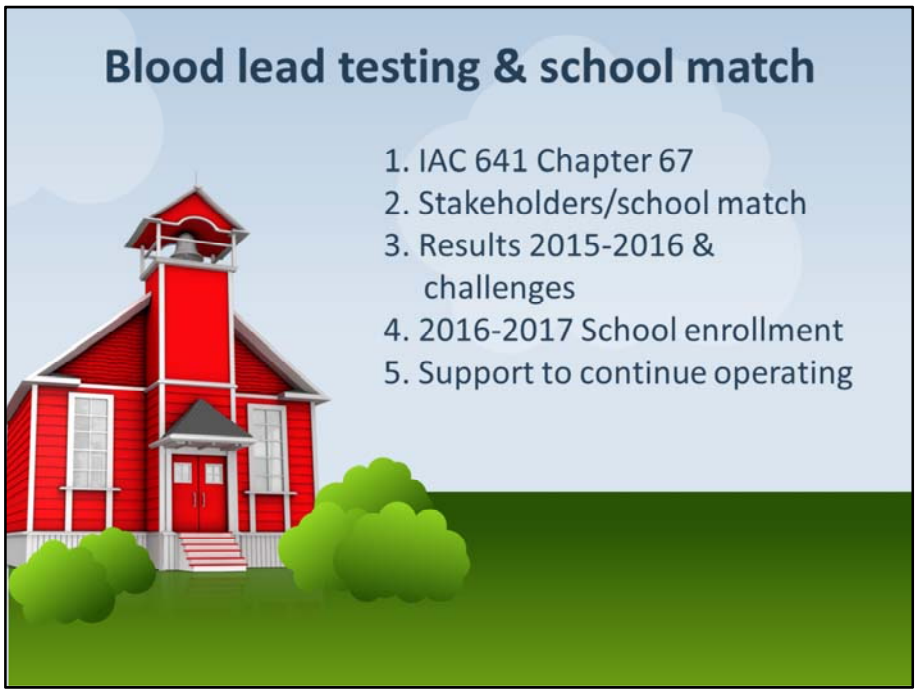
Childhood Lead Poisoning Prevention Program (CLPPP) Regional Meeting

8:30am – 9:00am	Check-in
9:00am – 9:15am	Introduction – Carmily Stone and Stu Schmitz
9:15am – 10:00am	Program Updates - Rossany Brugger (Blood Lead Testing); Kathy Leinenkugel (ABLES)
10:00am – 10:30am	CLPPP Program Review – Kevin Officer
10:30am – 10:45am	Break
10:45am – 11:15am	Performance Measure Discussion – Kevin Officer
11:15am – 12:30pm	Lunch
12:30pm – 1:45pm	Healthy Homes Lead Poisoning Surveillance System (HHLPSS) – Janet Lemmermann and Kevin Officer
1:45pm – 2:00pm	Break
2:00pm – 3:00pm	Environmental Public Health Tracking (EPHT) – Rob Walker
3:00pm – 3:30pm	Conclusion and Final Questions


Blood lead testing & school match
1. IAC 641 Chapter 67
2. Stakeholders/school match
3. Results 2015-2016 & challenges
4. 2016-2017 School enrollment
5. Support to continue operating

1. IAC 641
   Chapter 67

Blood Lead Testing

The bill passed 2007-08 legislative

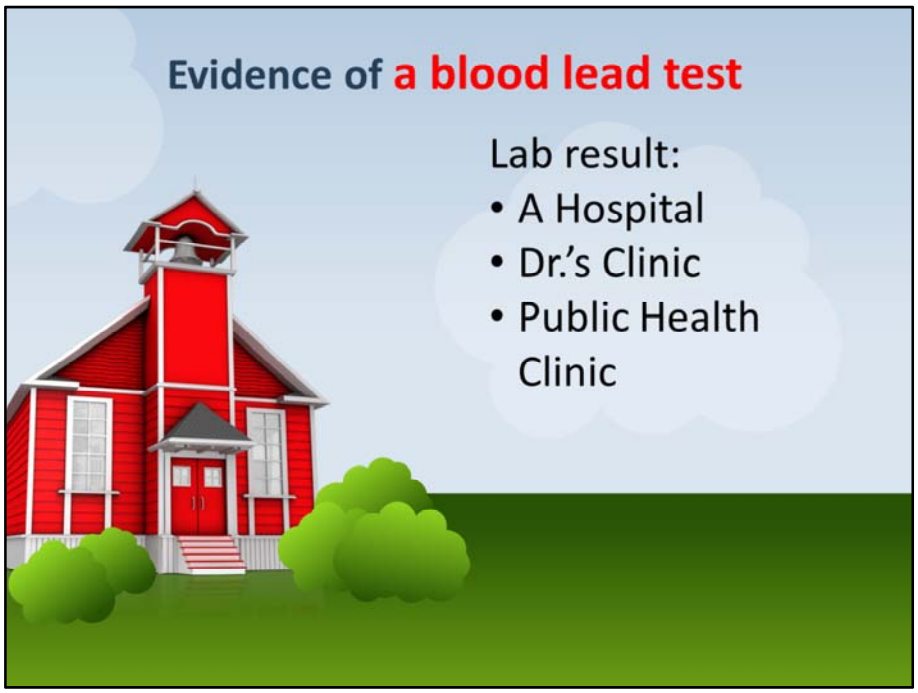
Requiring all Children entering kindergarten to have evidence of at least one blood lead test.

Children will NOT be kept out of school

The purpose of the blood lead testing requirement is to improve the health of Iowa's children.

of Iowa's children. Blood lead testing will facilitate early detection and referral for treatment of lead poisoning; reduce the incidence, impact, and cost of lead poisoning; inform parents and guardians of their children's exposure to lead; promote the importance of reducing exposure to lead as an integral component of preparation for school and learning; and contribute to statewide surveillance of childhood lead poisoning.

The blood lead testing requirement specified in this chapter applies to all applicants and transfer students as defined in this chapter.



641—67.5(135) Blood lead testing requirement.
67.5(1) Each applicant and transfer student shall meet the requirements of subrule 67.6(1).
67.5(2) The board of directors of each school district and the authorities in charge of each nonpublic school shall, in collaboration with the department, ensure that applicants and transfer students comply with the blood lead testing requirement according to subrule 67.6(1).

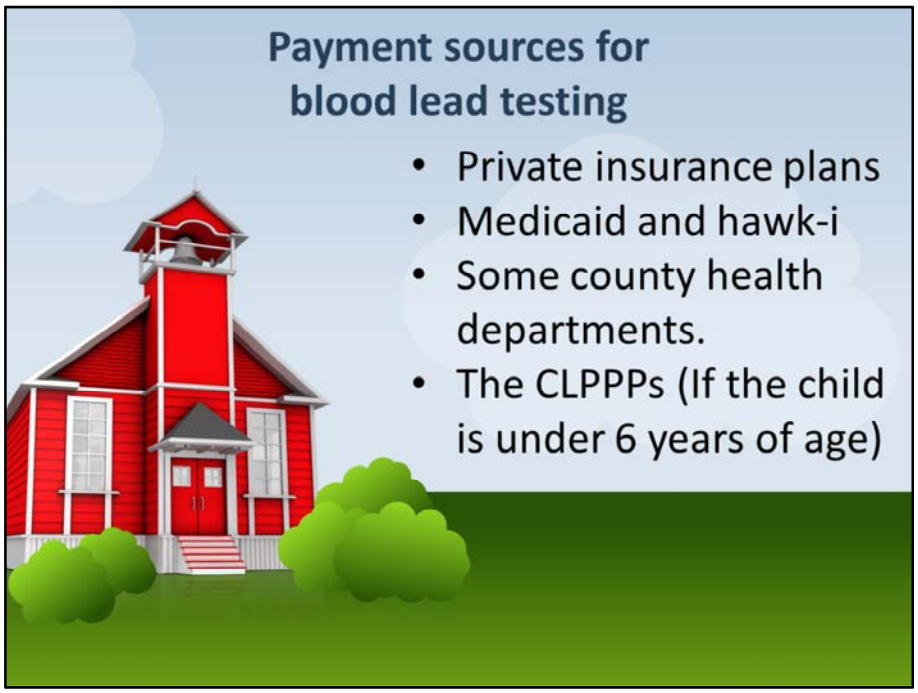
67.6(1) To be valid, a blood lead test shall be performed on an applicant or transfer student before the applicant or transfer student reaches six years of age, or in cases in which the applicant or transfer student has already reached six years of age, as soon as the department notifies the parent or guardian that a blood lead test has not yet been performed.
67.6(2) Desirable age for blood lead testing. A parent or guardian of a child under two years of age is strongly encouraged to have the child tested for elevated blood lead levels by the time that the child reaches two years of age.

IDPH: We will continue with the matching process regardless if we error. We have been advised on creating a "fuzzy logic" that would introduce the possibility of false negatives, or children who did not have a test but are counted as having one. Also, we have been requested to check on enrolled kindergartners before doing the match, so letters to parents

should only go to those who are in the system, but were not matched. We can't afford doing this manually. This is not a man job, it will require a team to do the search.
Labs:

"Elementary school" means an Iowa school district or accredited nonpublic school offering kindergarten.

We continue to make strides with the laboratories and health care providers to properly send the results of blood lead testing.


Payment sources for blood lead testing
• Private insurance plans
• Medicaid and hawk-i
• Some county health departments.
• The CLPPPs (If the child is under 6 years of age)

Exemptions to have a blood lead test

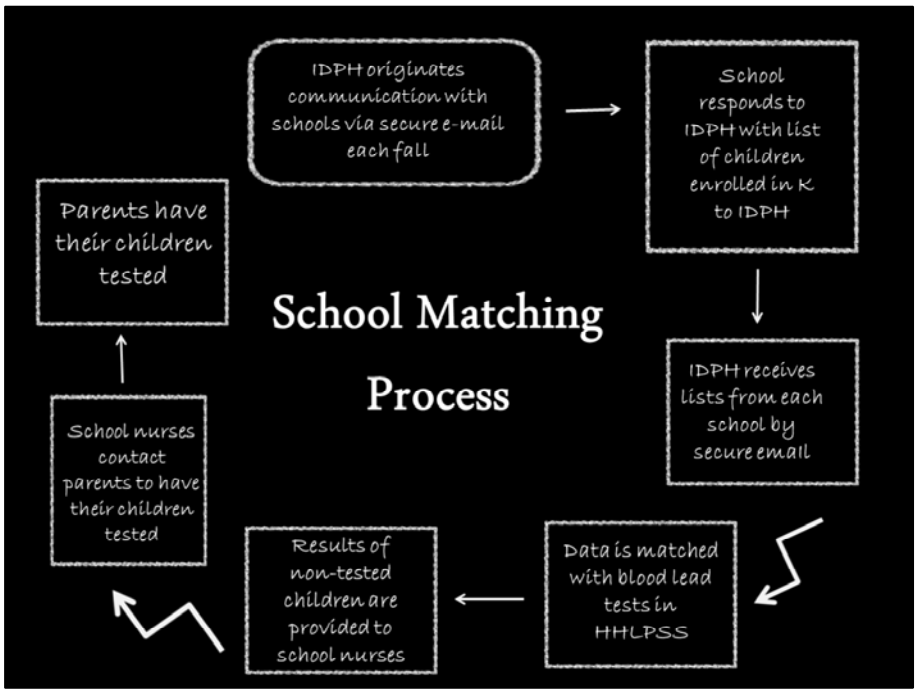
- **Low risk exemption**

Interview/questionnaire
800-972-2026 or (515) 281-8707
stuart.schmitz@idph.iowa.gov

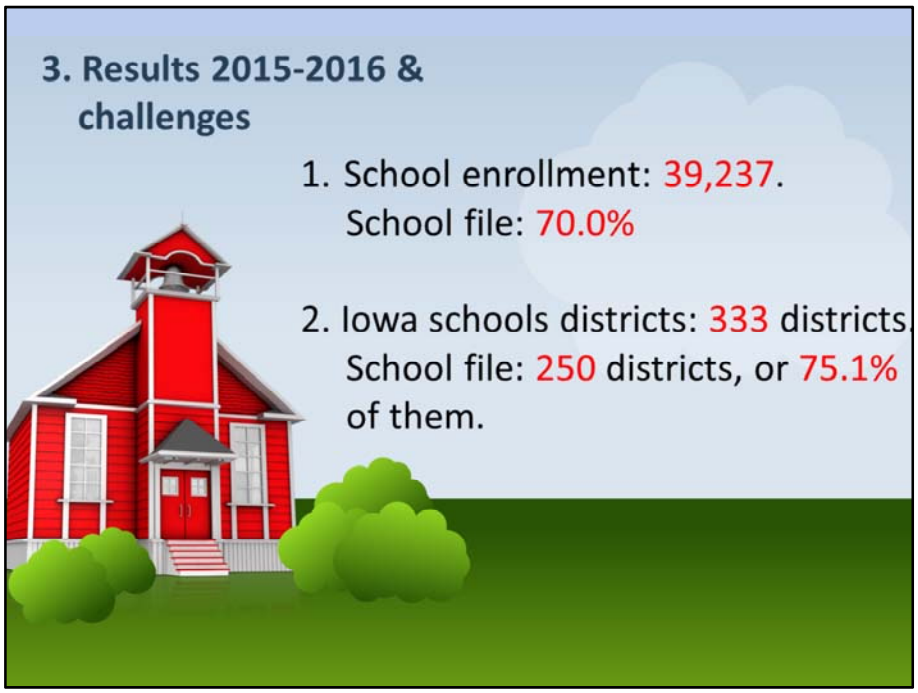
- **Religious exemption**

http://idph.iowa.gov/lpp/blood-lead-testing
800-972-2026 or (515) 281-3225
rossany.brugger@idph.iowa.gov

