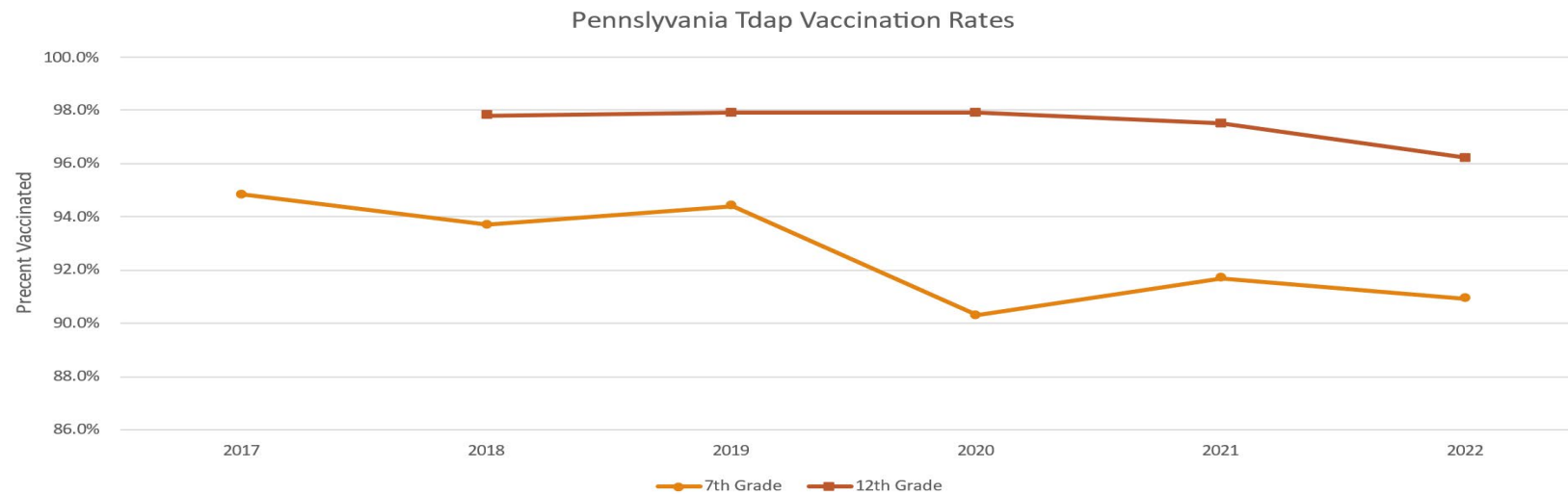


# Respiratory Disease Season

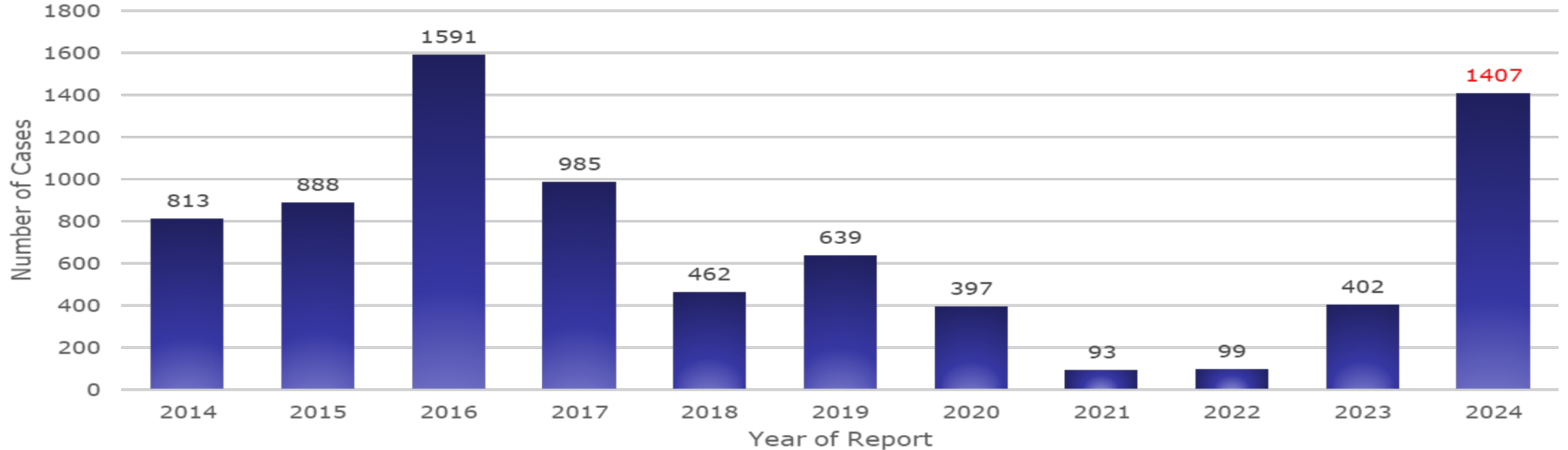
Sarah Rosado, RN, BSN  
Julie Myers, MPH  
Virginia Kise

