



**AIRA**  
AMERICAN IMMUNIZATION  
REGISTRY ASSOCIATION

# Improving the Kentucky Immunization Registry

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# Goals for today

Describe key elements & functionality of successful IIS

1

Review the history & purpose of IIS

2



3

Describe the policies & their impact on IIS

4

Review IIS technical considerations

5

Discuss future considerations for IIS



# Overview

History & Purpose



# IIS...

are confidential, population-based, computerized databases that record all immunization doses administered by participating providers to persons residing within a given geopolitical area.



Confidential



Population-based



Identify pockets of need



Exchange data with multiple providers



Assist schools & child care providers



Help improve vaccination rates &  
Reduce vaccine-preventable disease



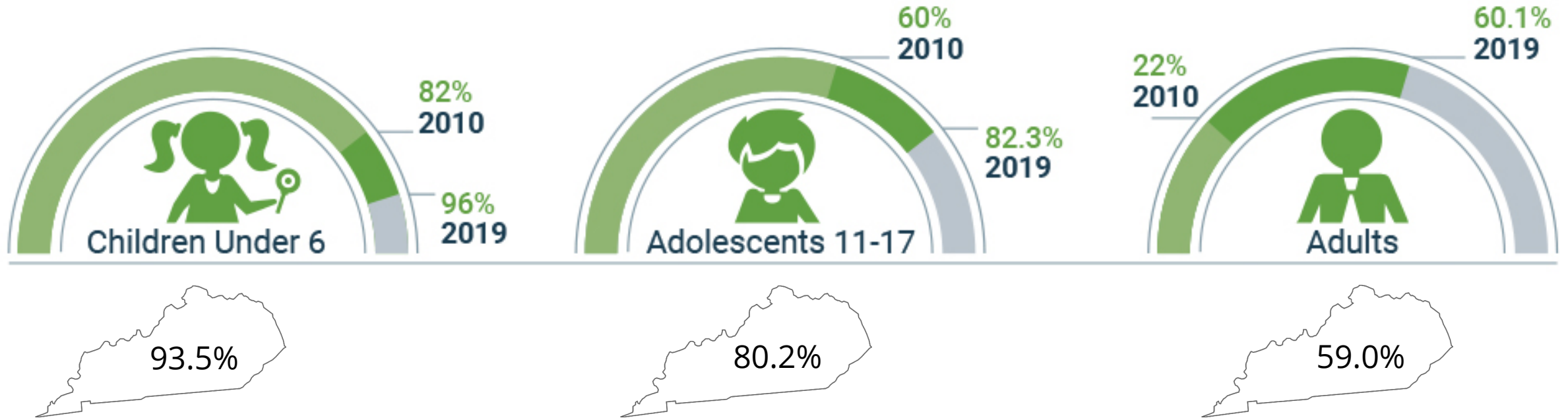
# Every state operates an IIS

## IIS are also in:

- New York City
- Philadelphia
- Washington D.C.
- San Diego
- San Joaquin County (RIDE)
- American Samoa
- Guam
- Marshall Islands
- Micronesia
- North Mariana Islands
- Palau
- Puerto Rico
- U.S. Virgin Islands



# Data Capture Across All IIS - 2019



Participation for children and adolescents requires two or more vaccines  
Participation for adults requires at least one adult vaccine



# Policies





# Policies That May Affect Functionality and/or Interoperability



Authorized  
Users

Local law/  
policy may  
govern who  
can access  
data,  
including  
consumers



Consent

Opt-in or opt-  
out policies  
may impact  
data exchange  
and data  
completeness



Mandates to  
Report

Reporting  
COVID doses  
is mandatory,  
requirements  
for reporting  
other vaccines  
varies



Business  
Needs

Program  
components  
supported by  
the IIS may  
vary among  
jurisdictions



Maturity

Standards  
adoption,  
saturation,  
or data  
quality may  
be affected



# Provider Participation



# Technical Considerations



# Most IIS Data Comes From Data Exchange



VITAL STATISTICS

DIRECT DATA ENTRY

ELECTRONIC HEALTH RECORDS (EHR)

PHARMACY SYSTEMS

OTHER SYSTEMS

In 2019, there were **117,000** data exchange connections



# Standards

- HL7 Implementation Guide V2.5.1 R1.5
- SOAP Web Services/CDC WSDL
- Clinical Decision Support for Immunizations (CDSi) Specifications
- Guidance documents, consensus-based recommendations, business process documentation, etc.
- Industry standards for Security