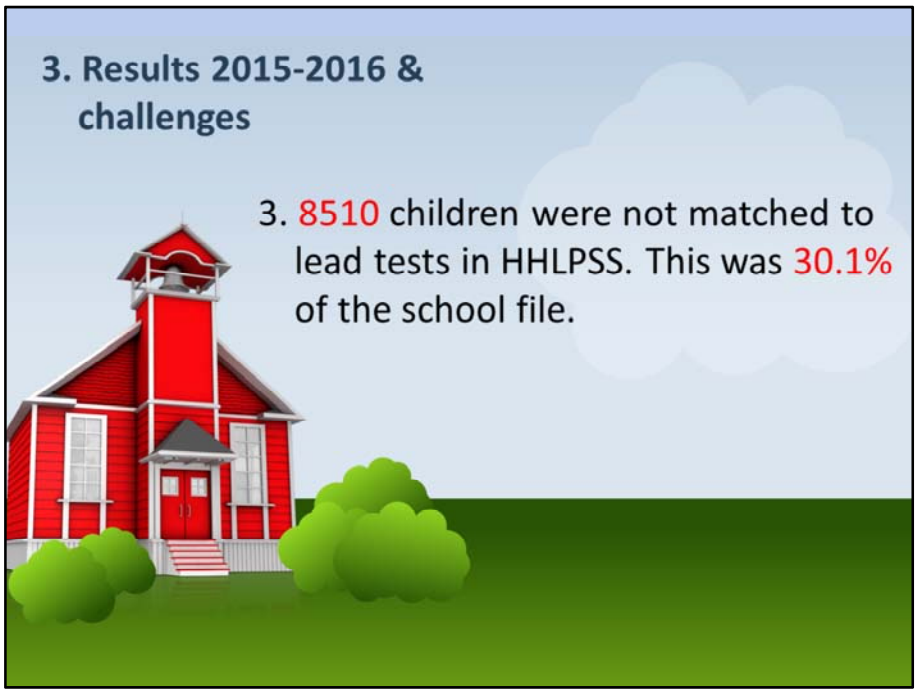
2. Stakeholders

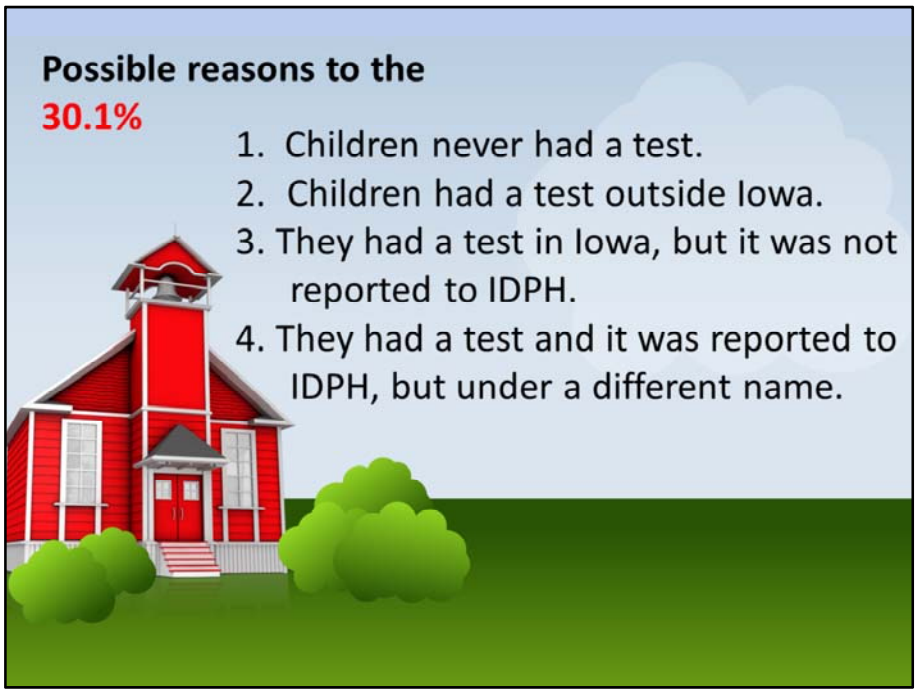


1. Sample is drawn at healthcare provider's location = doctor's office, WIC clinic or local public health office, or hospital
2. Sample is either processed on site (like a hospital or Lead Care II location) or sent off site to a reference lab or the State Hygienic Lab
3. Onsite hospital or LCII locations perform the test and get a result
4. That result and the required demographic information is entered into the LCII Software report which produces an .xml file, or into the Excel spreadsheet
5. XML file or Excel Spreadsheet is sent to IDPH via SecureMail
6. Offsite reference lab or Hygienic Lab performs the test and gets a result
7. That result and all the required information get entered into that organizations data system, and data extract is done
8. The data extract containing all required pieces of information is sent to IDPH via SmartLab or other ELR (electronic lab reporting) method



Last year, we had a total school enrollment of 39,237 kindergartners, and we received 70% of them listed in the spreadsheet. Out of the 333 Iowa school districts, we received communication from 250 districts, or 75.1%.


3. Results 2015-2016 & challenges
3. 8510 children were not matched to lead tests in HHLPSS. This was 30.1% of the school file.

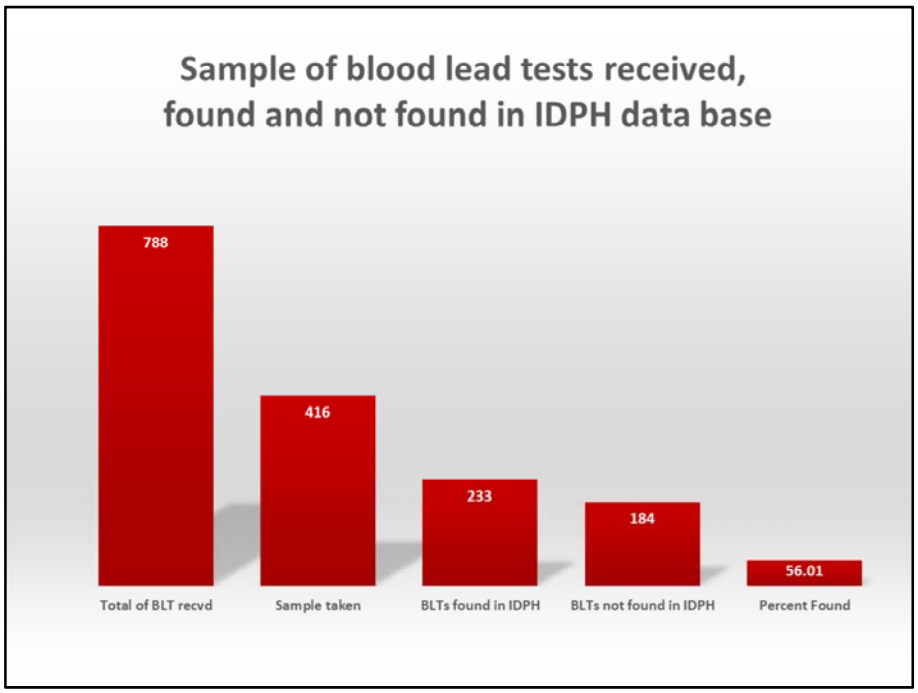


The transition from individual STELLAR databases to the web-based HHLPSS database and the move to electronic reporting of blood lead tests had some inherent issues that slowed down this matching process. Prior to completing the school match an extensive effort was made to clean as much of the data as possible.

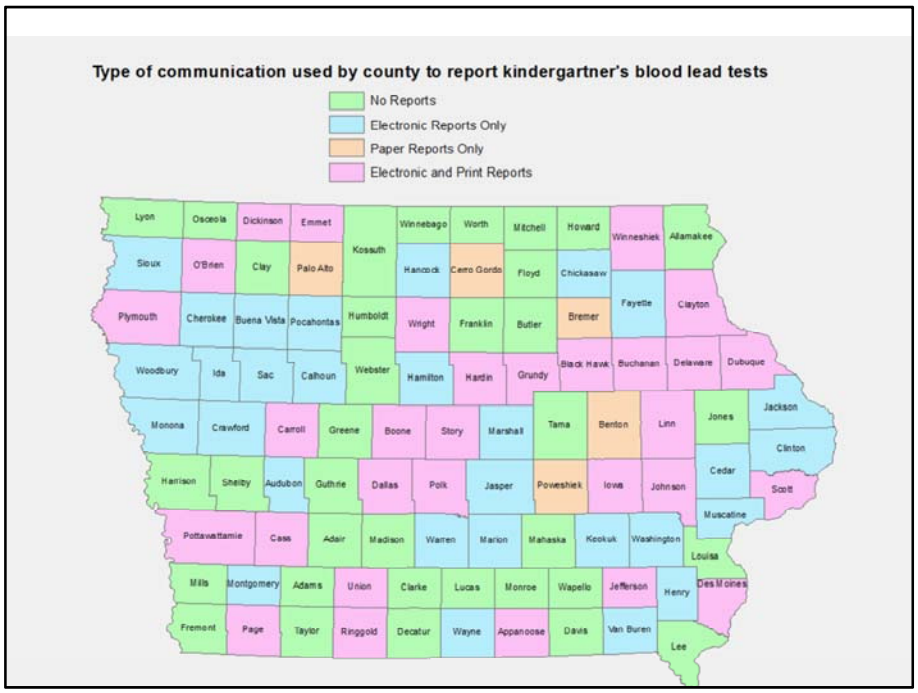
For a handful of the school districts we discovered an error in our matching process. The error occurred when we copied the information from the spreadsheet that was provided by school nurse to our master spreadsheet was a result of the difference in how different versions of Excel store the birthdate information. The explanation of the error is below:

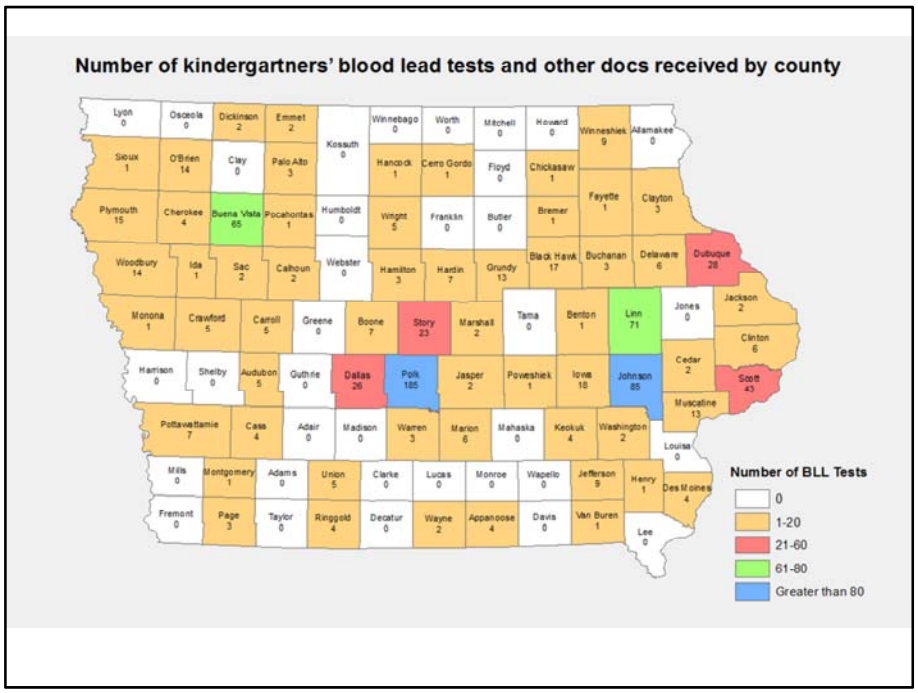
Excel stores all dates as numbers, usually starting from 1/1/1900 as 1 and each day before this day subtracts 1 and each day after adding 1 to the number. Your school utilizes the 1904 date system in Excel which is almost the same but the starting date is 1/1/1904. When dates from this setting are imported, they have a difference of 1461 days (four years and one day) as seen in the school match birthdates.
The 1900 date system was developed so Excel would work with Lotus 1-2-3 and the 1904 system was programmed to work with Apple operating systems and was developed

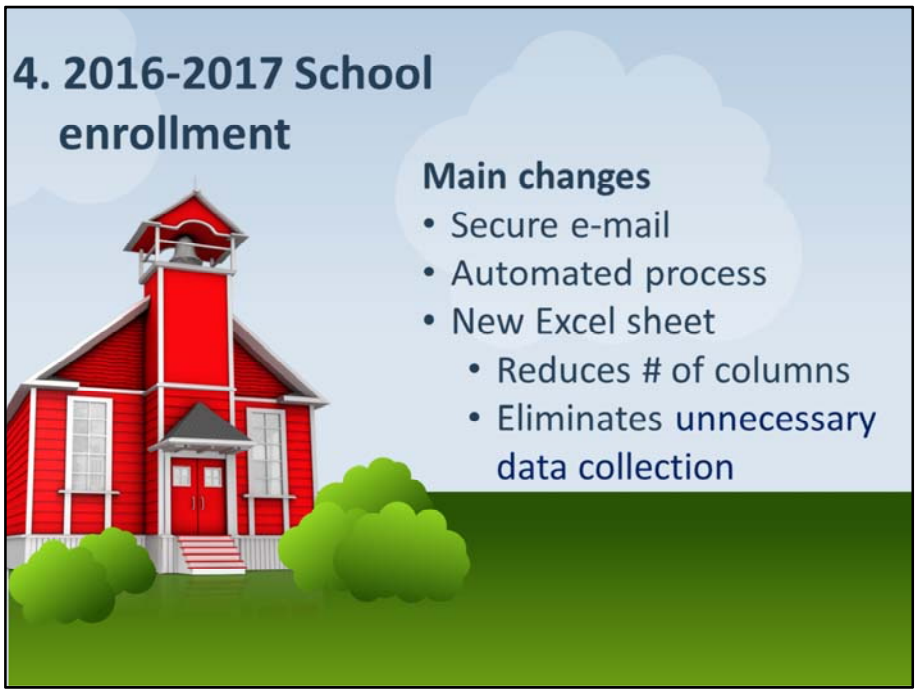
because 1900 was not a leap year and caused problems with some software dates. When the dates were copied into our master file, the dates were inadvertently changed.



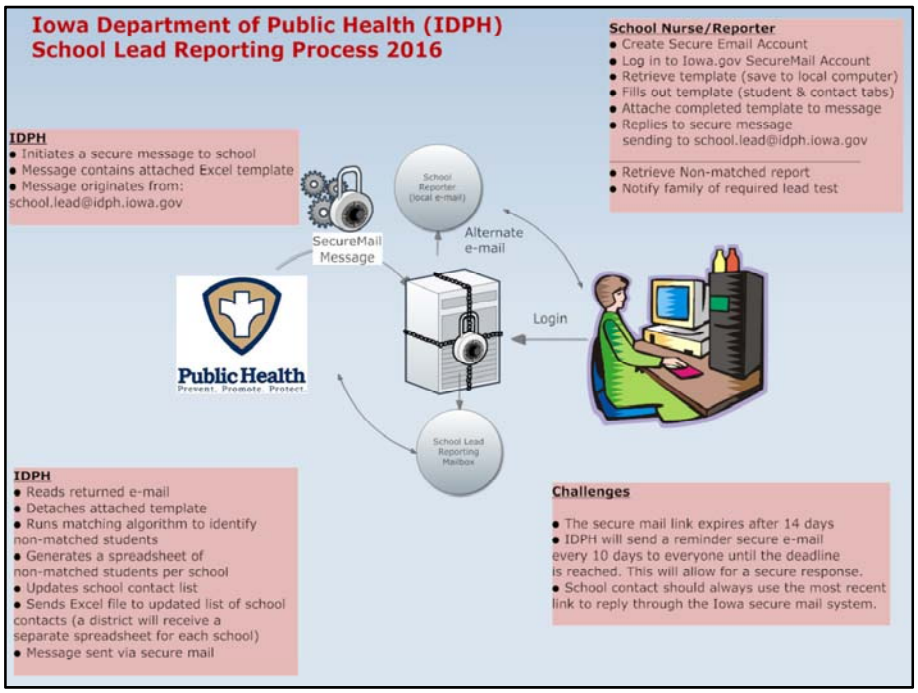
We received 9% response from the 8,510 children who according to our system did not have a blood lead test. I sampled 52% our of the 788 total blood lead tests or reports received from school nurses and parents.
This is what we found:


Type of communication used by county to report kindergartner's blood lead tests
No Reports
Electronic Reports Only
Paper Reports Only
Electronic and Print Reports
Lyon
Osceola
Dickinson
Emmet
Kossuth
Winnebago
Worth
Mitchell
Howard
Winneshiek
Allamakee
Sioux
O'Brien
Clay
Palo Alto
Hancock
Cerro Gordo
Floyd
Chickasaw
Fayette
Clayton
Plymouth
Cherokee
Buena Vista
Pocahontas
Humboldt
Wright
Franklin
Butler
Bremer
Woodbury
Ida
Sac
Calhoun
Webster
Hamilton
Hardin
Grundy
Black Hawk
Buchanan
Delaware
Dubuque
Monona
Crawford
Carroll
Greene
Boone
Story
Marshall
Tama
Benton
Linn
Jones
Jackson
Clinton
Harrison
Shelby
Audubon
Guthrie
Dallas
Polk
Jasper
Poweshiek
Iowa
Johnson
Cedar
Scott
Muscatine
Pottawattamie
Cass
Adair
Madison
Warren
Marion
Mahaska
Keokuk
Washington
Louisa
Mills
Montgomery
Adams
Union
Clarke
Lucas
Monroe
Wapello
Jefferson
Henry
Des Moines
Fremont
Page
Taylor
Ringgold
Decatur
Wayne
Appanoose
Davis
Van Buren
Lee


Number of kindergartners' blood lead tests and other docs received by county
Lyon 0
Osceola 0
Dickinson 2
Emmet 2
Kossuth 0
Winnebago 0
Worth 0
Mitchell 0
Howard 0
Winneshiek 9
Allamakee 0
Sioux 1
O'Brien 14
Clay 0
Palo Alto 3
Hancock 1
Cerro Gordo 1
Floyd 0
Chickasaw 1
Plymouth 15
Cherokee 4
Buena Vista 65
Pocahontas 1
Humboldt 0
Wright 5
Franklin 0
Butler 0
Bremer 1
Fayette 1
Clayton 3
Woodbury 14
Ida 1
Sac 2
Calhoun 2
Webster 0
Hamilton 3
Hardin 7
Grundy 13
Black Hawk 17
Buchanan 3
Delaware 6
Dubuque 28
Monona 1
Crawford 5
Carroll 5
Greene 0
Boone 7
Story 23
Marshall 2
Tama 0
Benton 1
Linn 71
Jones 0
Jackson 2
Clinton 6
Harrison 0
Shelby 0
Audubon 5
Guthrie 0
Dallas 26
Polk 185
Jasper 2
Poweshiek 1
Iowa 18
Johnson 85
Cedar 2
Scott 43
Muscatine 13
Pottawattamie 7
Cass 4
Adair 0
Madison 0
Warren 3
Marion 6
Mahaska 0
Keokuk 4
Washington 2
Louisa 0
Mills 0
Montgomery 1
Adams 0
Union 5
Clarke 0
Lucas 0
Monroe 0
Wapello 0
Jefferson 9
Henry 1
Des Moines 4
Fremont 0
Page 3
Taylor 0
Ringgold 4
Decatur 0
Wayne 2
Appanoose 4
Davis 0
Van Buren 1
Lee 0
Number of BLL Tests
0
1-20
21-60
61-80
Greater than 80



The only data we need to match is the first and last name of the kindergartener or younger and the date of birth. The rest of the information has been removed to avoid errors in the matching process.