9/10/2024

## Pennsylvania Tdap Vaccination Rates



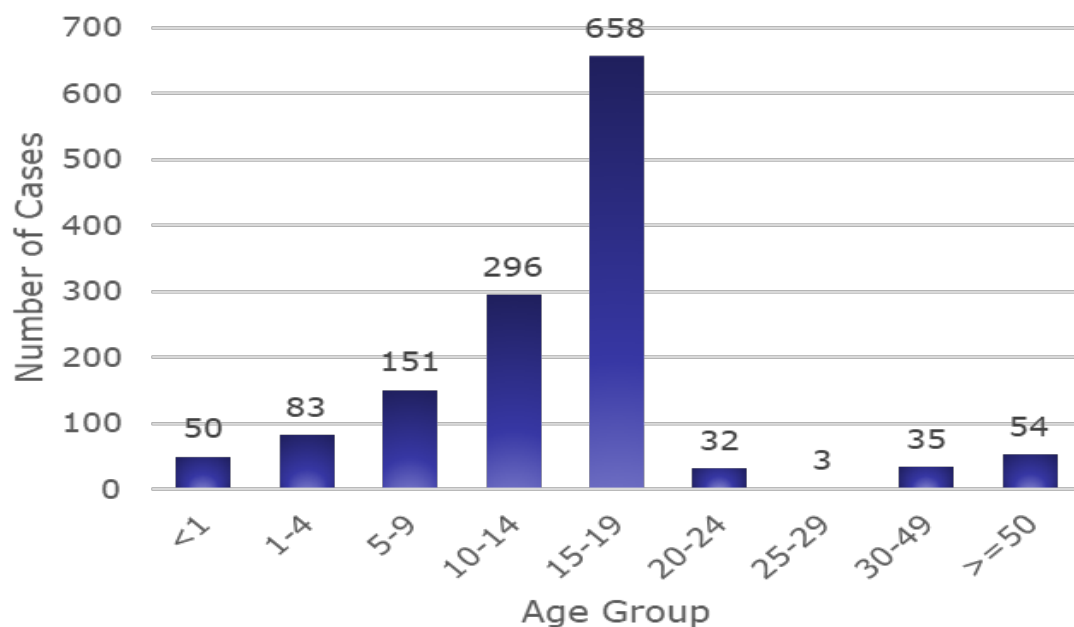
# Pennsylvania Pertussis Cases



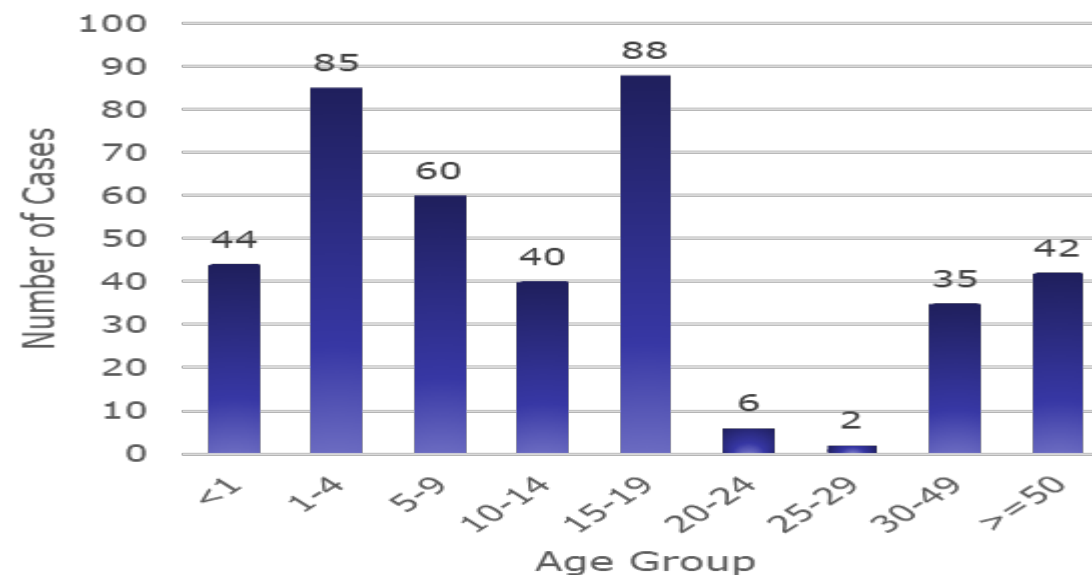
Data were extracted on 7/29/2024 from PA-NEDSS electronic data files for the morbidity and mortality weekly report years 2014-2023. Provisional data for 2024

# Pennsylvania Epidemiology of Pertussis

## Confirmed and Probable Cases of Pertussis by Age Group, Pennsylvania, January 1-July 24, 2024



## Confirmed and Probable Cases of Pertussis by Age Group, Pennsylvania, 2023



Data were extracted on 4/29/24 and 7/29/24 from PA-NEDSS electronic data files for the morbidity and mortality weekly report years 2014-2023. Provisional data for 2023-2024

# School Vaccination Rates



School Immunization Law Report System  
 School Immunization State Summary for both Public and Private Schools  
 School Year: 2022 - 2023

Grade	Total Students Enrolled	DTP/D T /D TP/D T 4 Doses or More	Polio 4 Doses or More	MMR 2 Doses or More	HepB 3 Doses or More	Varicella Had Disease	Varicella 2 Doses	Tdap/Td1 Dose	MCV 1 Dose	MCV (16+) 1 Dose	MCV 2 Doses	Number Medical Exempt	Number Religious Exempt	Number Philosophical Exempt	Number Enrolled Provisionally	Number Denied Admission
Kindergarten	132,250	125,332	124,974	124,914	126,615	358	124,179					487	2,677	1,861	2,988	35
Kindergarten - Home School	1,111	517	509	500	536	6	495					6	274	128	31	0