Timeliness

Data Quality  
Dilemma

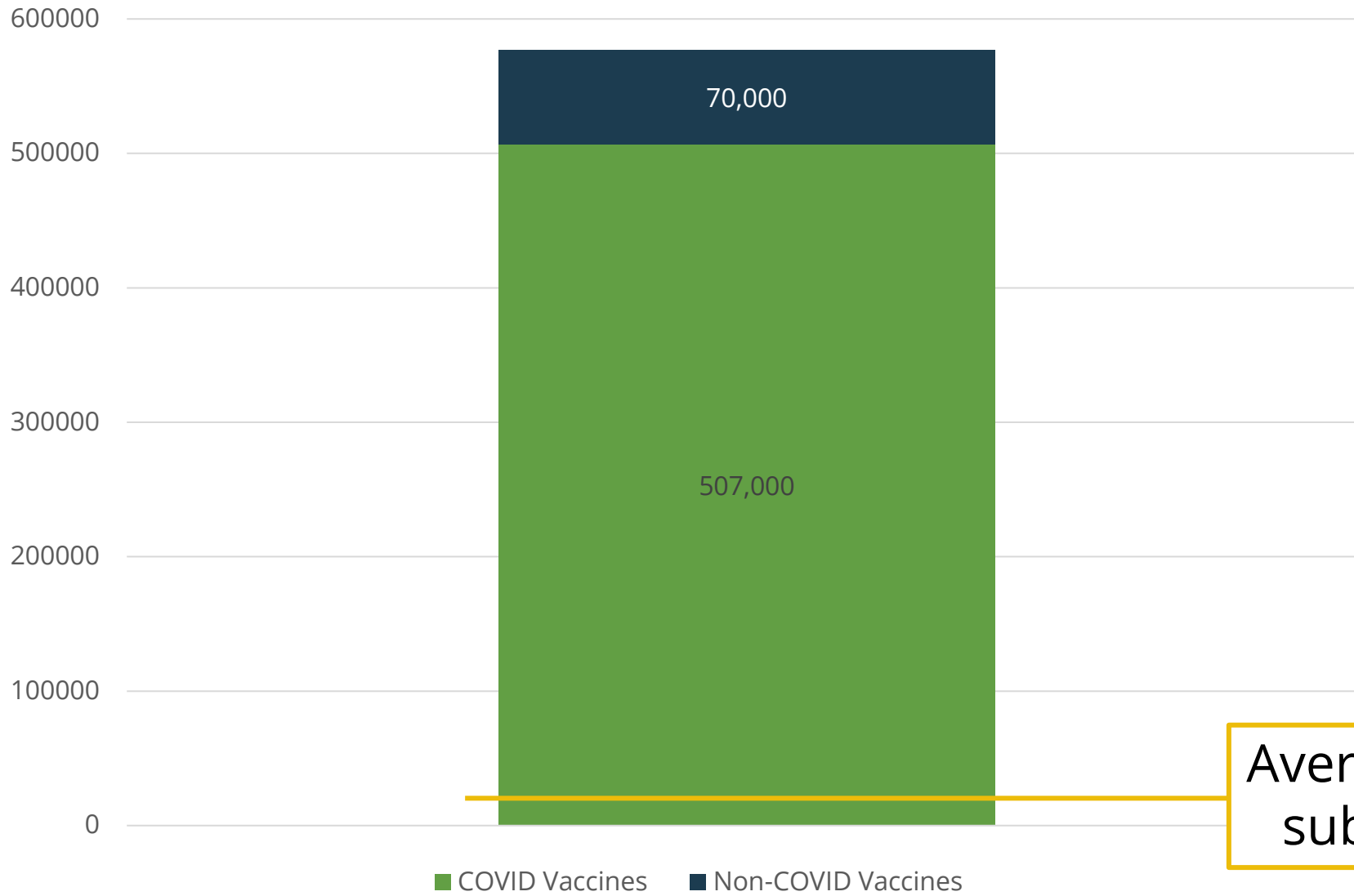
Completeness

Accuracy



# Future Considerations





Snapshot of Growth in Volume: Daily Submissions (one state)

Average pre-COVID daily submissions = **17,000**





# The Evolution of Vaccine Records & Patient Access

VACCINE	Date Given MO/DAY/YR	DOCTOR OR CLINIC	DATE NEXT DUE
1	AUG 25 1989	State of Hawaii, PHNS	
2	10/24/88	JOSEPHINE COUNTY HEALTH DEPT.	
3	10/24/88	JOSEPHINE COUNTY HEALTH DEPT.	
4	1-11-93	JOSEPHINE COUNTY HEALTH DEPT.	
5			
DPT	AUG 25 1989	State of Hawaii, PHNS	
1	10/24/88	R. F. FINE MD/MS	
2	10/24/88	R. F. FINE MD/MS	
3	10/24/88	R. F. FINE MD/MS	
4	10-9-89	JOSEPHINE COUNTY HEALTH DEPT.	
5	1-11-93	JOSEPHINE COUNTY HEALTH DEPT.	
6	3-17-97	Clerica Leo Cordes	
MEASLES			
RUBELLA	10-9-89	JOSEPHINE COUNTY HEALTH DEPT.	
MUMPS			
Hemorrhagic fever	2-26-90	JOSEPHINE COUNTY HEALTH DEPT.	
OTHER			
T.B. - true test done 6/29/89. Neg			
VACCINE REACTIONS AND OTHER NOTES:			
EXEMPTION-VACCINE:	PROVIDER:	DATE:	