Iowa Department of Public Health (IDPH)
School Lead Reporting Process 2016
IDPH
• Initiates a secure message to school
• Message contains attached Excel template
• Message originates from:
school.lead@idph.iowa.gov
School Nurse/Reporter
• Create Secure Email Account
• Log in to Iowa.gov SecureMail Account
• Retrieve template (save to local computer)
• Fills out template (student & contact tabs)
• Attache completed template to message
• Replies to secure message
sending to school.lead@idph.iowa.gov
• Retrieve Non-matched report
• Notify family of required lead test
School Reporter (local e-mail)
Alternate e-mail
SecureMail Message
Login
Public Health
Prevent. Promote. Protect.
School Lead Reporting Mailbox
IDPH
• Reads returned e-mail
• Detaches attached template
• Runs matching algorithm to identify non-matched students
• Generates a spreadsheet of non-matched students per school
• Updates school contact list
• Sends Excel file to updated list of school contacts (a district will receive a separate spreadsheet for each school)
• Message sent via secure mail
Challenges
• The secure mail link expires after 14 days
• IDPH will send a reminder secure e-mail every 10 days to everyone until the deadline is reached. This will allow for a secure response.
• School contact should always use the most recent link to reply through the Iowa secure mail system.

The only data we need to match is the first and last name of the kindergartener or younger and the date of birth. The rest of the information has been removed to avoid errors in the matching process.

Format of secure Email

iowa.gov SECUREMAIL

You have received a secure email from the State of Iowa.

Read your secure message by clicking the link below or paste the following address in your browser.

https://securemail.iowa.gov/verify/logon.php?fmu=https://securemail.iowa.gov/module/semail.fe?reqobject=Locale&reqaction=20&lang=en&id=ivorvig@outlook.com&page=semail_envelop&subject=FW%3a%20SecureMail%20test&sender=john.satre@idph.iowa.gov&beId=18E.u81DwZcK025656-u81DwZcN025656000013 34

The Web browser will be launched and prompt you to log in.

Your secured email message will be available for 14 days.

More information regarding Secure Email (including a User Guide) is available at:
https://help.iowa.gov/kb_view.do?sysparm_article=KB0010260

If you have concerns about the validity of this message, contact the sender directly,

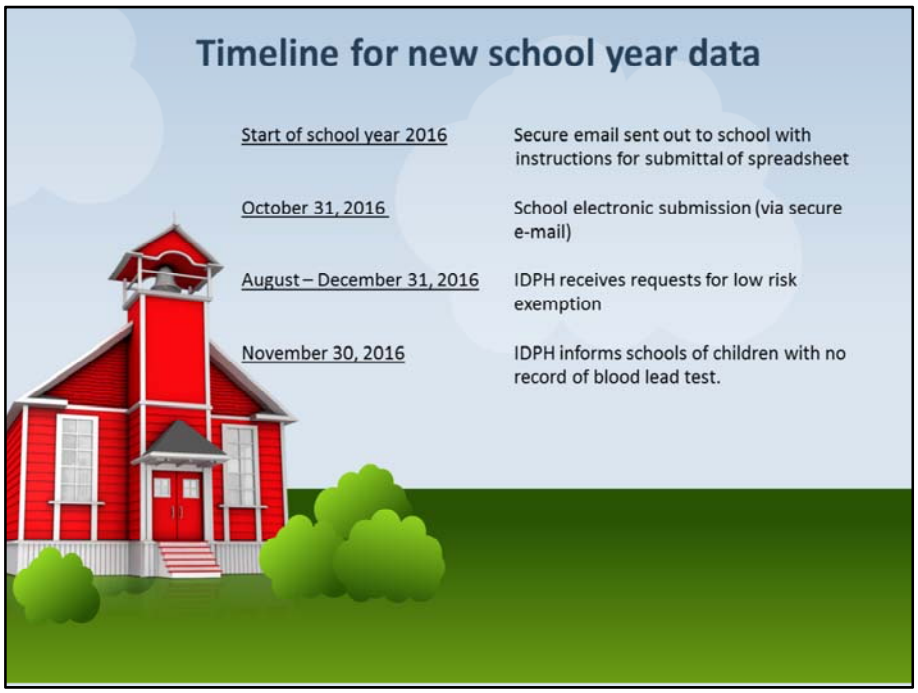
OR contact the Office of the Chief Information Officer Service Desk: Email: OCIO.Servicedesk@iowa.gov
Phone: 515-281-5703 or 1-800-532-1174.

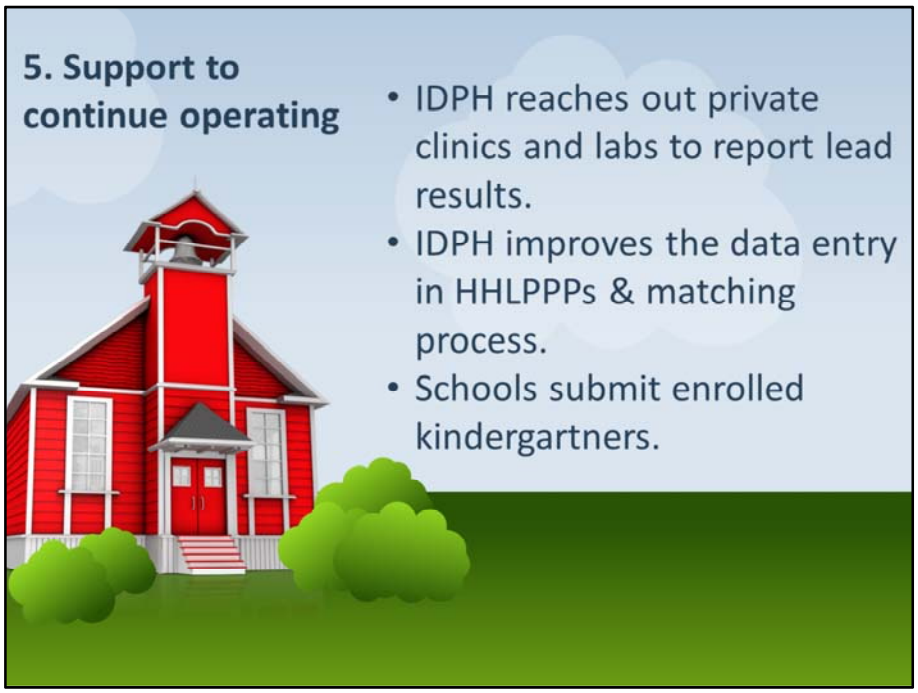
The only data we need to match is the first and last name of the kindergartener or younger and the date of birth. The rest of the information has been removed to avoid errors in the matching process.

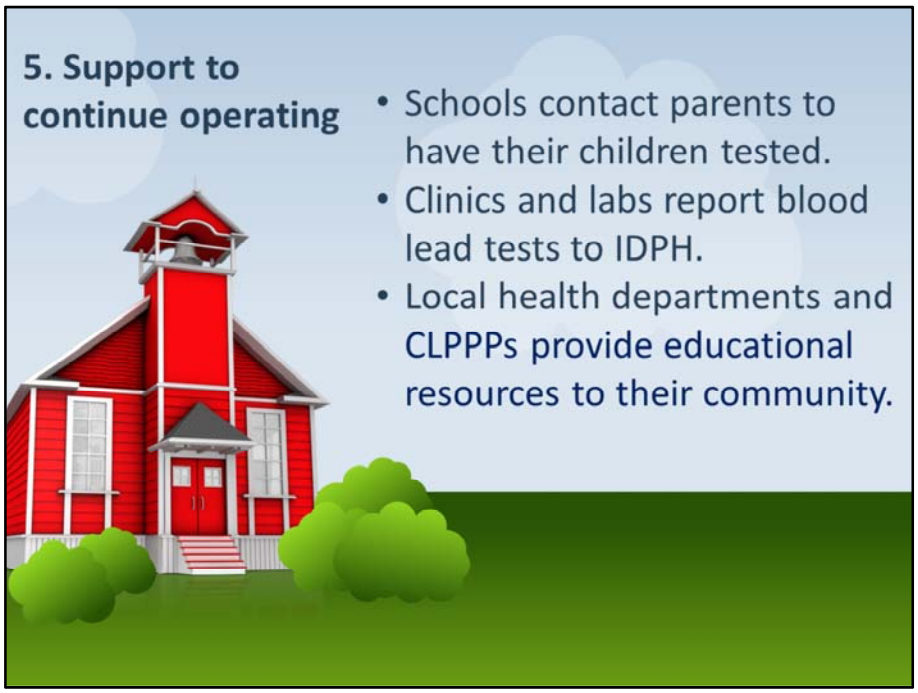
Two tabs to fill in

A	B	C	D	E	F	G	H	
Child's last name	Child's first name	Date of birth (mm/dd/yyyy)	Name of the school	Number of School District	City	County	Religious exemption	Low exe
Smith	Jane	1/20/2010	Norway Elementary School	609	Norway	Benton	X	
Cruz, Jr.	Alex	8/9/2010	Norway Elementary School	609	Norway	Benton		
Van Gogh	Vincent	3/30/2010	Norway Elementary School	609	Norway	Benton		X
Fulton	Mya	1/18/2010	Iowa Valley Elementary School	609	Marengo	Iowa		
Reed	Angel	10/29/2009	Iowa Valley Elementary School	609	Marengo	Iowa	X	
Slade, II	Parker	6/11/2009	Iowa Valley Elementary School	609	Marengo	Iowa		

A	B	C	D	E
First and last name of school's contact person	Name of the school	Number of the school district	E-mail address	Phone number
Katherine Davis	Norway Elementary School	609	katherine.davis@benton.k12.ia.us	319-230-7869 x7
Katherine Davis	Iowa Valley Elementary School	609	kdavis@ivcsd.org	319-642-3581


Timeline for new school year data
Start of school year 2016
Secure email sent out to school with instructions for submittal of spreadsheet
October 31, 2016
School electronic submission (via secure e-mail)
August – December 31, 2016
IDPH receives requests for low risk exemption
November 30, 2016
IDPH informs schools of children with no record of blood lead test.


5. Support to continue operating
• IDPH reaches out private clinics and labs to report lead results.
• IDPH improves the data entry in HHLPPPs & matching process.
• Schools submit enrolled kindergartners.


5. Support to continue operating
• Schools contact parents to have their children tested.
• Clinics and labs report blood lead tests to IDPH.
• Local health departments and CLPPPs provide educational resources to their community.

5. Support to continue operating
• Parents do their job!
Blood Lead Screening Test

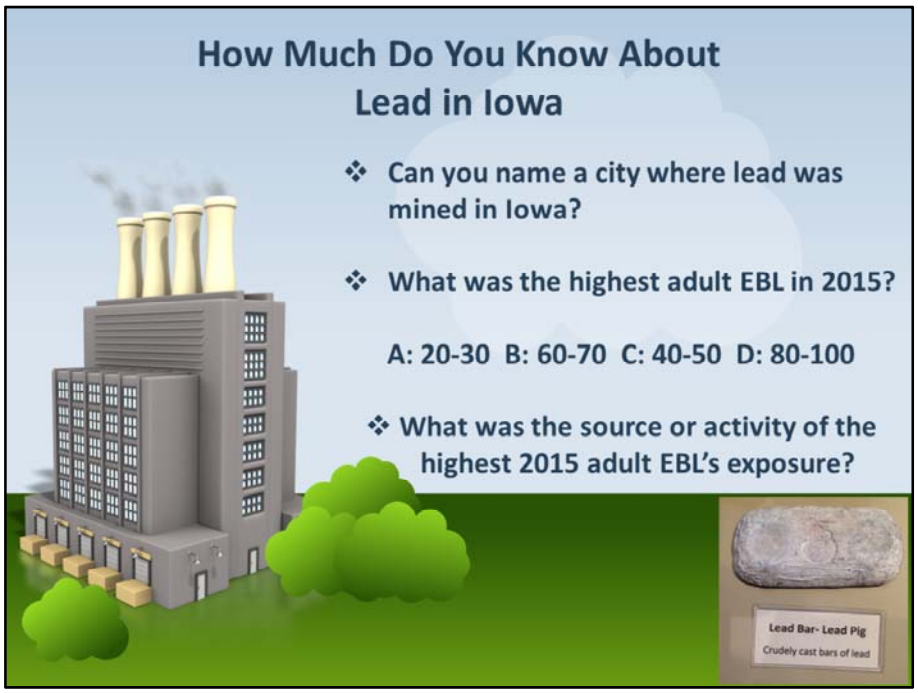
References & contact info.

- Iowa Department of Public Health http://idph.iowa.gov/lpp/blood-lead-testing
- CDC: http://www.cdc.gov/

Contact information:
1 (800) 972-2026
Rossany Brugger (515) 281-3225
Rossany.brugger@idph.iowa.gov
Stu Schmitz (515) 281-8707
stuart.schmitz@idph.iowa.gov

THANKYOU!