<b>Kindergarten - Total:</b>	<b>133,361</b>	<b>125,849</b>	<b>125,483</b>	<b>125,414</b>	<b>127,151</b>	<b>364</b>	<b>124,674</b>					<b>493</b>	<b>2,951</b>	<b>1,989</b>	<b>3,019</b>	<b>35</b>
<b>Percent:</b>		<b>94.4%</b>	<b>94.1%</b>	<b>94.0%</b>	<b>95.3%</b>	<b>0.3%</b>	<b>93.5%</b>					<b>0.4%</b>	<b>2.2%</b>	<b>1.5%</b>	<b>2.3%</b>	
7th Grade	145,204	139,322	138,968	139,256	139,387	1,130	137,851	133,254	132,810			759	2,842	3,865	2,811	63
7th Grade - Home School	2,483	1,319	1,270	1,274	1,312	27	1,232	1,040	998			20	600	283	117	5
<b>7th Grade - Total:</b>	<b>147,687</b>	<b>140,641</b>	<b>140,238</b>	<b>140,530</b>	<b>140,699</b>	<b>1,157</b>	<b>139,083</b>	<b>134,294</b>	<b>133,808</b>			<b>779</b>	<b>3,442</b>	<b>4,148</b>	<b>2,928</b>	<b>68</b>
<b>Percent:</b>		<b>95.2%</b>	<b>95.0%</b>	<b>95.2%</b>	<b>95.3%</b>	<b>0.8%</b>	<b>94.2%</b>	<b>90.9%</b>	<b>90.6%</b>			<b>0.5%</b>	<b>2.3%</b>	<b>2.8%</b>	<b>2.0%</b>	
12th Grade	140,892	136,863	136,421	136,819	136,891	1,794	134,953	136,220		6,714	123,626	1,486	2,627	2,193	2,578	235
12th Grade - Home School	1,608	967	911	925	938	35	893	882		108	644	15	345	229	69	0
<b>12th Grade - Total:</b>	<b>142,500</b>	<b>137,830</b>	<b>137,332</b>	<b>137,744</b>	<b>137,829</b>	<b>1,829</b>	<b>135,846</b>	<b>137,102</b>		<b>6,822</b>	<b>124,270</b>	<b>1,501</b>	<b>2,972</b>	<b>2,422</b>	<b>2,647</b>	<b>235</b>
<b>Percent:</b>		<b>96.7%</b>	<b>96.4%</b>	<b>96.7%</b>	<b>96.7%</b>	<b>1.3%</b>	<b>95.3%</b>	<b>96.2%</b>		<b>4.8%</b>	<b>87.2%</b>	<b>1.1%</b>	<b>2.1%</b>	<b>1.7%</b>	<b>1.9%</b>	



