# AIRA
## AMERICAN IMMUNIZATION REGISTRY ASSOCIATION

# SNAPSHOTS

IMMUNIZATION REGISTRY NEWS *from* AMERICAN IMMUNIZATION REGISTRY ASSOCIATION (AIRA)

## PRESIDENT'S REPORT

Dear Colleagues,

As we end the first quarter of the new year and get ready to transition into spring, I can feel the days having more sunlight and the new season dawning. The last few months have felt heavy, but as each day passes, the weight gets a bit lighter. I hope you, my colleagues across the country, feel the same sense of hope and renewal as we enter spring.

While this is an exciting time for the immunization community, there is still a lot of work to do, and the path before us may not be easy. Much of our time and efforts have been focused on the COVID-19 vaccine response and protecting the citizens of our states by assisting health care providers with vaccination campaigns. But that does not mean our day-to-day work has stopped. The articles in this edition of *SnapShots* showcase some of the ongoing work being done in the IIS community to ensure clinicians and IIS have timely access to complete and accurate immunization data and to creatively use data analytics to identify trends in IIS data.

I encourage you to carve a few minutes out of your busy schedule to read these articles and learn more about the amazing work being done by IIS programs across the country. Thank you for your continued work and dedication helping decision makers and the public understand immunizations and IIS.

Regards,
**Dave McCormick**
AIRA Board President
Director, Indiana Immunization Division
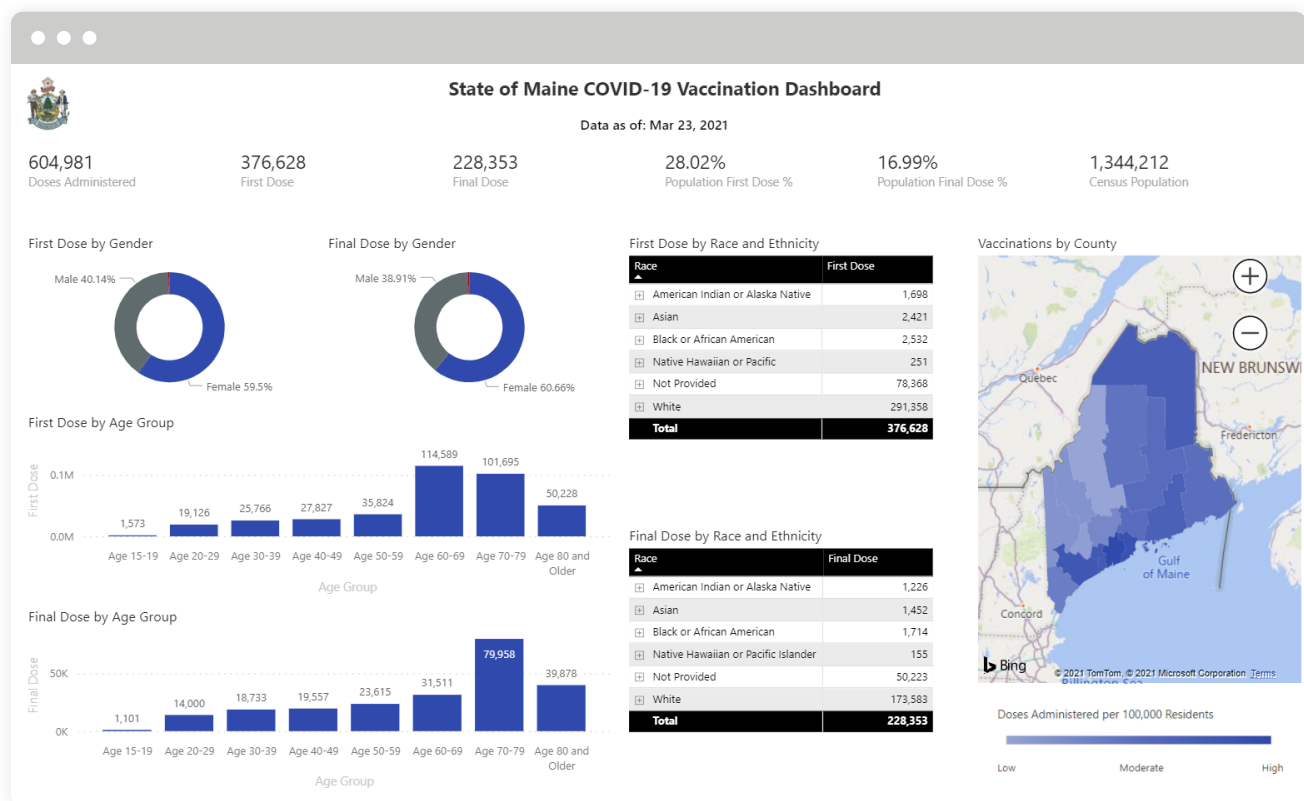Indiana State Department of Health

