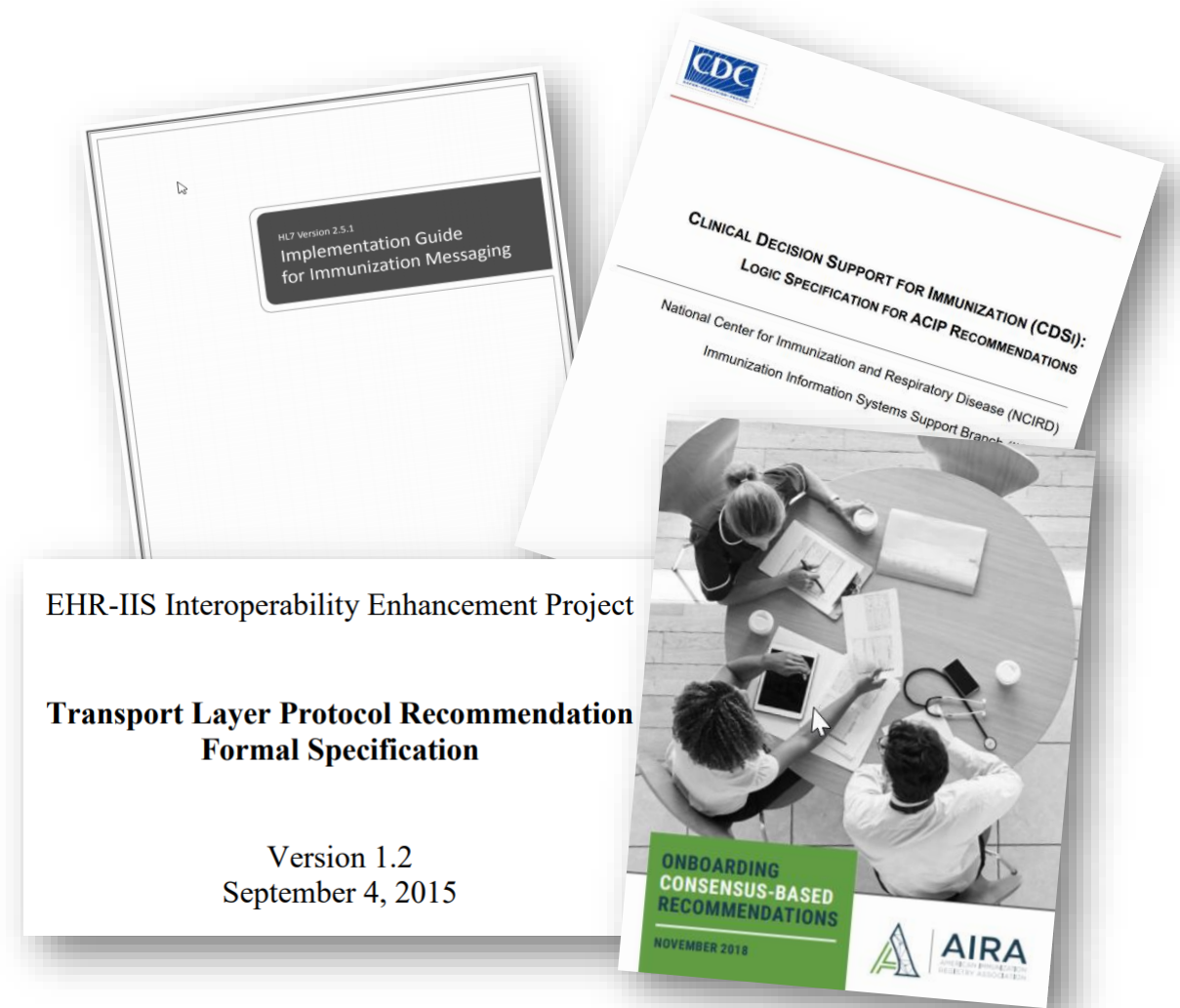
How AIRA Strengthens IIS



Standards

Standards create the foundation for

- Interoperability & data exchange
- High-quality data
- Observing trends over time
- Comparing metrics across jurisdictions
 - Especially important for surveillance and coverage assessments



How Standards are Developed

A continuous, collaborative cycle for relevant and effective standards.

- 1** Collaboration
Collaboration of CDC, AIRA, jurisdictions.
- 2** Development
Draft and define new standards or updates based on consensus.
- 3** Testing
Evaluate standards in real-world scenarios.



- 4** Refining
Making adjustments based on testing feedback and practical needs.
- 5** Updating
Formalizing changes to keep pace with evolving needs.
- 6** Implementation
Applying updated standards across systems and programs.