# RSV & Flu Coverage Rates

- [Respiratory Syncytial Virus \(RSV\) Vaccination Coverage, Pregnant Persons, United States | CDC](#)
- [Influenza Vaccination Coverage, Adults \(cdc.gov\)](#)
- [Flu Vaccination Coverage, United States, 2022–23 Influenza Season | FluVaxView | Seasonal Influenza \(Flu\) | CDC](#)
- [2023-24 Flu \(pa.gov\)](#)

# RSV effectiveness

- Babies who are born at least 2 weeks after their mother gets RSV vaccine are protected at birth, when infants are at the highest risk of severe RSV disease. The vaccine can reduce a baby's risk of being hospitalized from RSV by 57% in the first six months after birth.
- **Nirsevimab reduces the risk of severe RSV disease by about 80%.** One dose of nirsevimab protects infants for at least 5 months, the length of an average RSV season. Because nirsevimab does not activate the immune system, protection is most effective in the weeks right after nirsevimab is given and lessens over time. Nirsevimab does not provide long-term protection against RSV disease, but it does protect infants when they are most at risk of getting very sick from RSV.
- RSV can be dangerous for infants and some young children.
- RSV is the leading cause of infant hospitalization in the U.S.
- Immunizations can protect babies from getting very sick from RSV

[RSV in Infants and Young Children | RSV | CDC](#)

# 2023-2024 Respiratory Disease Season Vaccine Supply

- Between 8/1/23 – 4/30/24, the PA Immunization Program distributed...
  - ▣ Flu – 255,170 PED doses and 16,250 ADU doses
  - ▣ COVID – 88,960 PED and 7,630 ADU doses
  - ▣ Pneumococcal – 135,636 PED doses and 1,276 ADU doses
  - ▣ Tdap – 48,655 PED doses and 2,265 ADU doses
  - ▣ RSV – 18,910 PED doses and 0 ADU doses
    - ▣ Abrysvo – 25 doses
    - ▣ Nirsevimab (brand name Beyfortus) - 11,500 50mg doses
    - ▣ Nirsevimab (brand name Beyfortus) – 7,385 100mg doses



# 2023-2024 Respiratory Disease Season Vaccine Supply

- Beyfortus national supply shortage
  - Unprecedented uptake of a brand-new immunization
  - Unusually rapid coverage under insurance plans who have a full year to add new ACIP-recommended vaccines to plans
  - Takes a long time to make, so couldn't just quick and make more

# 2024-2025 Respiratory Disease Season Vaccine Supply

- Flu – 285,000 PED doses requested and 16,960 ADU doses requested
  - ▀ So far, 145,360 PED doses prebooked and 2,640 ADU doses prebooked
- COVID – 123,000 PED doses requested and 18,290 ADU doses requested
- Pneumococcal and Tdap – We are currently in the process of completing our Spend Plan setup. Our planned doses of these vaccines will be based on past ordering history trends and projected need.
- RSV – 0 ADU doses will be included in our Spend Plan. PED Abrysvo and both PED Beyfortus are under CDC allocation.

# 2024-2025 Respiratory Disease Season Vaccine Guidelines

- When to administer?
- Respiratory Disease Season is approximately October through March
  - Flu and COVID – September through March (and can continue as long as virus is in circulation – as of 8/10 PA had 79 reported cases of flu and we still see cases of COVID year-round)
  - Pneumococcal – [CDC summary](#) of Who and When to Vaccinate broken out for children younger than 2, 2-4 without risk conditions, 2-5 with risk conditions, 6-18 with risk conditions, 19-64 with risk conditions, and 65 and older

# 2024-2025 Respiratory Disease Season Vaccine Guidelines

- When to administer?