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Welcome to *SnapShots*, the American Immunization Registry Association's newsletter about the progress, best practices, and accomplishments of immunization information systems (IIS) across the country. We invite you to share news about your IIS. Email us at info@immregistries.org with information about a successful programmatic or technical innovation, major accomplishment, or milestone that your IIS has reached.

# IIS DATA VISUALIZATION SUCCESS IN MAINE

IIS have been a national focal point for state leadership and the public for data on the progress of the COVID-19 vaccine response. It is critical the data in IIS are reliable and in a meaningful format for the public.

In Maine, the IIS program responded to calls from the governor's office to publish its data. Working with their vendor, they were able to create interactive public-facing and internal dashboards, using PowerBI, to ensure access to the most up-to-date vaccine-related information. The public-facing dashboard is hosted on the state of Maine's primary response web page.



**State of Maine COVID-19 Vaccination Dashboard**

Data as of: Mar 23, 2021

| | | | | | |
|---|---|---|---|---|---|
| 604,981 | 376,628 | 228,353 | 28.02% | 16.99% | 1,344,212 |
| Doses Administered | First Dose | Final Dose | Population First Dose % | Population Final Dose % | Census Population |

First Dose by Gender — Male 40.14% / Female 59.5%

Final Dose by Gender — Male 38.91% / Female 60.66%

First Dose by Age Group

| Age 15-19 | Age 20-29 | Age 30-39 | Age 40-49 | Age 50-59 | Age 60-69 | Age 70-79 | Age 80 and Older |
|---|---|---|---|---|---|---|---|
| 1,573 | 19,126 | 25,766 | 27,827 | 35,824 | 114,589 | 101,695 | 50,228 |

Final Dose by Age Group

| Age 15-19 | Age 20-29 | Age 30-39 | Age 40-49 | Age 50-59 | Age 60-69 | Age 70-79 | Age 80 and Older |
|---|---|---|---|---|---|---|---|
| 1,101 | 14,000 | 18,733 | 19,557 | 23,615 | 31,511 | 79,958 | 39,878 |

First Dose by Race and Ethnicity

| Race | First Dose |
|---|---|
| American Indian or Alaska Native | 1,698 |
| Asian | 2,421 |
| Black or African American | 2,532 |
| Native Hawaiian or Pacific | 251 |
| Not Provided | 78,368 |
| White | 291,358 |
| **Total** | **376,628** |

Final Dose by Race and Ethnicity

| Race | Final Dose |
|---|---|
| American Indian or Alaska Native | 1,226 |
| Asian | 1,452 |
| Black or African American | 1,714 |
| Native Hawaiian or Pacific Islander | 155 |
| Not Provided | 50,223 |
| White | 173,583 |
| **Total** | **228,353** |