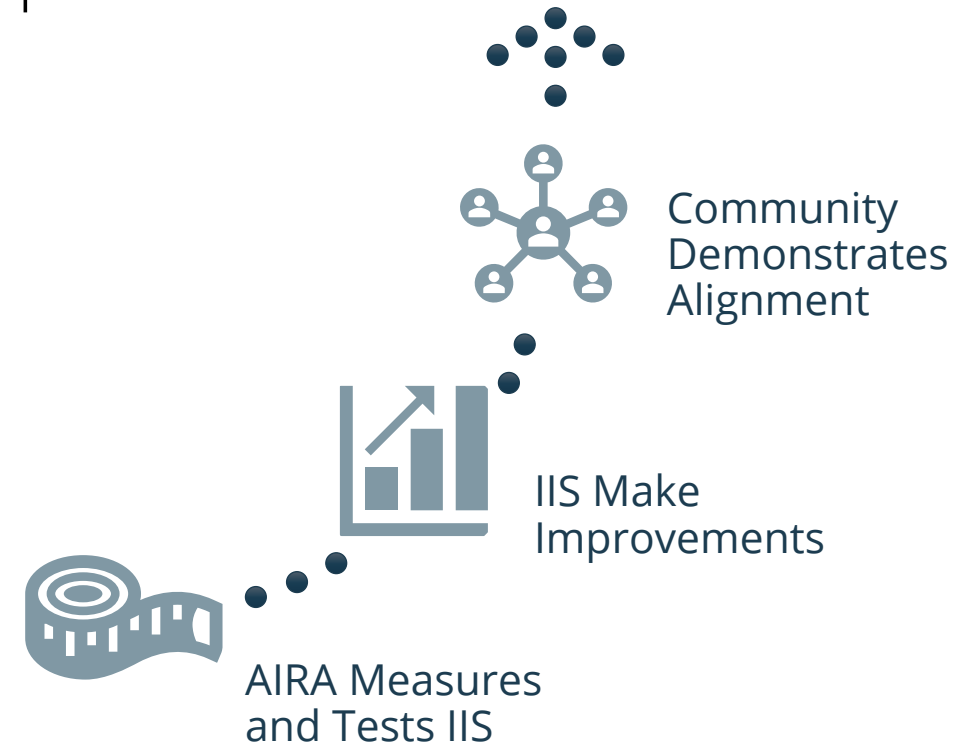


Measurement and Improvement Initiative (M&I)



M&I began in **2015** in collaboration with CDC as an effort to:

- Objectively test IIS alignment with standards
- Provide IIS with info and assistance to improve
- Demonstrate alignment across systems



M&I and the Standards Landscape



- Detecting Gaps
Identify areas where systems or data may be lacking or incomplete
- Supporting Systems
Ensure robust systems are in place to support operations and data integrity
- Maintaining Integrity
Implement measures to preserve the accuracy, quality, and consistency across all systems
- Driving Continuous Improvement
Foster a culture of ongoing enhancement and optimization



Value of Standards to IIS Programs



Improves Data
Quality

Accurate,
complete, and
reliable
immunization
records



Onboarding
Simplified

Clear
expectations for
providers,
vendors, and
partners



Supports
Interoperability

Enables
standardized
data exchange
with EHRs,
pharmacies, and
public health



Builds Trust
in Data

Confidence for
clinical care,
reporting, and
decisions



AIRA's Training & Technical Assistance



- Expert Guidance
Direct assistance for technical challenges
connections with experts
- Peer Learning
Access to a community that has faced similar issues
- Practical Resources
Tools and information
- Problem Solving
Building long-term knowledge and confidence
- Capacity Building
Strengthening individual expertise
- Personalized Support
Support for specific and unique needs

Meeting you where you are, from beginner to expert



EHR and IIS

Their Differences and How They Work Together

Only captures patient health information within the same medical organization

Captures immunization information for a broad population



Replaces written health records of medical encounters

Consolidates immunization records by reaching across health care providers and networks



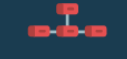
Supports provider decisions about a patient's care

Provides clinical decision support and vaccine forecasting



Automates and streamlines provider workflow

Identifies areas of need, where lower immunization rates exist



Can communicate bidirectionally with IIS

Can communicate bidirectionally with other IIS and EHRs



Better Together

Connectivity
IIS connect providers with a patient's full immunization history, regardless of prior networks or providers visited. When IIS are integrated into the EHR, access to this information becomes seamless. This connectivity eliminates the burden of retrieving and compiling fragmented information from past providers and pharmacies.