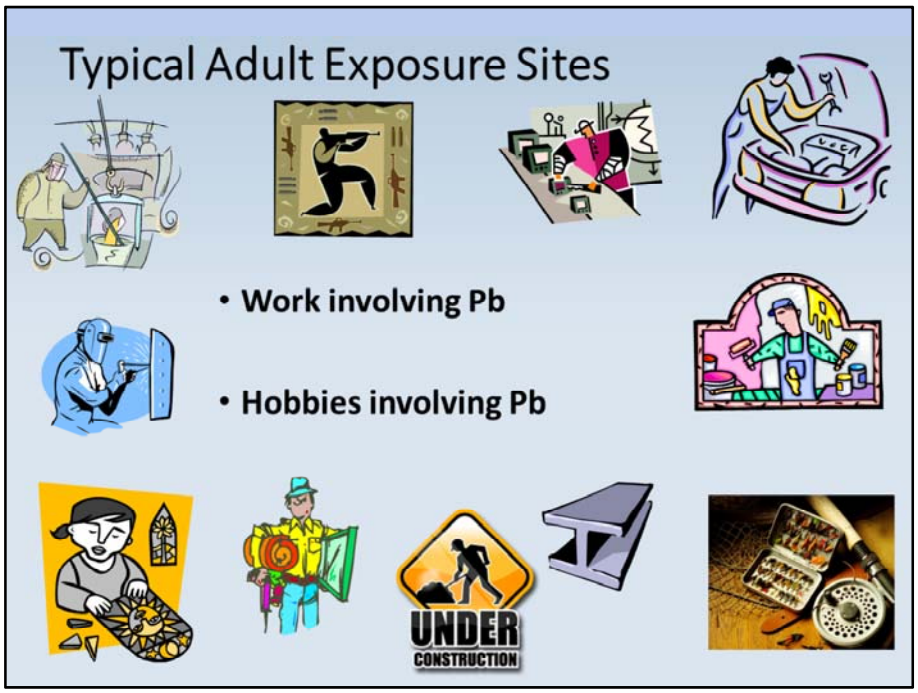
Introduction:
Adult Lead
• Adult Lead Exposure in Iowa
• Current reference level for adults
• What follow-up is done for EBL adults
• HHLPSS and Adults – what LPH needs to know
• Child Cases and ABLES – working together
• Beyond ABLES project
• Using HHLPSS built-in reports (if time)
• Comments, Questions.....
Kathy Leinenkugel, IDPH
Occupational Health & Safety Surveillance Program

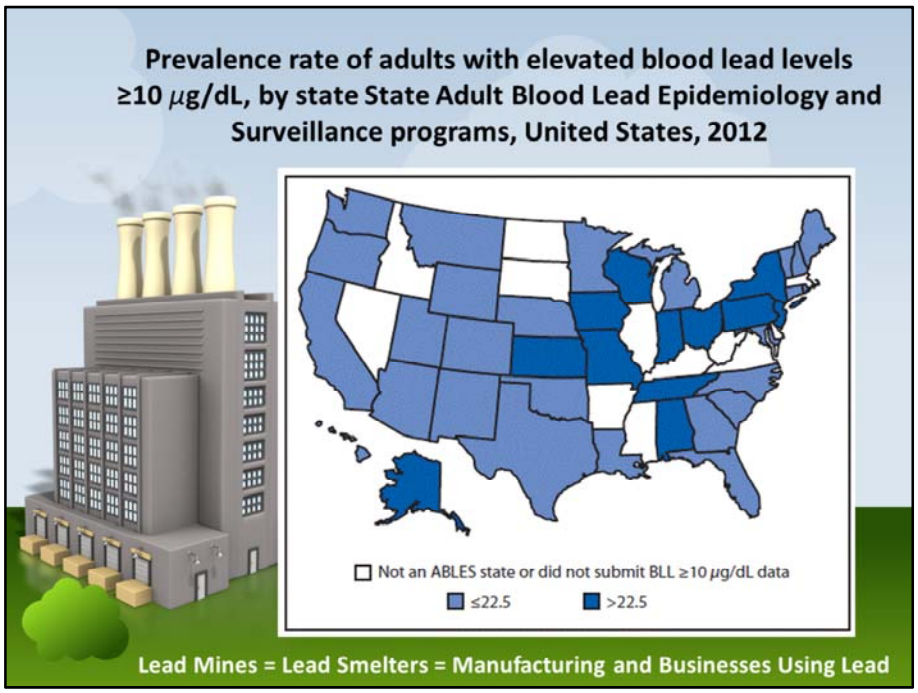


http://www.msswarriors.org/history/MeskinteractiveCD1/Pages/Culture/Anthology/Collins%20Meskwaki%20Lead%20Mine.htm
Lead Mining Dubuque
http://www.encyclopediadubuque.org/index.php?title=LEAD_MINING
LEAD MINING. The principal attraction of the Dubuque area to the first white settlers. LEAD mining was carried on in the area as early as 1685 when Nicholas PERROT entered the territory. He established a fort near the present site of East Dubuque and mined lead on the western bank of the Mississippi. (1)It is believed that the small-scale mining done by Native Americans attracted Julien DUBUQUE to this land in 1788. Dubuque skillfully persuaded the natives, in an agreement signed at Prairie du Chien on September 22, 1788, to grant him mining rights along the western side of the MISSISSIPPI RIVER near CATFISH CREEK. Dubuque established one furnace to refine ore near present-day EAGLE POINT while a second furnace was constructed at the mouth of Catfish Creek. (2) Estimates of the amount of ore he annually mined range between twenty thousand and forty thousand pounds. (3) Doubtful about the legality of his agreement with the Native Americans, Dubuque petitioned the Spanish Governor-General in 1796 to obtain formal recognition of his claim to which he gave the name "Mines of Spain." (4) From 1788 to 1810 he worked these mines with hoe, shovel, crowbar and pick, but sank no shafts. He also used Native American labor.

According to Lucius Hart LANGWORTHY, the amount of lead exported from the Dubuque mining district from 1833 to 1856 varied from 40,000,000 to 60,000,000 pounds annually. Lead miners continued to enjoy what appeared to be a limitless supply of ore. In 1841 estimates were made that four times as much lead ore was mined than had been seen in the preceding four years. Much of the mining between 1833 and 1856 was called "surface scratching" referring to the lack of tunneling. One exception was the Thomas Levins mine discovered in October 1850, in which a shaft was dug 120 feet long and small cars were operated on tracks to bring the ore to the shaft, a distance of several hundred feet. Occasionally vast caverns were discovered in which the crystallized lead sparkled like silver and assayed out at 85 percent purity. Estimates were made that five thousand miners would not exhaust the supply of ore in less than one hundred years. In 1875 eighty-five percent of the 25,000 people living in Dubuque were miners. The growth of lead mining peaked in 1848 just as the California gold rush drew miners west in search of riches. (19) The continued development of mining caused the number of smelters to increase to seven by 1849. The total production of the seven smelters was estimated at thirty thousand pigs annually with the price ranging from $17.00 to $25.00 per thousand pounds. Production varied widely. In 1847 a total of 140,000 pigs of lead were shipped from Dubuque, while in 1848 the number had sunk to 30,000.
Four smelting furnaces were in operation in Dubuque at the beginning of the 1860s. All were located near a source of water that was necessary in the smelting process. Refining lead was simply a process of roasting the ore to burn off the estimated 16 percent sulphur content. The remaining material was then washed free of ash and dirt.

Shifting priorities, rather than a lack of ore, spelled the decline of lead mining in Dubuque. Settlers, recognizing the great opportunities in farming, abandoned the mines to homestead. By the start of the 1900s, Dubuque was no longer a lead-mining community.


Typical Adult Exposure Sites
• Work involving Pb
• Hobbies involving Pb
UNDER
CONSTRUCTION



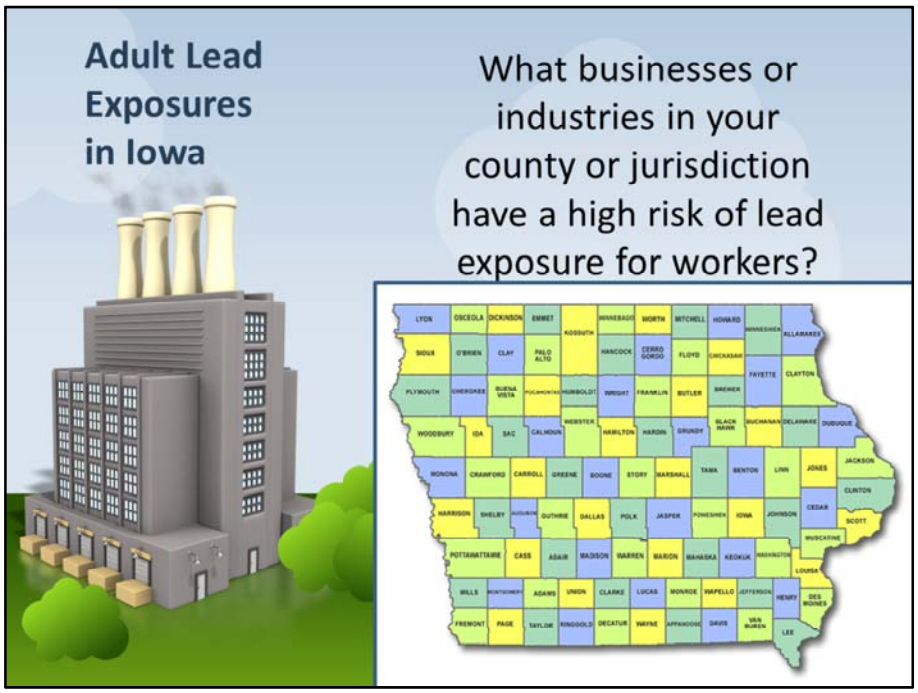
Even though most of the lead mines in the US are no longer active, and there are fewer smelters, the legacy of those businesses still impacts Iowa and other states.
Federal Agency Region 7: NE, KS, IA, MO – high adult lead prevalence rates are linked to the historical
Lead Mines – Lead Smelters – Mfg. using Lead

2012 was the last year with this many states reporting Adult lead data – funding discontinued by NIOSH
2015 – some funding available to states as part of general occupational surveillance – about half as many states reporting data to NIOSH
Rates shown are prevalence rate per 100,000 employed adults in state.

Industries With Adult Pb Exposures in Iowa

- Plumbing fixture Mfg
- Industrial Machinery Mfg
- Iron, Brass & Aluminum foundry
- Valve & Pipe fittings
- Lead smelter/Primary
- Storage Battery Mfg
- Lead Pigment Mfg
- Industrial Inorganic Chemicals Mfg
- Radiator Shops
- Stained Glass Artisans
- Indoor Firing Range Employees and/or users
- Construction Industry (Renovators, Home Repairs, Painting Contractors)

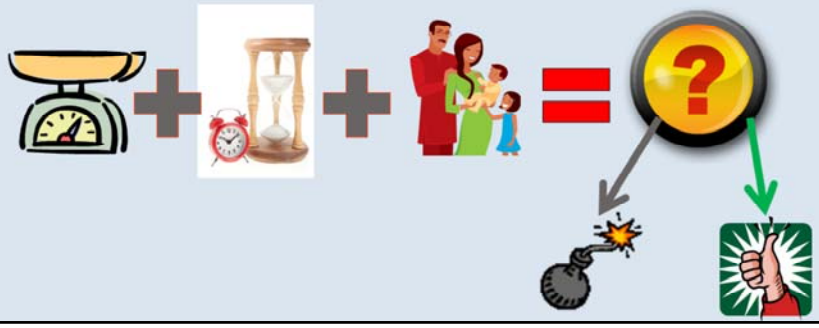
What industries or businesses in your county or jurisdiction have a high risk of lead exposure for workers?


Adult Lead Exposures in Iowa
What businesses or industries in your county or jurisdiction have a high risk of lead exposure for workers?

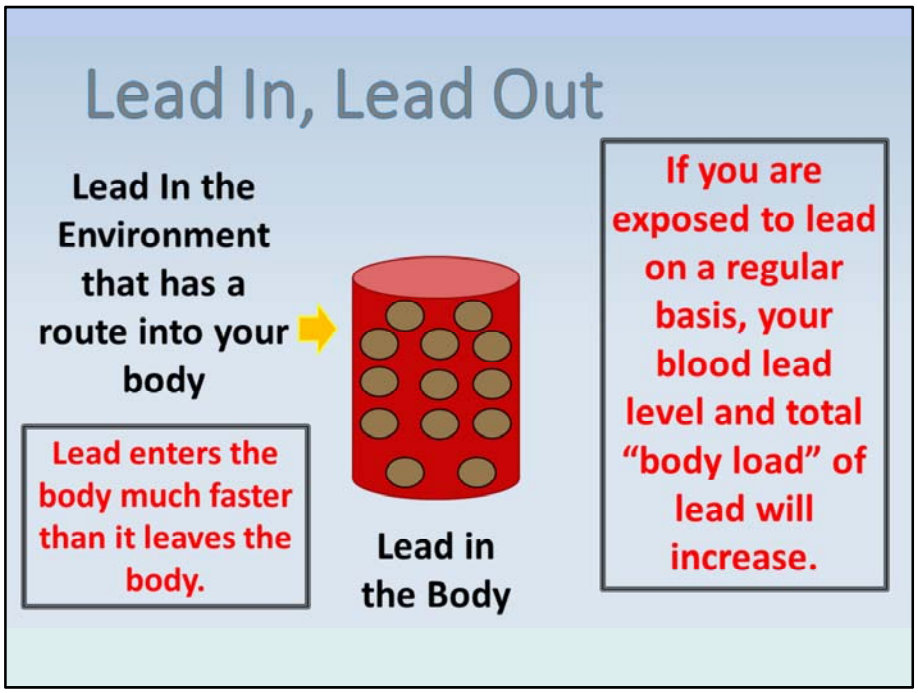
Some Lead Industries Across Iowa
GERDAU
EnerSys
MAHLE
CLOW
EAST PENN manufacturing co., inc.
Johnson Controls
Boyard Studio Inc.
Stained Glass
Radiator Classic
EXIDE BATTERIES
CAR BATTERY

Lead 101

- **Lead is a dose toxin:**
  - How much
  - How long
  - Vulnerability of the person



Route of Adult Exposure
• Most likely by inhalation
• Lead fumes
• Can be oral
• airborne lead contamination of food & drink items
• hand-to-mouth transfer from surfaces
GAS


Lead In, Lead Out
Lead In the Environment that has a route into your body
Lead enters the body much faster than it leaves the body.
Lead in the Body
If you are exposed to lead on a regular basis, your blood lead level and total "body load" of lead will increase.

Adults:
Effects of Lead Exposure

☹Cardiovascular and Kidney Damage
☹High Blood Pressure
☹Digestive problems
☹Nerve Disorders
☹Anemia
☹Reproductive Problems

Problems can be effects from childhood exposure or current exposure as an adult.