Vaccinations by County

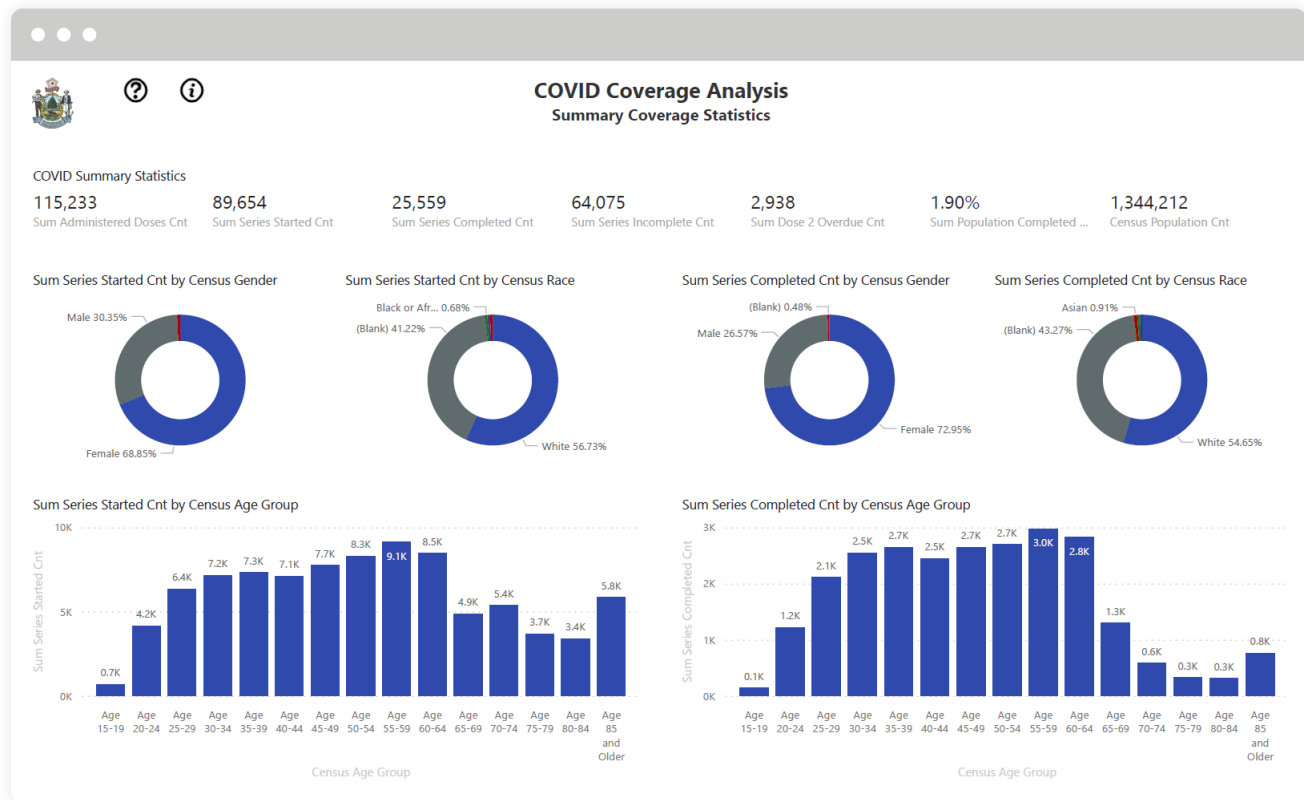Doses Administered per 100,000 Residents — Low / Moderate / High

The dashboard includes a high-level summary with a variety of different state benchmarks. Citizens can drill down to the county level to get a more accurate picture of their community. Key decision makers are able to measure, monitor, and analyze trends in real time because the data are updated daily.
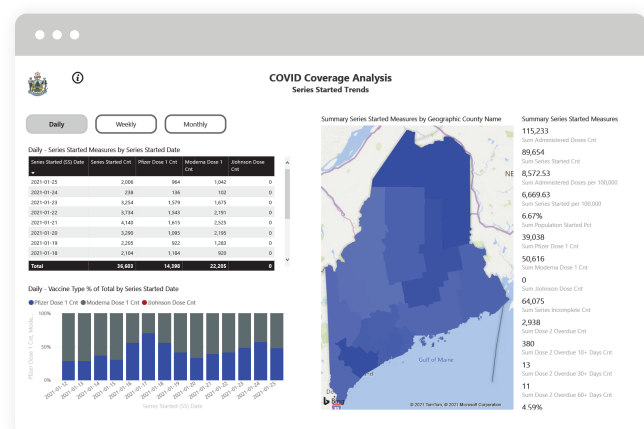
# IIS DATA VISUALIZATION SUCCESS IN MAINE *Continued from page 2*

Additionally, a series of internal data views for the immunization program were created. Currently, the internal reporting focuses on Summary Coverage Statistics as well as Series Started and Series Completed Trends. The Summary Coverage Statistics report focuses on the administration of COVID-19 vaccines to the various patient demographic populations with comparisons to recent census data as shown below.
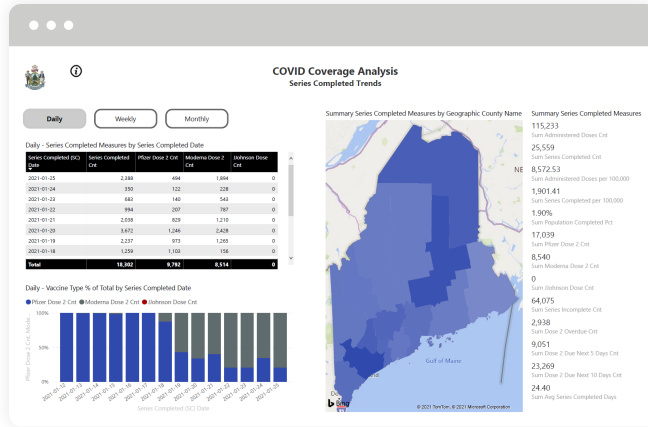