Visibility
Collecting providers to broader population data allows them visibility into the history and needs of the population they serve, ensuring the best outcomes in daily clinical decision-making. Providers also gain visibility into future needs through immunization forecasting, helping organizations more strategically plan and communicate with patients through timely vaccination reminders.

Collaboration
When IIS and EHR systems share data, patient immunization records become as complete and accurate as possible. A consolidated record that follows patients throughout their lifetime prevents the patient from receiving too many or too few vaccines in the future.

Learn more about the unique capabilities of IIS and EHR at immregistries.org.



101

IIS 101: The Basics

IIS /i-i-s/ Noun, plural: confidential, population-based, computerized databases that record all immunization doses administered by participating providers to persons residing within a given geopolitical area. The most powerful tool for managing immunization records and supporting healthier communities. The following are five ways an IIS makes the community stronger:

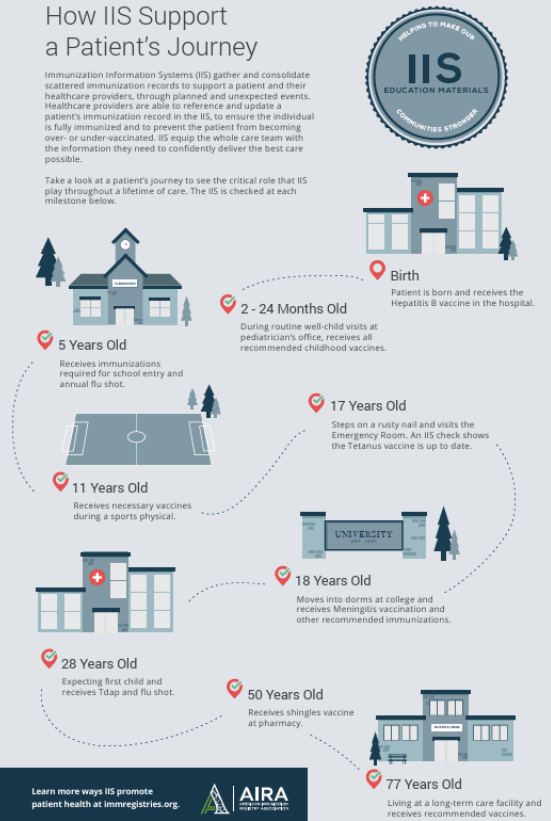
- 1 Connects People with Information**
IIS are public health systems that maintain electronic vaccination records, managed by health departments in states, territories, counties, and cities. Each of the systems collects and shares data across multiple healthcare organizations, clinics, and pharmacies in a jurisdiction. IIS provide a consolidated record of administered vaccines, connecting participating providers with patients' complete vaccination history. Access to this data is critical for maintaining accurate patient records across multiple point-of-care providers.
- 2 Promotes Comprehensive Immunization Records**
As confidential, electronic systems, IIS allows healthcare providers, pharmacies, health administrators, health insurance payers, school systems, and consumers varying levels of access to comprehensive vaccination histories. For example, IIS help public health implement



How IIS Support a Patient's Journey

Immunization Information Systems (IIS) gather and consolidate scattered immunization records to support a patient and their healthcare providers, through planned and unexpected events. Healthcare providers are able to reference and update a patient's immunization record in the IIS, to ensure the individual is fully immunized and to prevent the patient from becoming over- or under-vaccinated. IIS equip the whole care team with the information they need to confidently deliver the best care possible.

Take a look at a patient's journey to see the critical role that IIS play throughout a lifetime of care. The IIS is checked at each milestone below.



Learn more ways IIS promote patient health at immregistries.org.

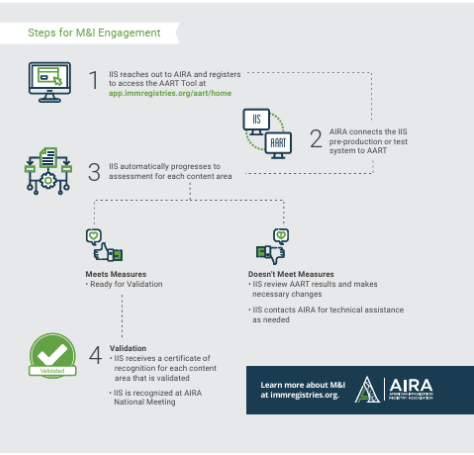


Alignment with Standards. Advancement for IIS.