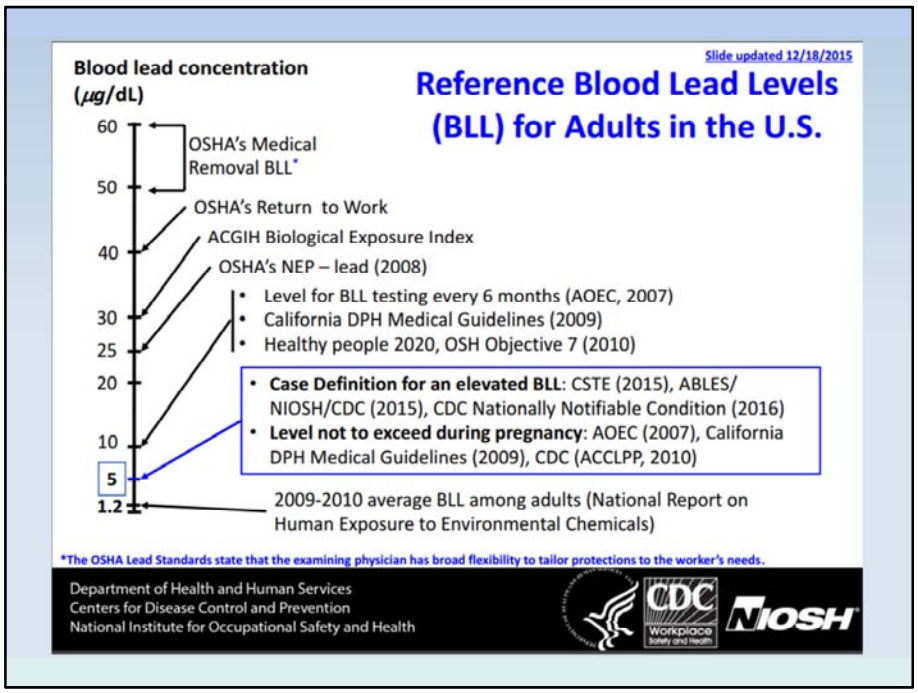
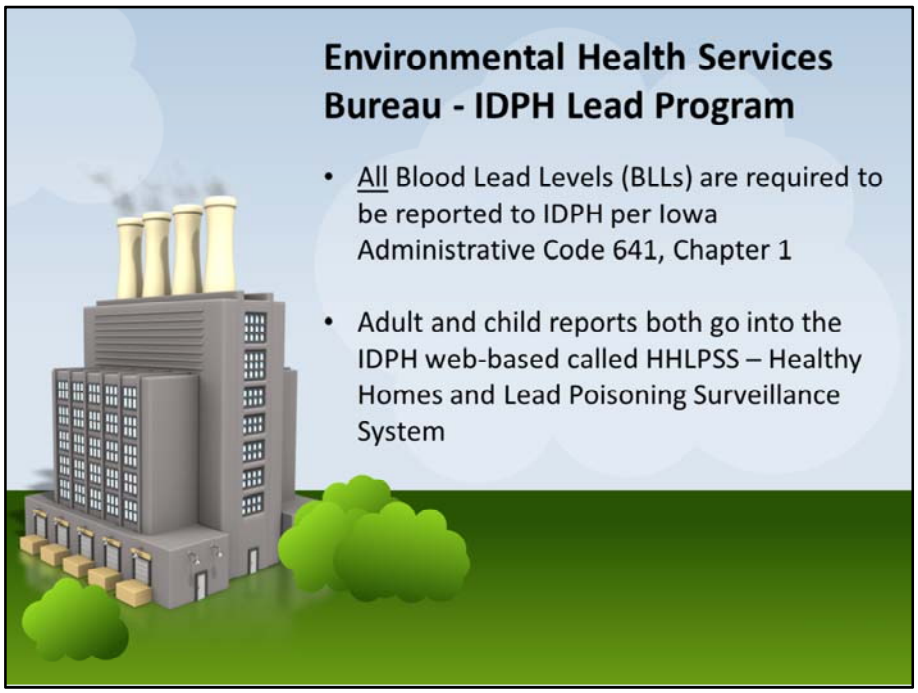
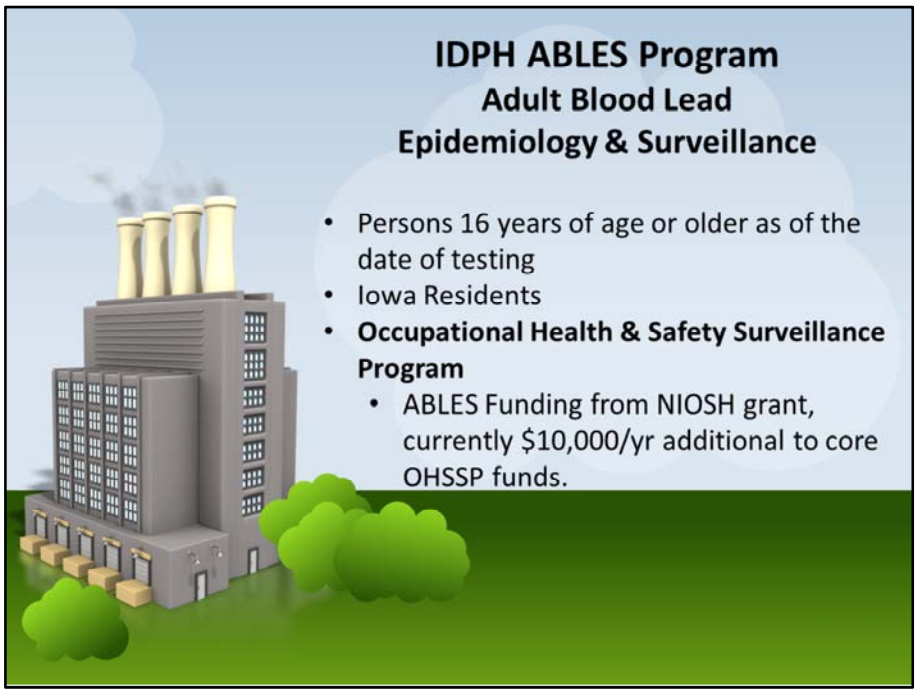


Chart and 2nd page Included in references

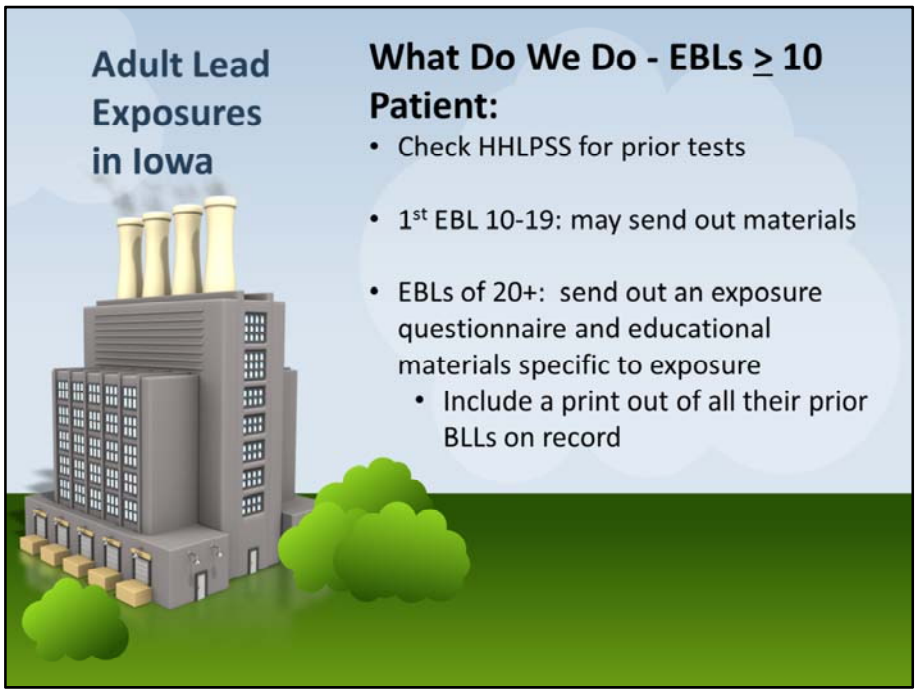
Iowa follows NIOSH (CDC) definitions for adult lead levels, so in Iowa, a blood lead level of 5 mcg/dL or higher is considered above the reference level or elevated from a medical point of view.


Environmental Health Services Bureau - IDPH Lead Program
All Blood Lead Levels (BLLs) are required to be reported to IDPH per Iowa Administrative Code 641, Chapter 1
Adult and child reports both go into the IDPH web-based called HHLPSS – Healthy Homes and Lead Poisoning Surveillance System

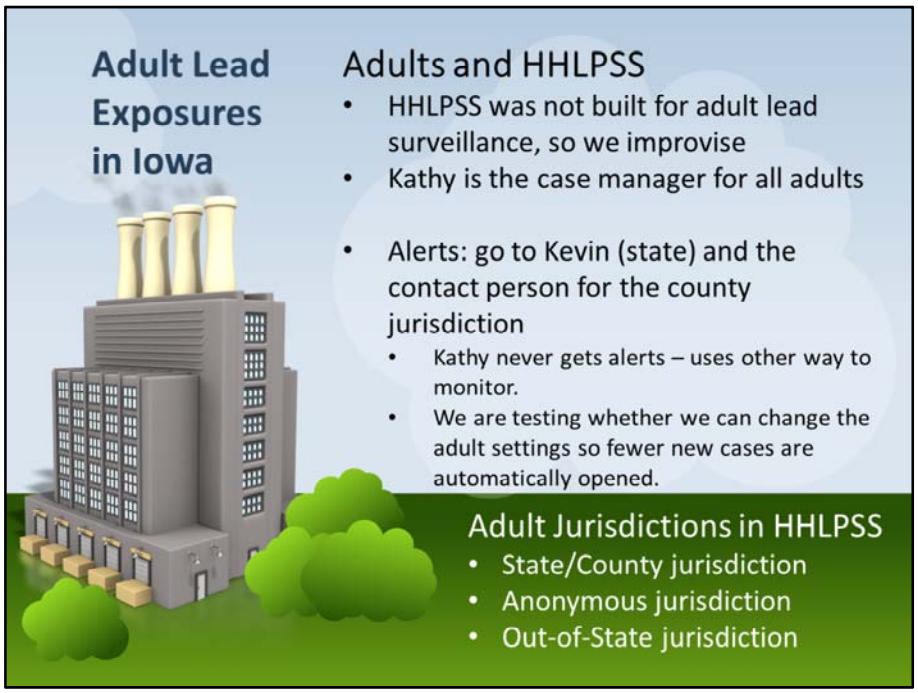

IDPH ABLES Program
Adult Blood Lead
Epidemiology & Surveillance
• Persons 16 years of age or older as of the date of testing
• Iowa Residents
• Occupational Health & Safety Surveillance Program
• ABLES Funding from NIOSH grant, currently $10,000/yr additional to core OHSSP funds.

Adult Lead Exposures in Iowa
What Do We Do
• Primary Goal of NIOSH Funding:
• Track info about exposures
• Work-related or not
• Industry coding (employer)
• Job (occupation)
• Non-work: hobby, home RRP, other
• Report de-identified data to NIOSH for use in national surveillance

Adult Lead Exposures in Iowa
What Do We Do - EBLs ≥ 10
Medical Provider – 1st EBL
• Contact medical provider/clinic to request missing info (address most common)
• Fax form asking for reason for test, suspected exposure source , name of employer if work-related
• Provide reference materials regarding adult lead reference levels, chronic exposure concerns
• Provide referrals for treatment guidance
• Iowa Poison Control Center, UI

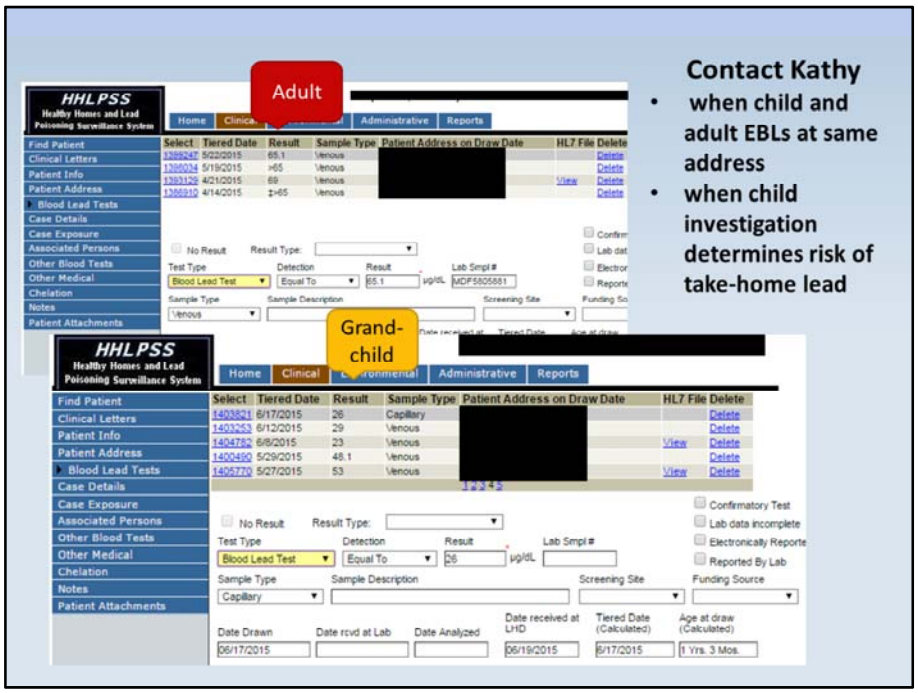

Adult Lead Exposures in Iowa
What Do We Do - EBLs ≥ 10
Patient:
• Check HHLPSS for prior tests
• 1st EBL 10-19: may send out materials
• EBLs of 20+: send out an exposure questionnaire and educational materials specific to exposure
• Include a print out of all their prior BLLs on record

Referrals to OSHA for site inspections, regulatory role
Usually referral is by employer/business name with a summary of concerns
(Ex: Four workers had BLLs all drawn on 8/10/16; A=45 mcg/dL, prior test was 22 on 6/9/16; B=41 mcg/dL, prior test was 20 on 6/9/16; C=24 mcg/dL, prior test was 9 on 5/4/16; D= 14 mcg/dL, second test of record, prior test was <2 on 7/7/16)
Patient name only shared when OSHA needs more information regarding location in plant where EBL works
Referrals to OSHA allowed under IAC 641—1.17(139A,22) Confidentiality: 1.17(3) Reportable disease records and information, with the exception of AIDS and HIV records, which identify a person or a business named in a report, may be disclosed under the following limited circumstances: a. By and between department employees and agents who have a need for the record in the performance of their duties. b. By and between department employees and agents and local boards of health and local health departments as necessary to conduct an investigation. c. By and between department employees and agents and health care providers, laboratories, and hospitals as necessary to conduct an investigation. d. **By and between department employees and agents and employees and agents of federal, state, and local agencies as necessary to conduct an investigation.**

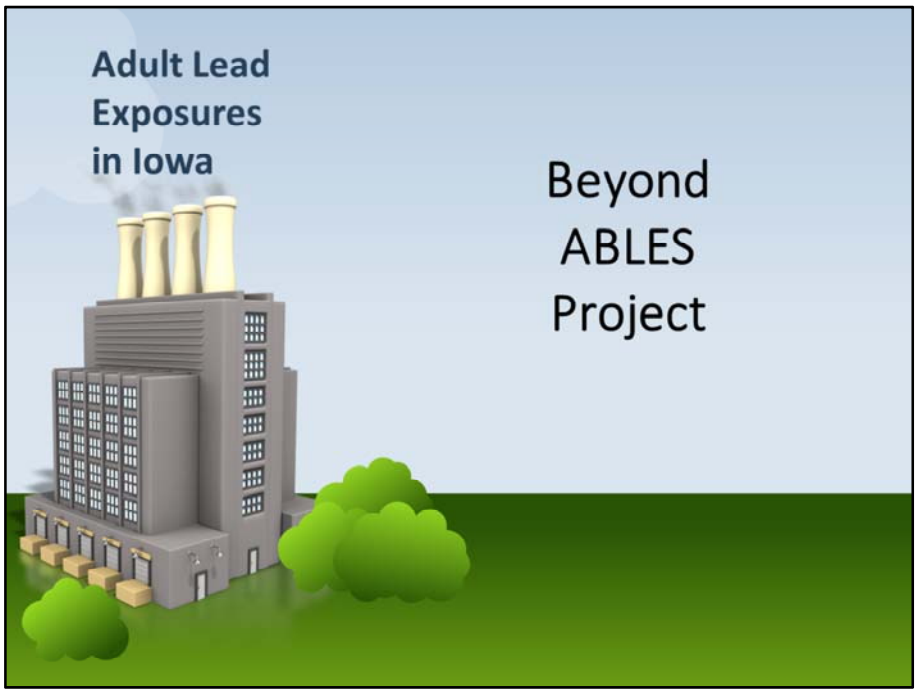


An adult with a validated address should show as being in the state or county jurisdiction
If an adult does not have a validated address (or it is missing), it will be in the anonymous jurisdiction until problem resolved
If the adult if from another state, once the address is validated, the case should move to an out-of-state jurisdiction but is still visible in database and extracted data

Adult Lead Exposures in Iowa
HHLPSS Adult Alerts: LPH role
1. Verify the alert is for an adult address or person
2. Mark alert as 'read'
• Address option: Administratively close if HHLPSS will let you so it does not come up as an open address in your jurisdiction.
3. That's it.
However, please contact Kathy when.....