Maine is also focused on trends for starting and completing COVID-19 vaccines. The Series Started Trends shown in the image to the right focus on daily, weekly, and monthly trends in the administration of COVID-19 vaccines. This report gives daily, weekly, and monthly trends by vaccine type and geographic summarization used to identify county geographic areas in the state where vaccine distribution is deficient when compared to the census population. It contains unique features to identify Dose 2 Overdue issues.

# IIS DATA VISUALIZATION SUCCESS IN MAINE *Continued from page 3*



The Series Completed Trends report focuses on the completion of the COVID-19 vaccine series. This report gives daily, weekly, and monthly trends by vaccine type (Pfizer, Moderna, and placeholders for Janssen, AstraZeneca, and others) and geographic summarization used to identify county geographic areas in the state where vaccination completion is deficient when compared to the census population.

As dynamics shift, these tools can be used to support immunization activity and provide quick response and updates. For example, being able to accommodate for single dose versus two doses based just on the structure of the system supporting the data allows for quick response to shifting needs as the nation navigates this next stage of COVID-19 vaccine response.

Work currently underway includes distribution and inventory reporting that will help clarify throughput and capacity, facilitate transfers, and minimize wastage. The road map forward plans predictive analytics combining disease surveillance data and immunization data. This includes reports for disease outbreak using geographic mapping overlays and side-by-side comparisons of coverage, case, and hospitalization rates. Vaccine efficacy reports are also planned, with analysis-over-time series for vaccine type and manufacturers by age, race, ethnicity, and gender, as well as efficacy on adherence to the recommended schedule and efficacy against new virus variants.

*- Submitted by **Danielle Sherwood,** Maine CDC,*
*and **Kevin Lampi,** Gainwell Technologies*

# NEW AND EVOLVING TOOLS AVAILABLE FOR IIS PROJECT MANAGEMENT

IIS programs are often tasked with large and complex projects, from platform migration to new feature rollouts. IIS managers and other key IIS staff may find themselves needing to engage in active project management, change management, and working through the software development lifecycle.

An article in the December edition of *SnapShots* detailed how CDC funded the Public Health Informatics Institute (PHII) to give technical assistance to programs undergoing system migrations and how a resulting dedicated learning community composed of 16 immunization programs and 40+ staff representatives helped develop guidance and interactive tools.

PHII is pleased to announce the IIS Migration Toolkit that came from this work. It has continued to grow and evolve, and it now features an additional instructional video for how to navigate the more than 40 interactive tools and templates on large-scale project management. The toolkit includes a set of guidance and tools from PHII and CDC on transitioning to a new IIS technology platform or module or other large-scale projects. The toolkit guides users through the process of determining whether a system migration or module adoption is the right move for a specific IIS and then gives easy-to-follow navigation through the five phases of a migration project. Toolkit users are walked through each phase in order and given a checklist of comprehensive exit criteria in each phase to ensure they're ready to move forward to the next. The tools are also presented by work domain categories (including staffing, testing, and training) for ease of use.

> **The toolkit includes a set of guidance and tools from PHII and CDC on transitioning to a new IIS technology platform or module or other large-scale projects.**

Many of these tools are also available on the IIS Operations Tools web page, which is intended to serve as a guide for day-to-day operations of running an IIS. This set of tools empowers IIS staff to navigate the various processes involved in managing and maintaining a well-functioning IIS. Staff can quickly access tools to support the management of projects, stakeholder communication and change management, staffing and assignment of resources, training, and more.

The expertise of and lessons learned by the IIS Migrations/Transitions Learning Community was foundational to building these resources. Project management, change management, and system development lifecycle best practices are brought to bear in guidance and adaptable tools for program implementation.