- Tdap

- Adolescents should receive a single dose of Tdap, preferably at age 11 or 12 years.
    - Pregnant people should get a dose of Tdap during every pregnancy, preferably during the early part of the third trimester, to help protect the newborn from pertussis. Infants are most at risk for severe, life-threatening complications from pertussis.
    - Adults who have never received Tdap should get a dose of Tdap.
    - Adults should receive a booster dose of either Tdap or Td (a different vaccine that protects against tetanus and diphtheria but not pertussis) every 10 years, or after 5 years in the case of a severe or dirty wound or burn.

- Abrysvo should be administered to pregnant people between 32-36 weeks gestation.

- Abrysvo is effective and reduces the number of infants requiring Beyfortus during the respiratory disease season if they are born 14 or more days after Abrysvo was administered.

# 2024-2025 Respiratory Disease Season Vaccine Administration

- Insurance coverage (VFC and our Adult program offers all these products for those who are uninsured and underinsured)
  - ▣ Flu
    - ▣ Most private plans, MA, Medicare Part B, and CHIP
    - ▣ Available through VFC and our Adult Program
  - ▣ COVID
    - ▣ Most private plans, MA, Medicare Part B, and CHIP
    - ▣ Available through VFC and our Adult Program
  - ▣ Pneumococcal
    - ▣ Most private plans, MA, Medicare Part B, and CHIP
    - ▣ Available through VFC and our Adult Program

# 2024-2025 Respiratory Disease Season Vaccine Administration

- Insurance coverage

- Tdap

- Most private plans, MA, Medicare Part D\*, and CHIP
    - Available through VFC and our Adult Program

- Abrysvo

- Most private plans, MA, Medicare Part D\*, and CHIP
    - Available through VFC and our Adult Program

- Beyfortus

- Most private plans, MA, Medicare Part D\*, CHIP

\*Not part of original Medicare Part A and B. Must be joined separately to obtain coverage. Not all patients with Medicare will have coverage for immunizations covered by Part D.

# Limiting Vaccine Waste

- The PA Immunization Program helps to limit vaccine waste in the following ways:
  - Administration data is now required to be reported in PIERS for all PA Immunization Program supplied immunizations
    - By next respiratory disease season, BOI and providers will be able to see how much ordered vaccine was administered to better inform appropriate ordering
  - Review provider population before approving orders
  - Inventory must be reconciled before every order or once a month
  - We track all vaccine waste and returns
    - Can trigger education visit to provide technical assistance to align ordering with use
    - Implement new processes or education to address trends (example: unit doors being left open)

## Limiting Vaccine Waste

- The PA Immunization Program helps to limit vaccine waste in the following ways:
  - ▀ Encourage providers to reach out regarding vaccines that will expire before use to help facilitate vaccine transfer to enrolled provider who will use
  - ▀ Encourage and help to facilitate minimum order sharing between providers with small populations
  - ▀ Providers required to have up to date emergency plans that all vaccine staff know and can readily access
  - ▀ Excessive vaccine waste is one of the red flags that triggers an unscheduled storage and handling visit
  - ▀ Ongoing waste after education and technical assistance trigger our noncompliance SOP which can lead to forceful disenrollment and a fraud and abuse investigation



# Resources

- [CDC Updates Vaccine Recommendations](#)
- [CDC Immunizations and Vaccine Product Summaries](#)
- [CDC Respiratory Illnesses Data Channel](#)
- [PA DOH Flu Dashboard](#) (2024-2025 dashboard will be available)

# Acknowledgements

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# PIERS

## PIERS

**Go Live Migration Information**

**PIERS Registration**

**Training Updates**

# PIERS

## Agenda:

- Introduction
- Go Live
- Demonstration
  - How to Search for a Patient
- How to Register
- Training
- Contact Information
- Questions



# PIERS

GO Live

Migrated:

- 181 million immunization records
- 16 million patients
- 17,000 clinics
- 6,672 system users
- Over 550 HL7 providers

# PIERS

## How to Register for a PIERS account:

- Register as a business partner via the PIERS Business Partner Registration link
- Receive email with business partner user id (B-XXXXXX)
- Complete the PIERS User Account Request Form and return form to email address listed

**NOTE: A Business Partner ID application must be completed prior to completion of the PIERS User Account Request Form.**

**NOTE: Commonwealth of Pennsylvania employees (CWOPA) are NOT required to register for a Business Partner ID.**

# PIERS

## User Registration Form:



### PIERS User Account Request Form

To request a user account in Pennsylvania Immunization Electronic Registry System (PIERS), you must register as a business partner by going to [PIERS Business Partner Registration](#) as well as complete the PIERS User Account Request Form.