What is M&I?
AIRA's Measurement and Improvement (M&I) initiative exists to provide Immunization Information Systems (IIS) with information and tools to more fully align with Functional Standards. The project connects IIS pre-production (or test) systems with AIRA testing processes in various content areas (interoperability, data quality, etc.) and shares results with the IIS via a web application called the Aggregate Analysis Reporting Tool (AART). Within AART, each IIS has access to customized quarterly reports on how their individual IIS is doing in the Discovery, Assessment, and Validation stages for each content area. Through this process, AIRA helps jurisdictions institute standards and improve their systems through technical and operational support.

What's the Value of Participating?
By bringing the IIS community together under locally implemented standards, all IIS gain credibility and become increasingly sustainable. Standardized IIS and solid data quality speed up onboarding, as well as lower provider and IS/EHR burden to connect and sustain interoperability. While participation in M&I is strong, engagement of all IIS in the process is crucial as standards need to be implemented consistently across all jurisdictions to demonstrate the progress and capability of the IIS community.



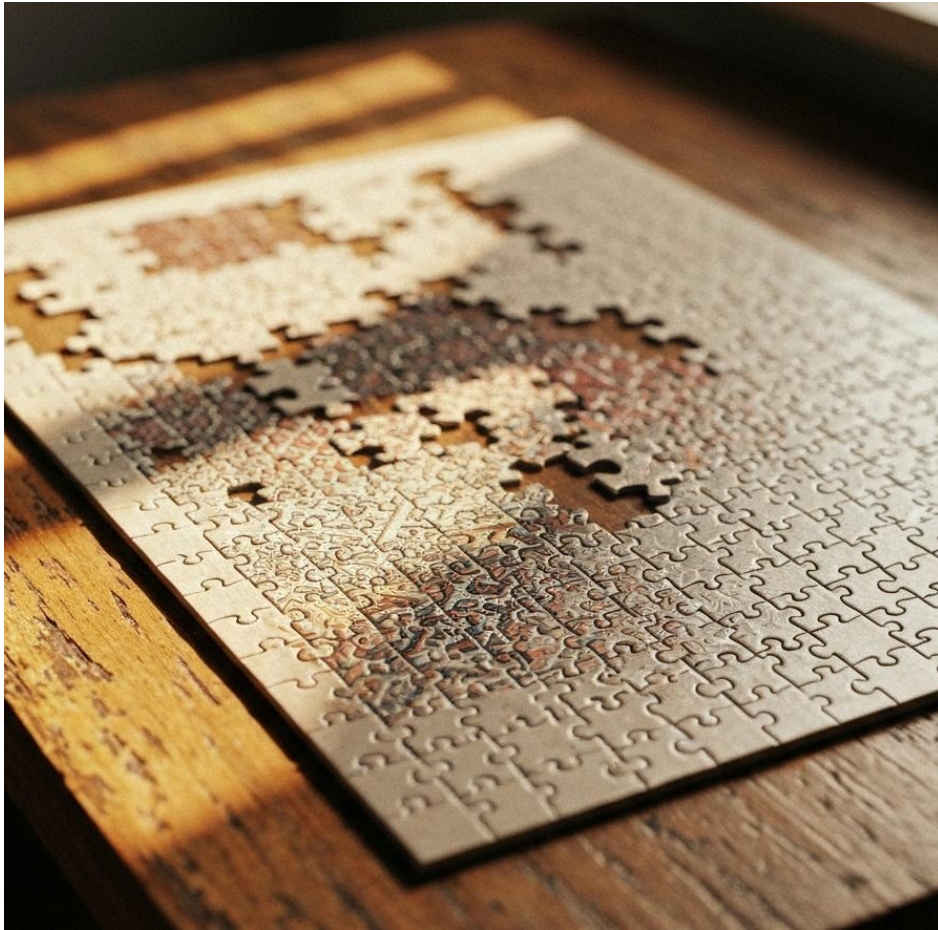
Additional Resources from our Partners



The Bigger Picture



Bringing It All Together



- Members
The focus of all AIRA's efforts
- Convening
Brings the community together
- Standards
Ensure data consistency, usability, and alignment across jurisdictions
- Measurement
Measuring progress and identifying areas for enhancement
- Training & Technical Assistance
Essential training and technical assistance to members
- Partnerships & Advocacy
Connecting partners to advance work & creating a stronger network of advocates



Looking Ahead and Call to Action



Looking Ahead



Programs and Staff can anticipate

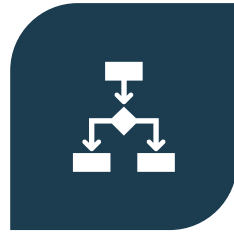
- Increased demand for real-time, high-quality data
- Greater interoperability across healthcare and public health systems
- System modernization and evolving standards (FHIR)
- Continued need to advocate for sustained investment



Key Takeaways



IIS are critical infrastructure for public health



High-quality, shared data drives better outcomes



Advocacy and partnerships keep IIS connected with nationwide priorities



Standards and Measurement support consistency and interoperability



Collaboration across the IIS community is essential



Call to Action!