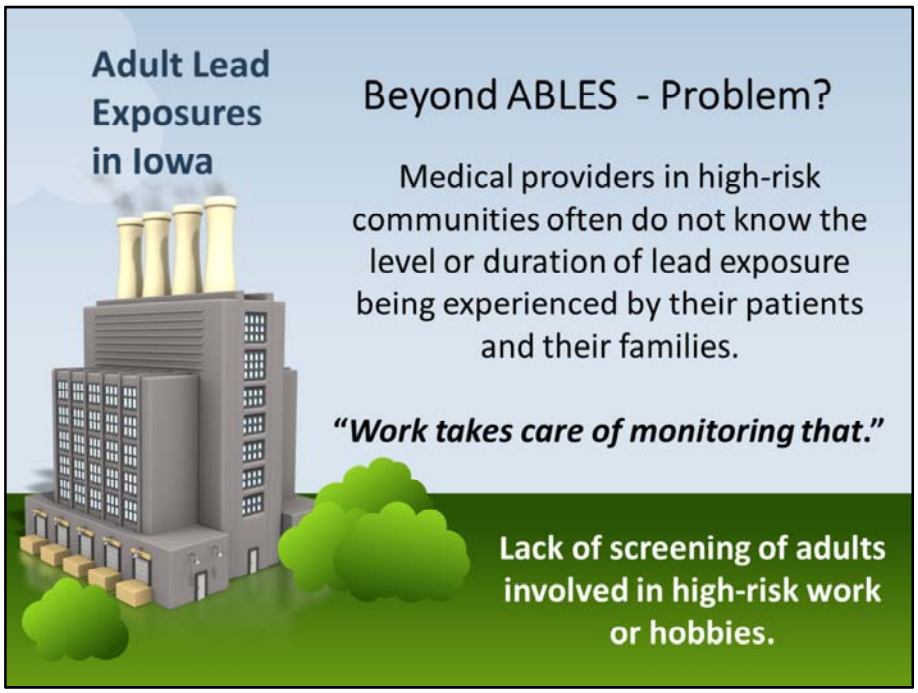


ABLES does not routinely do home environmental visits or inspections. If IDPH knows that a family is working with both an EBL child and an adult with an EBL, Kathy will defer to the State or LPH contacts for most of the communication with the family.


Adult Lead
Exposures
in Iowa
Beyond
ABLES
Project

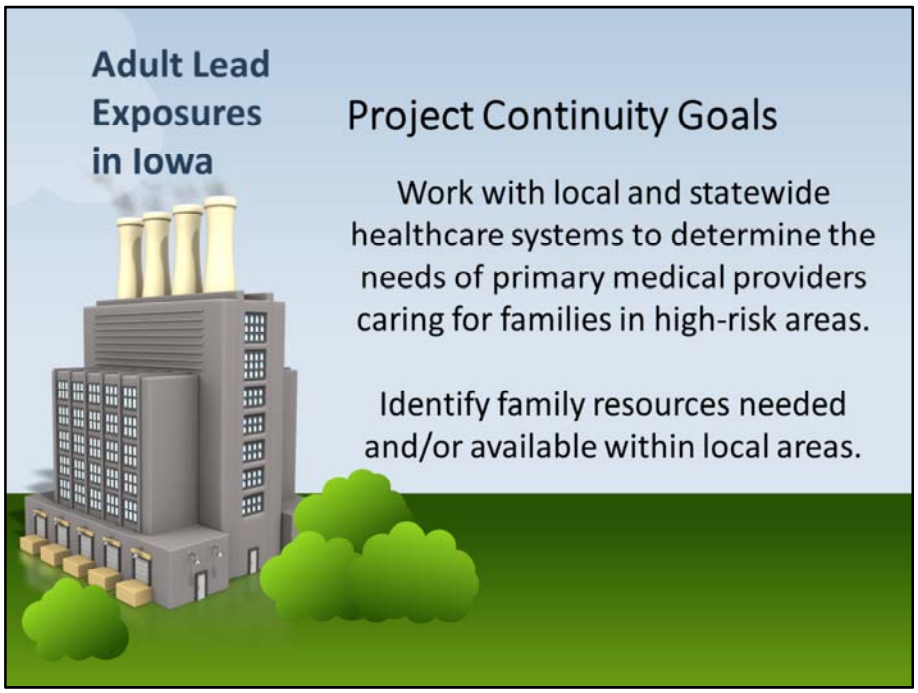
Background: 2013 Adult Data

- 770 of 856 or 90% of Iowa EBLs were employees working in manufacturing plants that use lead or metal products containing lead.
- 10 employers accounted for 786 EBLs workers - almost 92%
- Highest EBL cases were linked to hobby exposure related to firearms use at unregulated gun clubs, casting or reloading ammunition, and to small business radiator repair shops, and home renovators.
- Some counties with the highest number of adult EBLs had the lowest percentages of children being screened at 1, 2, 3 years of age.
- Data showed an increasing number of young women working in the Iowa battery plants, with a 2-fold increase in EBLs in women of child-bearing age in 2013.
- Many battery plant workers have decades of elevated lead levels, which may be resulting in worsening health and chronic disease.


Adult Lead Exposures in Iowa
Beyond ABLES - Problem?
Medical providers in high-risk communities often do not know the level or duration of lead exposure being experienced by their patients and their families.
"Work takes care of monitoring that."
Lack of screening of adults involved in high-risk work or hobbies.

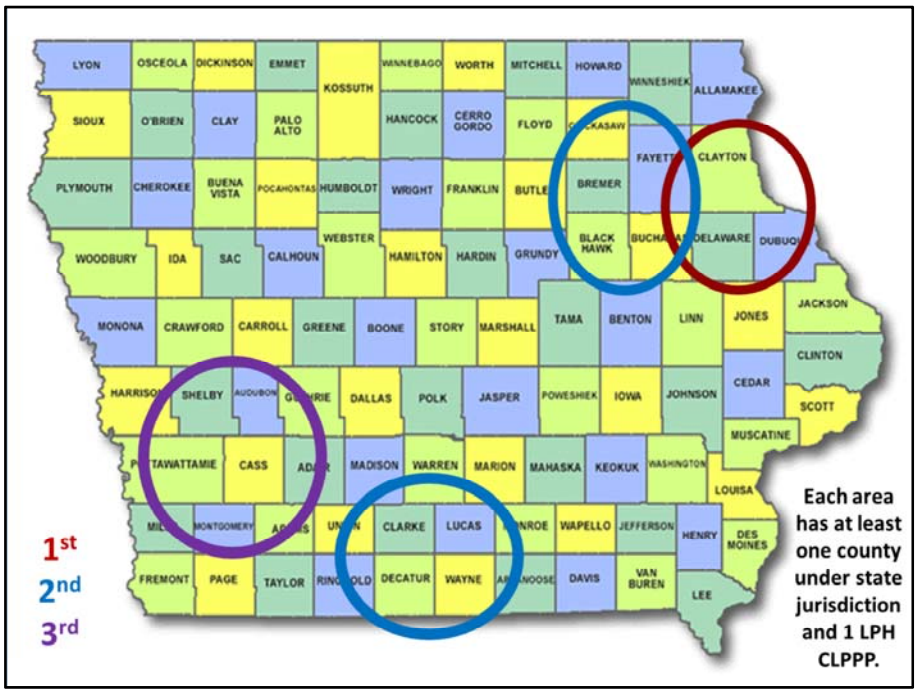
Adult Lead Exposures in Iowa
Beyond ABLES: Strategy
IDPH ABLES and CLPPP will work with local public health providers to connect with medical providers, families, and employers at the community level to raise awareness of hazards and health impacts from workplace and hobby lead exposure.

Adult Lead Exposures in Iowa
Project Communication Goals
Messaging to Medical Providers, Employers, Employees:
• Exposure dangers for women of child-bearing age
• Impacts from chronic lead exposure
• Take-home lead concerns for children and family members
• Reasons for periodic screening of children 1-4 years of age in high risk areas

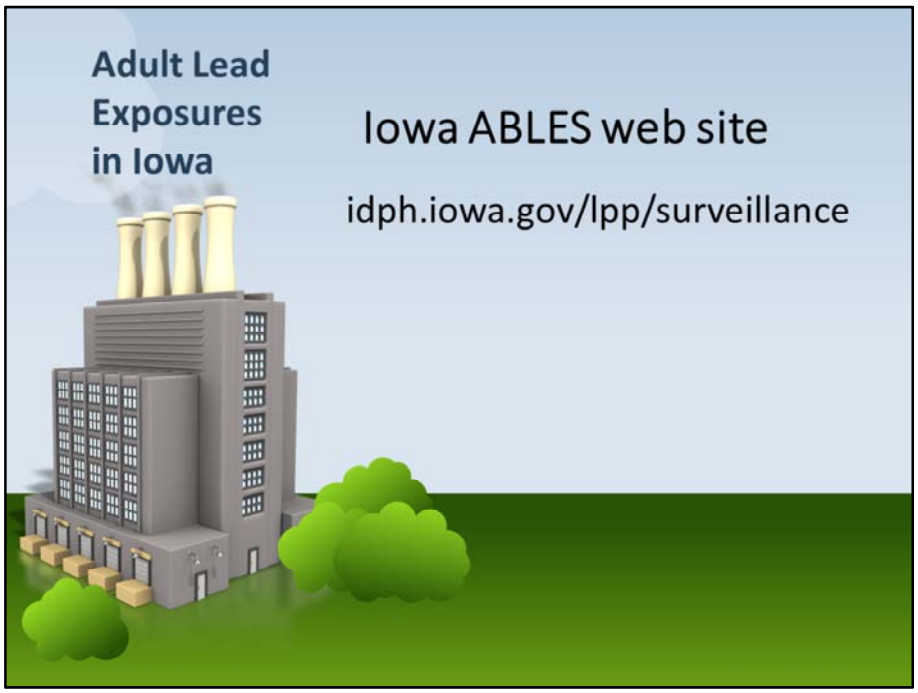

Adult Lead Exposures in Iowa
Project Continuity Goals
Work with local and statewide healthcare systems to determine the needs of primary medical providers caring for families in high-risk areas.
Identify family resources needed and/or available within local areas.

Using Data to Focus – Where to Start

- **Cross referencing was done of the 99 counties:**
  - County of residence for lead battery plant workers with EBLs in 2013 (29)
  - Known industrial lead exposure case clusters (7)
  - Known gun clubs or firing ranges (53)
  - Known radiator repair shops(36)
  - 10 or more adult EBL individuals in 2013 (13)
- **This comparison yielded a list of 20 counties representing 92% of the adult EBLs in 2013.**


LYON
OSCEOLA
DICKINSON
EMMET
KOSSUTH
WINNEBAGO
WORTH
MITCHELL
HOWARD
WINNESHIEK
ALLAMAKEE
SIOUX
O'BRIEN
CLAY
PALO ALTO
HANCOCK
CERRO GORDO
FLOYD
CLAYTON
PLYMOUTH
CHEROKEE
BUENA VISTA
HUMBOLDT
WRIGHT
FRANKLIN
BREMER
WEBSTER
HAMILTON
HARDIN
GRUNDY
BLACK HAWK
DELAWARE
WOODBURY
IDA
SAC
CALHOUN
MONONA
CRAWFORD
CARROLL
GREENE
BOONE
STORY
MARSHALL
TAMA
BENTON
LINN
JONES
JACKSON
CLINTON
CEDAR
SCOTT
MUSCATINE
SHELBY
DALLAS
POLK
JASPER
POWESHIEK
IOWA
JOHNSON
CASS
MADISON
WARREN
MARION
MAHASKA
KEOKUK
WASHINGTON
LOUISA
MONTGOMERY
CLARKE
LUCAS
WAPELLO
JEFFERSON
HENRY
DES MOINES
FREMONT
PAGE
TAYLOR
DECATUR
WAYNE
DAVIS
VAN BUREN
LEE
1st
2nd
3rd
Each area has at least one county under state jurisdiction and 1 LPH CLPPP.

Adult Lead Exposures in Iowa
Beyond ABLES Project
Next Step
• Identify Key Partners in Area 1 (Clayton, Delaware, and Dubuque Counties)
Contact Kathy if you would like to be involved in future planning.


Adult Lead Exposures in Iowa
Iowa ABLES web site
idph.iowa.gov/lpp/surveillance

Using HHLPSS Current Build in Reports

- If time allows, review in session
- If not, anyone can contact Kathy to follow-up, get tips
- Kathy.leinenkugel@idph.iowa.gov 515-281-4930

Useful Ways to Use the Current Build in Blood Lead Test List Reports Function

- Run a report of blood lead tests for your jurisdiction between any date range
  - Then you can do your own data clean-up and analysis, spot duplicates,
- Limited choices, but still provides helpful information
- Not an option: Cannot currently run for only the highest result for a person between date range – still need to do that manually from all tests (or write your own macro).

Using Reports to monitor recent tests

HHLPSS
Healthy Homes and Lead Poisoning Surveillance System

Home | Clinical | Environmental | Administrative | Reports

- Clinical
- Blood Lead Test List
- Lead Program Activity
- Cases Eligible for Closure
- Positive Test With No Case
- List Cases By Provider
- List Cases By Case Manager
- Complete Child Report
- Blood Test Counts
- Duplicate Child Report
- Child Case Events
- Environmental
- Administrative

Blood Tests Report

Report Parameters

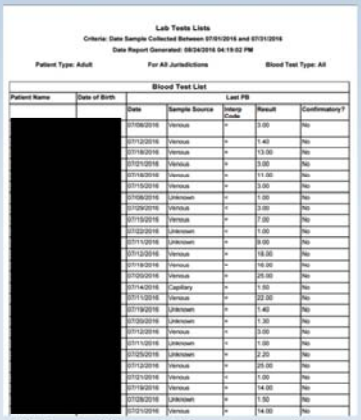
Blood Test Type	All	Patient Type	Adult
Next PB Test			
Next PB Test From Date		Next PB Test End Date	
Blood Sample Test			
Blood Sample From Date	07/01/2016	Blood Sample End Date	07/31/2016
Next PB Test Overdue Days	0	Jurisdiction	All Jurisdictions
Blood Sample Test Case Type	All	Report Type	Blood Test List
Report Export Format	CSV		

View Report

BloodTestRepor....c...