\*\*\*Please note that a Business Partner ID application must be completed prior to completion of this form.\*\*\*

\*\*Commonwealth of Pennsylvania employees (CWOPA) are not required to register for a Business Partner ID\*\*

Requester Information			
1. Requester's first name, middle initial, last name			
2a. Requester's email address (Provide your personal work-affiliated email address; must not be a shared email account)		2b. Requester's email address (used in Business Partner ID Application, if different than Field 2a)	
3. Business Partner ID (e.g. b-xxxxxx)		4. Job Title	
5. Requester's facility name		6a. PIERS Clinic ID (if known)	6b. VFC PIN # (if applicable)
7. Facility street address (Line 1)		8. Facility street address (Line 2)	
9. Facility city	10. Facility county	11. Facility zip code	
12. Facility phone number	13. Facility manager name	14. Facility manager email address	
User Account Types			
<input type="radio"/> Clinic User -- Add Patients/Immunizations <input type="radio"/> Clinic User -- Add Patients/Immunizations/Inventory Management/Clinic Tools <input type="radio"/> School Nurse -- View Patients/Immunizations/Reports/Education; Add and Update Education/Reports ***If your school administers vaccine, please select the applicable Clinic User type above!*** <input type="radio"/> View-Only User -- View Immunizations/Patients/Reports			
<b>For Commonwealth of Pennsylvania Employees Only (CWOPA User)</b>			
<input type="radio"/> VFC Staff <input type="radio"/> DOI Field Nurse <input type="radio"/> Clinic User -- Add Patients/Immunizations <input type="radio"/> EPI Staff <input type="radio"/> Hep B Staff <input type="radio"/> Clinic User -- Add Patients/Immunizations/Inventory Management/Clinic Tools			
<b>User Settings</b> (ONLY check if Give or Prescribe Immunizations, otherwise leave blank)		<b>Clinic Inventory Management</b> (ONLY check if designated Facility Shipping Contact, otherwise leave blank)	
<input type="checkbox"/> Gives Immunizations <input type="checkbox"/> Prescribes Immunizations (MD/DD; PA-C; CRNP; Pharmacist)		<input type="checkbox"/> Primary Shipping Contact <input type="checkbox"/> Backup Shipping Contact	
Acknowledgement of Responsibilities			
My signature below attests that I am the individual named above and the information I provided on this form is true and correct to the best of my knowledge. I understand and shall adhere to Pennsylvania Immunization Electronic Registry System User Agreement and Confidentiality Policy.			
14. Signature		15. Date	
Facility Approval			
<input type="radio"/> I approve that this requester is authorized to enter information in PIERS on behalf of my facility <input checked="" type="radio"/> I am approving my own request since I am the owner of this facility			
16. Signature	17. Title	18. License (if applicable)	19. Date
<b>A Business Partner ID application must be completed prior to completion of this form.</b> Upon completion of form to its entirety, please send via email attachment to <a href="mailto:rs-sharesuseract@pa.gov">rs-sharesuseract@pa.gov</a>			



# PIERS

## TRAINING

The following workshops are now being offered:

- Reconciliation for Non HL7 Clinics
- Reconciliation for HL7 Clinics
- Inventory
- Immunizations



# PIERS

## CONTACT INFORMATION:

- **Email:** [RA-DHPIERSSUPPORT@PA.GOV](mailto:RA-DHPIERSSUPPORT@PA.GOV)
- **Hotline Phone Number:** 1-877-774-4748
- **Please include your VFC Pin # in your email and/or phone message.**
- ***Disclaimer: Limit sending PHI to only what is required to assist with your request and to send any necessary PHI encrypted always.***

# Questions