# NEW AND EVOLVING TOOLS AVAILABLE FOR IIS PROJECT MANAGEMENT *Continued from page 5*

**PHII is grateful for the hard work and thoughtful contributions of the IIS Migration/Transitions Learning Community, which included representatives from the following IIS programs:**

- California
- Connecticut
- Hawaii
- Illinois
- Missouri
- Montana
- Nebraska
- New Hampshire

- New Jersey
- Oklahoma
- Pennsylvania
- Puerto Rico
- San Antonio
- South Carolina
- Virginia
- Washington, D.C.

*- **Submitted by Piper Hale,** PHII*

# NATIONAL, MULTI-STAKEHOLDER IMMUNIZATION INTEGRATION PROGRAM (IIP) COLLABORATIVE ENCOURAGES ADOPTION OF COMMON STANDARD FOR TRANSPORT OF IMMUNIZATION MESSAGES

At the end of 2020, the HIMSS Immunization Integration Program (IIP) Collaborative, composed of leaders representing clinicians, electronic health record (EHR) developers, health information exchanges (HIEs), immunization information systems (IIS), and other public health agencies, announced via a news release that it had gained agreement on the unified adoption of a standard transport protocol to improve interoperability and information sharing among EHRs and IIS to support public health immunization goals.

The transport protocol—Simple Object Access Protocol (SOAP) standard interface and the Web Services Definition Language—which is referenced in the CDC Functional Standards v4.1 and is commonly referred to as the CDC WSDL, has already been adopted by over 80% of IIS across the country. As part of its Measurement and Improvement Initiative, AIRA tests IIS conformance with the CDC WSDL and makes aggregate results of testing publicly available through its efforts to provide IIS with information and tools to more fully align with CDC Functional Standards. While the Office of the National Coordinator for Health Information Technology (ONC) does not require EHR conformance to any transport standard within the §170.315(f)(1) Transmission to Immunization Registries requirements of the ONC Health IT Certification Program, a majority of EHRs have already voluntarily adopted the standard to facilitate effective immunization information sharing between health care provider settings and IIS.

## IIP Collaborative Recommendations and Actions

The just-released IIP Collaborative report, *Improving Immunization Information Sharing through Unified Adoption of a Transport Standard*, calls for universal adoption of the CDC WSDL among EHRs, IIS, and HIEs and further collaboration to address other "last-mile" issues associated with immunization interoperability and information sharing. It also calls for state and local policymakers to remove jurisdictional barriers and both enable and encourage their IIS to comply with the standard transport protocol. The report also highlights actions that the IIP will take to support adoption, including the integration of a new test within the voluntary IIP Testing and Recognition Program that will enable EHR products to demonstrate conformance with the transport protocol, as well as building awareness of the recommendations among key stakeholders through education and outreach. Finally, the report outlines a set of methods to measure both adoption and impact of the standard.

# NATIONAL, MULTI-STAKEHOLDER IMMUNIZATION INTEGRATION PROGRAM (IIP) COLLABORATIVE ENCOURAGES ADOPTION OF COMMON STANDARD FOR TRANSPORT OF IMMUNIZATION MESSAGES

Variability in transport protocols used by EHRs and IIS to send and receive immunization data results in considerable burden—including increased time and cost for EHR developers, health care providers, and IIS—and negatively impacts the completeness of data for both public health and clinical decision making. IIP Collaborative members agree that adoption of the CDC WSDL transport capability among EHRs, HIEs, and IIS will enable clinicians and public health agencies to have more timely access to the immunization information needed to support decision making and immunization management, ultimately increasing vaccination coverage and reducing vaccine-preventable disease. This action comes at an important time, given recent declines in routine immunization due to concerns about accessing non-essential medical services during the COVID-19 pandemic.

> **IIP Collaborative members agree that adoption of the CDC WSDL transport capability among EHRs, HIEs, and IIS will enable clinicians and public health agencies to have more timely access to the immunization information needed to support decision making and immunization management, ultimately increasing vaccination coverage and reducing vaccine-preventable disease.**

### About the Immunization Integration Program

The Immunization Integration Program brings clinicians, EHRs, HIEs, and IIS together to gain agreement on and advance the adoption of EHR capabilities and interoperability and information sharing solutions that will help assure that both clinicians and public health agencies have the information they need to increase vaccination coverage and reduce vaccine-preventable disease. Launched in 2013, the IIP is supported by CDC and convened through a collaboration involving HIMSS, AIRA, and the Drummond Group. For more information on the IIP, contact IIPHelp@himss.org.

*- **Submitted by Mary Beth Kurilo,** AIRA*