Depending on your computer hardware, software, the report will either open on screen or show up as a download in the lower right of your screen (Windows 7 Enterprise, MS Office 2013, browser Chrome shown)

Why Use CSV and not PDF or Excel



Lab Tests Lists

Criteria: Date Sample Collected Between 07/01/2016 and 07/31/2016

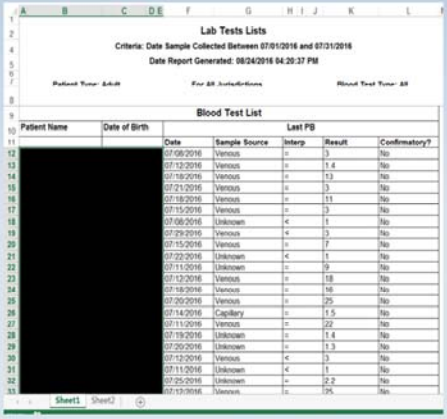
Date Report Generated: 08/24/2016 04:19:02 PM

Patient Type: Adult For All Jurisdictions Blood Test Type: All

Blood Test List

Patient Name	Date of Birth	Last PB				
		Date	Sample Source	Interp Code	Result	Confirmatory?
[redacted]		07/06/2016	Venous	=	3.00	No
		07/12/2016	Venous	=	1.40	No
		07/18/2016	Venous	=	13.00	No
		07/21/2016	Venous	=	3.00	No
		07/18/2016	Venous	=	11.00	No
		07/15/2016	Venous	=	3.00	No
		07/06/2016	Unknown	=	1.00	No
		07/29/2016	Venous	=	3.00	No
		07/15/2016	Venous	=	7.00	No
		07/22/2016	Unknown	=	1.00	No
		07/11/2016	Unknown	=	9.00	No
		07/12/2016	Venous	=	18.00	No
		07/18/2016	Venous	=	16.00	No
		07/20/2016	Venous	=	25.00	No
		07/14/2016	Capillary	=	1.50	No
		07/11/2016	Venous	=	22.00	No
		07/19/2016	Unknown	=	1.40	No
		07/20/2016	Unknown	=	1.30	No
		07/12/2016	Venous	=	3.00	No
		07/11/2016	Unknown	=	1.00	No
		07/25/2016	Unknown	=	2.20	No
		07/12/2016	Venous	=	26.00	No
		07/21/2016	Venous	=	1.00	No
		07/19/2016	Venous	=	14.00	No
		07/26/2016	Unknown	=	1.50	No
		07/21/2016	Venous	=	14.00	No

PDF good for printing, but can't format, sort, etc.



Lab Tests Lists

Criteria: Date Sample Collected Between 07/01/2016 and 07/31/2016

Date Report Generated: 08/24/2016 04:20:37 PM

Patient Type: Adult For All Jurisdictions Blood Test Type: All

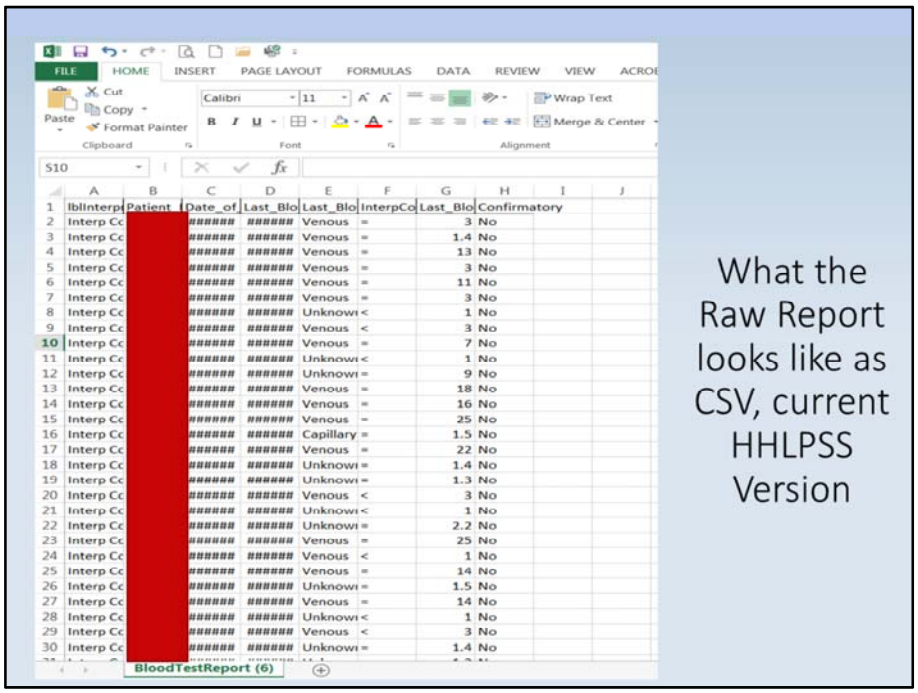
Blood Test List

Patient Name	Date of Birth	Last PB				
		Date	Sample Source	Interp	Result	Confirmatory?
[redacted]		07/06/2016	Venous	=	3	No
		07/12/2016	Venous	=	1.4	No
		07/18/2016	Venous	=	13	No
		07/21/2016	Venous	=	3	No
		07/18/2016	Venous	=	11	No
		07/15/2016	Venous	=	3	No
		07/06/2016	Unknown	<	1	No
		07/29/2016	Venous	<	3	No
		07/15/2016	Venous	=	7	No
		07/22/2016	Unknown	<	1	No
		07/11/2016	Unknown	=	9	No
		07/12/2016	Venous	=	18	No
		07/18/2016	Venous	=	16	No
		07/20/2016	Venous	=	25	No
		07/14/2016	Capillary	=	1.5	No
		07/11/2016	Venous	=	22	No
		07/19/2016	Unknown	=	1.4	No
		07/20/2016	Unknown	=	1.3	No
		07/12/2016	Venous	<	3	No
		07/11/2016	Unknown	<	1	No
		07/25/2016	Unknown	=	2.2	No
		07/12/2016	Venous	=	26	No

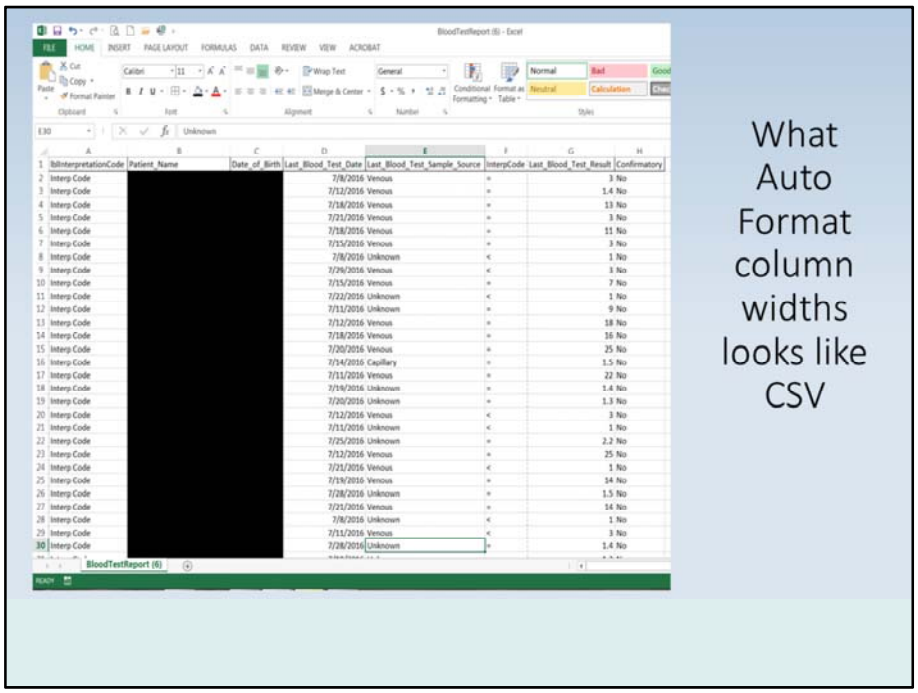
Excel built in report can be sorted, formatted, etc. but not as easily as CSV.

Good: Both capture the criteria used for the report (CSV does not).
Bad all versions: No way currently to capture: HHLPSS ID, Address, Med Provider, Lab, Middle Initial.

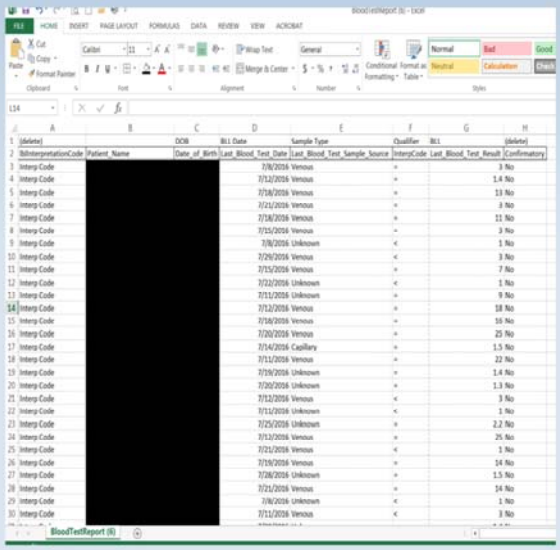
CSV stands for comma separated values



	A	B	C	D	E	F	G	H
1	lblInterp	Patient_	Date_of	Last_Blo	Last_Blo	InterpCo	Last_Blo	Confirmatory
2	Interp Co	[redacted]	######	######	Venous	=	3	No
3	Interp Co	[redacted]	######	######	Venous	=	1.4	No
4	Interp Co	[redacted]	######	######	Venous	=	13	No
5	Interp Co	[redacted]	######	######	Venous	=	3	No
6	Interp Co	[redacted]	######	######	Venous	=	11	No
7	Interp Co	[redacted]	######	######	Venous	=	3	No
8	Interp Co	[redacted]	######	######	Unknowi	<	1	No
9	Interp Co	[redacted]	######	######	Venous	<	3	No
10	Interp Co	[redacted]	######	######	Venous	=	7	No
11	Interp Co	[redacted]	######	######	Unknowi	<	1	No
12	Interp Co	[redacted]	######	######	Unknowi	=	9	No
13	Interp Co	[redacted]	######	######	Venous	=	18	No
14	Interp Co	[redacted]	######	######	Venous	=	16	No
15	Interp Co	[redacted]	######	######	Venous	=	25	No
16	Interp Co	[redacted]	######	######	Capillary	=	1.5	No
17	Interp Co	[redacted]	######	######	Venous	=	22	No
18	Interp Co	[redacted]	######	######	Unknowi	=	1.4	No
19	Interp Co	[redacted]	######	######	Unknowi	=	1.3	No
20	Interp Co	[redacted]	######	######	Venous	<	3	No
21	Interp Co	[redacted]	######	######	Unknowi	<	1	No
22	Interp Co	[redacted]	######	######	Unknowi	=	2.2	No
23	Interp Co	[redacted]	######	######	Venous	=	25	No
24	Interp Co	[redacted]	######	######	Venous	<	1	No
25	Interp Co	[redacted]	######	######	Venous	=	14	No
26	Interp Co	[redacted]	######	######	Unknowi	=	1.5	No
27	Interp Co	[redacted]	######	######	Venous	=	14	No
28	Interp Co	[redacted]	######	######	Unknowi	<	1	No
29	Interp Co	[redacted]	######	######	Venous	<	3	No
30	Interp Co	[redacted]	######	######	Unknowi	=	1.4	No



BlInterpretationCode	Patient_Name	Date_of_Birth	Last_Blood_Test_Date	Last_Blood_Test_Sample_Source	InterpCode	Last_Blood_Test_Result	Confirmatory
Interp Code	[redacted]	[redacted]	7/8/2016	Venous	=	3	No
Interp Code	[redacted]	[redacted]	7/12/2016	Venous	=	1.4	No
Interp Code	[redacted]	[redacted]	7/18/2016	Venous	=	13	No
Interp Code	[redacted]	[redacted]	7/21/2016	Venous	=	3	No
Interp Code	[redacted]	[redacted]	7/18/2016	Venous	=	11	No
Interp Code	[redacted]	[redacted]	7/15/2016	Venous	=	3	No
Interp Code	[redacted]	[redacted]	7/8/2016	Unknown	<	1	No
Interp Code	[redacted]	[redacted]	7/29/2016	Venous	<	1	No
Interp Code	[redacted]	[redacted]	7/15/2016	Venous	=	7	No
Interp Code	[redacted]	[redacted]	7/22/2016	Unknown	<	1	No
Interp Code	[redacted]	[redacted]	7/11/2016	Unknown	=	9	No
Interp Code	[redacted]	[redacted]	7/12/2016	Venous	=	18	No
Interp Code	[redacted]	[redacted]	7/18/2016	Venous	=	16	No
Interp Code	[redacted]	[redacted]	7/20/2016	Venous	=	25	No
Interp Code	[redacted]	[redacted]	7/14/2016	Capillary	=	1.5	No
Interp Code	[redacted]	[redacted]	7/11/2016	Venous	=	22	No
Interp Code	[redacted]	[redacted]	7/19/2016	Unknown	=	1.4	No
Interp Code	[redacted]	[redacted]	7/20/2016	Unknown	=	1.3	No
Interp Code	[redacted]	[redacted]	7/12/2016	Venous	<	3	No
Interp Code	[redacted]	[redacted]	7/11/2016	Unknown	<	1	No
Interp Code	[redacted]	[redacted]	7/25/2016	Unknown	=	2.2	No
Interp Code	[redacted]	[redacted]	7/12/2016	Venous	=	25	No
Interp Code	[redacted]	[redacted]	7/21/2016	Venous	<	1	No
Interp Code	[redacted]	[redacted]	7/19/2016	Venous	=	14	No
Interp Code	[redacted]	[redacted]	7/28/2016	Unknown	=	1.5	No
Interp Code	[redacted]	[redacted]	7/21/2016	Venous	=	14	No
Interp Code	[redacted]	[redacted]	7/8/2016	Unknown	<	1	No
Interp Code	[redacted]	[redacted]	7/11/2016	Venous	<	3	No
Interp Code	[redacted]	[redacted]	7/28/2016	Unknown	=	1.4	No

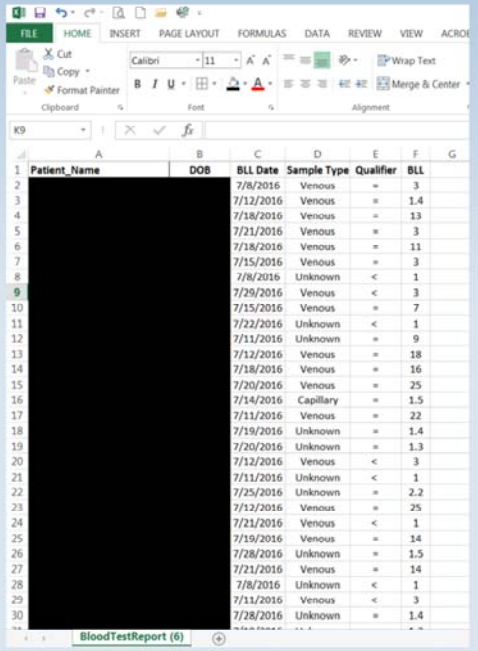


	A	B	C	D	E	F	G	H
1	(delete)		DOB	BL1 Date	Sample Type	Qualifier	BL1	(delete)
2	BiInterpretationCode	Patient_Name	Date_of_Birth	Last_Blood_Test_Date	Last_Blood_Test_Sample_Source	IntergCode	Last_Blood_Test_Result	Confirmatory
3	Interg-Code	[redacted]		7/8/2016	Venous	=	3	No
4	Interg-Code			7/12/2016	Venous	=	1.4	No
5	Interg-Code			7/18/2016	Venous	=	13	No
6	Interg-Code			7/21/2016	Venous	=	3	No
7	Interg-Code			7/18/2016	Venous	=	11	No
8	Interg-Code			7/15/2016	Venous	=	3	No
9	Interg-Code			7/8/2016	Unknown	<	1	No
10	Interg-Code			7/29/2016	Venous	<	3	No
11	Interg-Code			7/15/2016	Venous	=	7	No
12	Interg-Code			7/22/2016	Unknown	<	1	No
13	Interg-Code			7/11/2016	Unknown	=	9	No
14	Interg-Code			7/12/2016	Venous	=	18	No
15	Interg-Code			7/18/2016	Venous	=	16	No
16	Interg-Code			7/20/2016	Venous	=	25	No
17	Interg-Code			7/14/2016	Capillary	=	1.5	No
18	Interg-Code			7/11/2016	Venous	=	22	No
19	Interg-Code			7/19/2016	Unknown	=	1.4	No
20	Interg-Code			7/20/2016	Unknown	=	1.3	No
21	Interg-Code			7/12/2016	Venous	<	3	No
22	Interg-Code			7/11/2016	Unknown	<	1	No
23	Interg-Code			7/25/2016	Unknown	=	2.2	No
24	Interg-Code			7/12/2016	Venous	=	25	No
25	Interg-Code			7/21/2016	Venous	<	1	No
26	Interg-Code			7/19/2016	Venous	=	14	No
27	Interg-Code			7/28/2016	Unknown	=	1.5	No
28	Interg-Code			7/21/2016	Venous	=	14	No
29	Interg-Code			7/8/2016	Unknown	<	1	No
30	Interg-Code			7/11/2016	Venous	<	3	No

Formatting Options

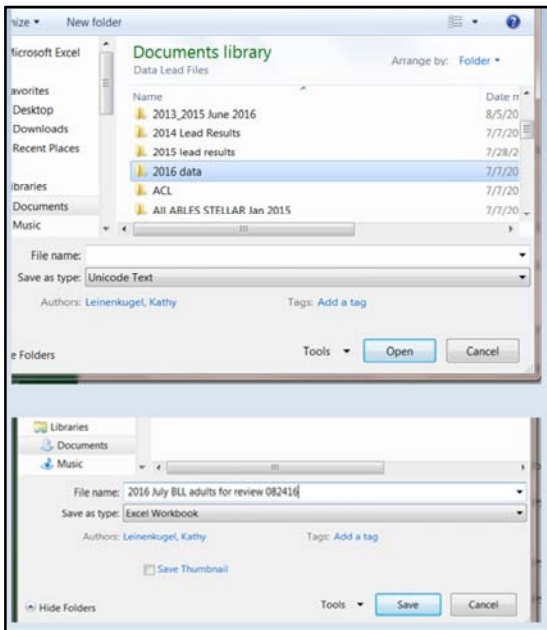
- Leave column headers alone
- Wrap text in column headers
- Redo column headers (examples in row 1 shown)

- 1st column – error in CSV reports in this HHLPSS version – delete
- Last column – for adults, always shows no so I delete.