Member Login Search our site...

Member Login Search our site...

- Home
- About AIRA
- Ongoing Efforts
- Events & Trainings
- Repository
- Members Only

Request Technical Assistance

AIRA Technical Assistance Requests

AIRA offers TA on many IIS topics in collaboration with CDC and other partners. For assistance accessing you or your child's immunization records, please contact your local IIS: <https://www.cdc.gov/iis/contacts-locate-records/index.html>

Category of Request *

-Select-

Title of Request *

250 character limit

- [Standards & Interoperability Steering Committee \(SISC\)](#)
SISC provides technical support and guidance to interoperability efforts.

Quick Links

- [Become an AIRA Member](#)
- [My Profile](#)
- [National Meeting](#)
- [New to AIRA & IIS](#)
- [Request TA](#)
- [Weekly Updates](#)
- [What's New](#)

Upcoming Events

- Mon Apr 6, 2026
[AIRA Discovery Session](#)
Category: Webinars
- Fri Apr 10, 2026
[Immunization Focus Group](#)
Category: Committees

- Get involved:
 - Participate in workgroups and user groups
 - Support each other across the IIS community
 - Engage with AIRA



Resources



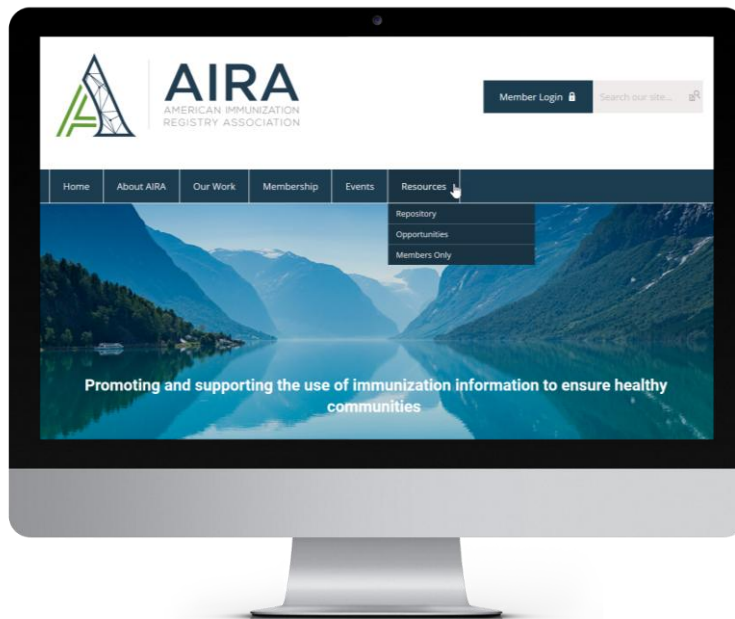


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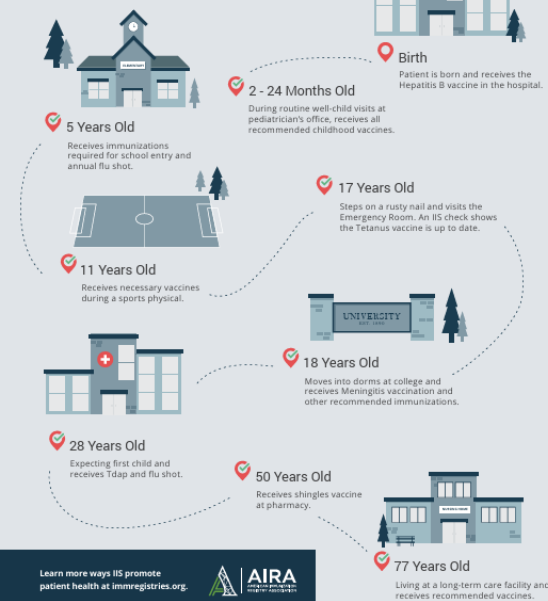
www.immregistries.org

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IIS 101 Video



Thank You!

Rebecca Coyle, MEd coyler@immregistries.org

Mary Beth Kurilo, MPH, MSW mbkurilo@immregistries.org

Thank you to our presenters,
and thanks to all of you for
joining us!

Please complete a brief evaluation survey

The next Discovery Session
will be on **May 18, 2026**

Extra Slides

Immunization Program Staffing Changes

- Programs have experienced higher rates of staff turnover
- Underscores the need for thorough cross-training and maintaining institutional knowledge