### COVID-19 Vaccination Record Card

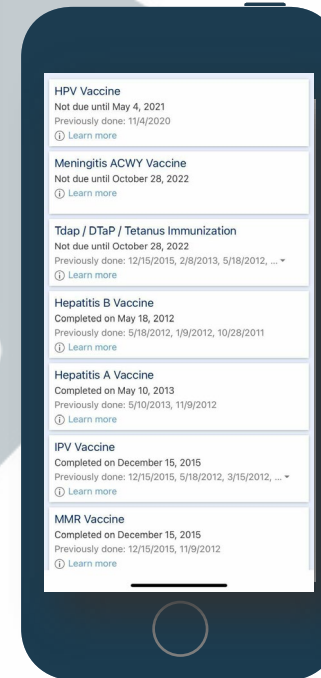
Please keep this record card, which includes medical information about the vaccines you have received.  
Por favor, guarde esta tarjeta de registro, que incluye informacion médica sobre las vacunas que ha recibido.

DEPARTMENT OF HUMAN SERVICES DIV. CDC

Last Name \_\_\_\_\_ First Name \_\_\_\_\_ MI \_\_\_\_\_

Date of Birth \_\_\_\_\_ Patient number (medical record or NS record number) \_\_\_\_\_

Vaccine	Product Name/Manufacturer Lot Number	Date	Healthcare Professional or Clinic Site
1 <sup>st</sup> Dose COVID-19	.....	mm / dd / yy	
2 <sup>nd</sup> Dose COVID-19	.....	mm / dd / yy	
Other	.....	mm / dd / yy	
Other	.....	mm / dd / yy	



It is critical to understand - the issuance of a digital record **does not** create the policy for how these records may be used. It simply moves a paper record to a digital format much like mail largely moved to e-mail.



# Future Considerations



State Policies  
National Policies



Strategic IIS  
Modernization



All providers report all  
vaccines administered



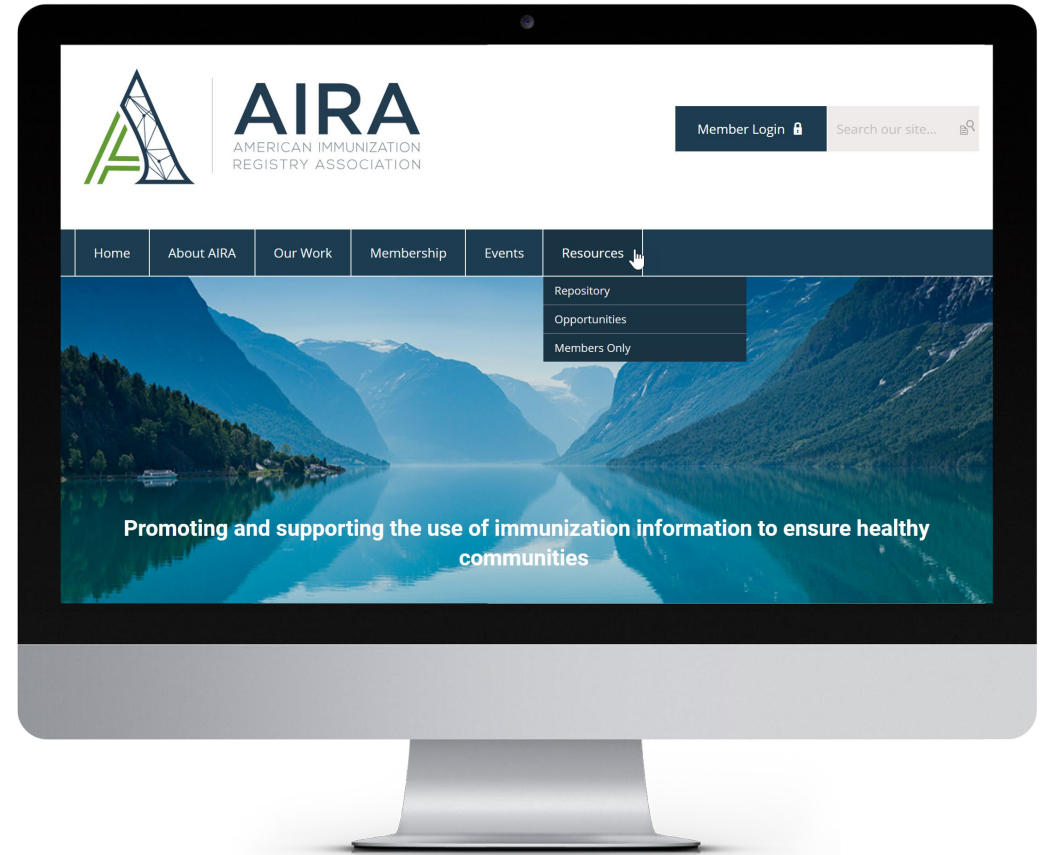
Sustainable Funding



# Thank You!

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[www.immregistries.org](http://www.immregistries.org)