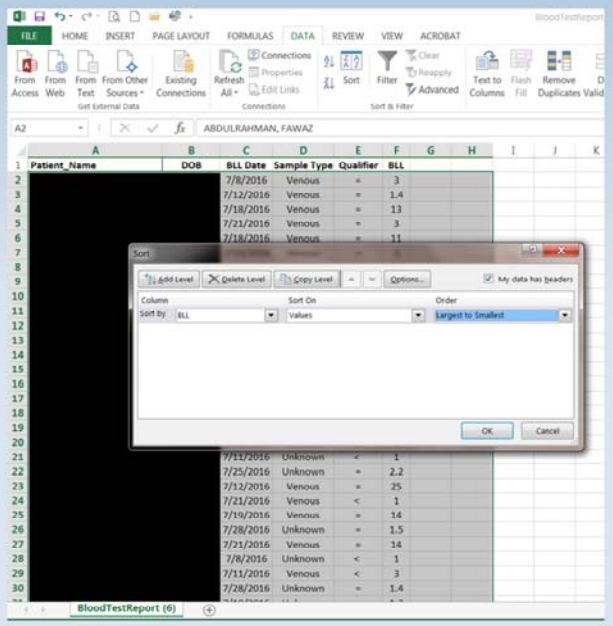
Patient_Name	DOB	BLL Date	Sample Type	Qualifier	BLL
[redacted]	[redacted]	7/8/2016	Venous	=	3
		7/12/2016	Venous	=	1.4
		7/18/2016	Venous	=	13
		7/21/2016	Venous	=	3
		7/18/2016	Venous	=	11
		7/15/2016	Venous	=	3
		7/8/2016	Unknown	<	1
		7/29/2016	Venous	<	3
		7/15/2016	Venous	=	7
		7/22/2016	Unknown	<	1
		7/11/2016	Unknown	=	9
		7/12/2016	Venous	=	18
		7/18/2016	Venous	=	16
		7/20/2016	Venous	=	25
		7/14/2016	Capillary	=	1.5
		7/11/2016	Venous	=	22
		7/19/2016	Unknown	=	1.4
		7/20/2016	Unknown	=	1.3
		7/12/2016	Venous	<	3
		7/11/2016	Unknown	<	1
		7/25/2016	Unknown	=	2.2
		7/12/2016	Venous	=	25
		7/21/2016	Venous	<	1
		7/19/2016	Venous	=	14
		7/28/2016	Unknown	=	1.5
		7/21/2016	Venous	=	14
		7/8/2016	Unknown	<	1
		7/11/2016	Venous	<	3
		7/28/2016	Unknown	=	1.4

Reformatted View, still CSV



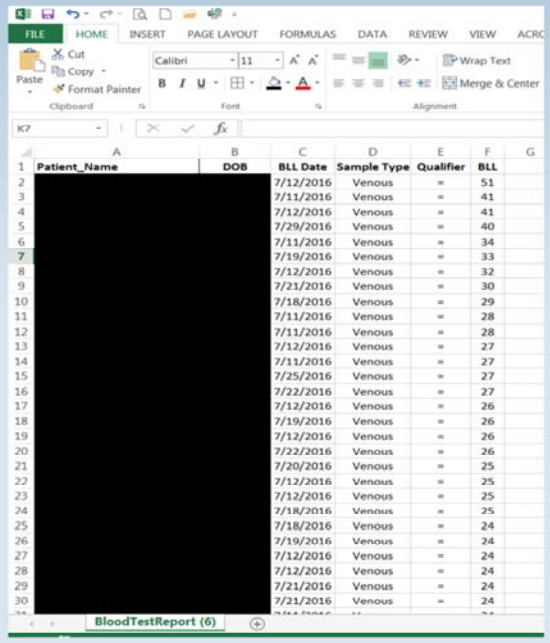
Saving as Excel

- Use 'file' then 'save as'
- Browse to the folder you want to use to save your data file
- Fill in a file name
- Notice that the 'save as type' still shows 'Unicode Text' – click down arrow for options, chose Excel
- Click 'Save'



Formatting to do a quick review

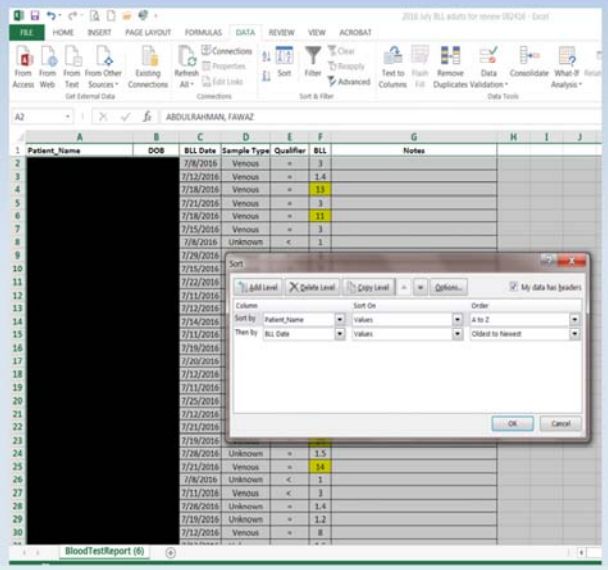
- Click on upper left-hand corner to highlight entire field
- Click on Data Tab
- Check my data has headers
- Choose options for sort by and order



Patient_Name	DOB	BLL Date	Sample Type	Qualifier	BLL
[redacted]	[redacted]	7/12/2016	Venous	=	51
		7/11/2016	Venous	=	41
		7/12/2016	Venous	=	41
		7/29/2016	Venous	=	40
		7/11/2016	Venous	=	34
		7/19/2016	Venous	=	33
		7/12/2016	Venous	=	32
		7/21/2016	Venous	=	30
		7/18/2016	Venous	=	29
		7/11/2016	Venous	=	28
		7/11/2016	Venous	=	28
		7/12/2016	Venous	=	27
		7/11/2016	Venous	=	27
		7/25/2016	Venous	=	27
		7/22/2016	Venous	=	27
		7/12/2016	Venous	=	26
		7/19/2016	Venous	=	26
		7/12/2016	Venous	=	26
		7/22/2016	Venous	=	26
		7/20/2016	Venous	=	25
		7/12/2016	Venous	=	25
		7/12/2016	Venous	=	25
		7/18/2016	Venous	=	25
		7/18/2016	Venous	=	24
		7/19/2016	Venous	=	24
		7/12/2016	Venous	=	24
		7/12/2016	Venous	=	24
		7/21/2016	Venous	=	24
		7/21/2016	Venous	=	24

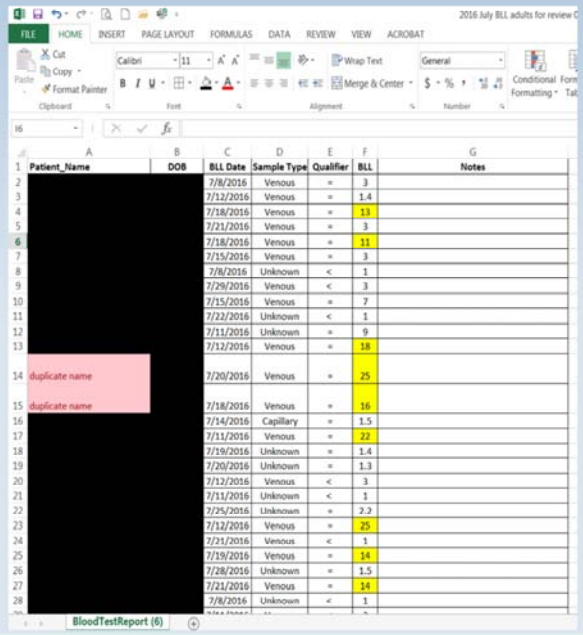
Results shown sorted by BLL highest to lowest

I then highlight all results that are at or above the BLL level for review want to review (10 mcg/dL).



Then I do another sort by the person's name, then BLL date (oldest to newest)

Why: all of a person's test results within the time frame of the report are grouped together for review.

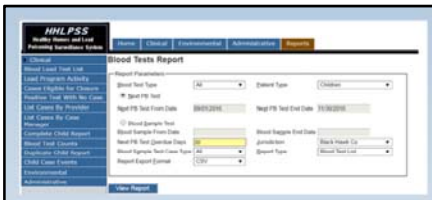


Patient_Name	DOB	BLL Date	Sample Type	Qualifier	BLL	Notes
[redacted]	[redacted]	7/8/2016	Venous	=	3	
[redacted]	[redacted]	7/12/2016	Venous	=	1.4	
[redacted]	[redacted]	7/18/2016	Venous	=	13	
[redacted]	[redacted]	7/21/2016	Venous	=	3	
[redacted]	[redacted]	7/18/2016	Venous	=	11	
[redacted]	[redacted]	7/15/2016	Venous	=	3	
[redacted]	[redacted]	7/8/2016	Unknown	<	1	
[redacted]	[redacted]	7/29/2016	Venous	<	3	
[redacted]	[redacted]	7/15/2016	Venous	=	7	
[redacted]	[redacted]	7/22/2016	Unknown	<	1	
[redacted]	[redacted]	7/11/2016	Unknown	=	9	
[redacted]	[redacted]	7/12/2016	Venous	=	18	
duplicate name		7/20/2016	Venous	=	25	
duplicate name		7/18/2016	Venous	=	16	
[redacted]	[redacted]	7/14/2016	Capillary	=	1.5	
[redacted]	[redacted]	7/11/2016	Venous	=	22	
[redacted]	[redacted]	7/19/2016	Unknown	=	1.4	
[redacted]	[redacted]	7/20/2016	Unknown	=	1.3	
[redacted]	[redacted]	7/12/2016	Venous	<	3	
[redacted]	[redacted]	7/11/2016	Unknown	<	1	
[redacted]	[redacted]	7/25/2016	Unknown	=	2.2	
[redacted]	[redacted]	7/12/2016	Venous	=	25	
[redacted]	[redacted]	7/21/2016	Venous	<	1	
[redacted]	[redacted]	7/19/2016	Venous	=	14	
[redacted]	[redacted]	7/28/2016	Unknown	=	1.5	
[redacted]	[redacted]	7/21/2016	Venous	=	14	
[redacted]	[redacted]	7/8/2016	Unknown	<	1	

I also conditionally format the patient name column to highlight duplicate names.

I add a column for notes.

I format the page layout as desired



Using Reports to generate a retest list & other uses

Black Hawk Jurisdiction, Children Next Test Due
Sept.1, 2016-Nov. 30, 2016, >30 days overdue, All Types of Cases

Patient Name	DOB	Last Blood Test Date	Last Sample Type	Interp Code	Last BLL	Confirm-atory
[redacted]	11/16/2014	11/19/2015	Capillary	<	2	No
1	9/26/2013	9/29/2015	Unknown	<	3	No
1	9/26/2013	9/28/2015	Unknown	<	3	No
[redacted]	2/10/2014	9/10/2015	Capillary	<	2	No
2	10/29/2010	8/4/2015	Capillary	<	2	No
2	10/29/2010	9/12/2015	Unknown	<	3	No
3	4/15/2013	4/21/2014	Capillary	<	2	No
3	4/15/2013	9/28/2015	Capillary	=	2	No
[redacted]	6/13/2014	9/16/2015	Capillary	=	2	No
	10/1/2013	10/13/2015	Capillary	<	3.3	No
	11/3/2014	11/5/2015	Unknown	=	2	No
	6/10/2013	11/4/2015	Unknown	<	3	No
	9/15/2014	10/13/2015	Capillary	<	3.3	No
4	11/13/2014	11/16/2015	Unknown	<	3	No
4	11/13/2014	11/17/2015	Venous	<	3	No
5	5/28/2013	7/9/2014	Venous	=	2	No
5	5/28/2013	9/22/2015	Capillary	=	2	No
[redacted]	10/16/2014	10/23/2015	Unknown	<	3	No
6	10/10/2013	4/30/2015	Capillary	<	3	No
6	10/10/2013	10/17/2015	Unknown	<	3	No
[redacted]	11/7/2014	11/10/2015	Capillary	<	2	No
7	9/1/2014	9/4/2015	Unknown	<	3	No
7	9/1/2014	9/5/2015	Unknown	<	3	No
8	8/30/2014	9/5/2015	Unknown	<	3	No
8	8/30/2014	9/3/2015	Unknown	<	3	No
[redacted]	8/30/2014	6/2/2015	Unknown	<	3	No

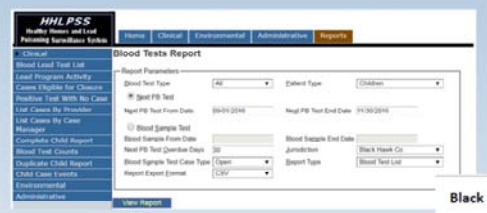
Total Tests in list: 1721

Black Hawk Jurisdiction, Children Next Test Due
Sept.1, 2016-Nov. 30, 2016, >30 days overdue, All Types of Cases

	Patient_Name	DOB	Last Blood Test Date	Last Sample Type	Interp Code	Last BLL	Confirm-atory
6	[redacted]	9/24/2013	9/26/2015	Unknown	<	3	No
7	Drew, Nancy	5/18/2012	12/2/2013	Capillary	<	2	No
8	Drew, Nancy	5/18/2012	9/24/2015	Capillary	<	3.3	No
9	[redacted]	5/18/2012	5/23/2013	Capillary	<	3	No
0	Star, Shining BH	1/15/2014	1/16/2015	Capillary	=	7	No
1	Star, Shining BH	1/15/2014	7/23/2015	Unknown	=	4	No
2	Star, Shining BH	1/15/2014	1/19/2016	Capillary	=	19	No
3	Star, Shining BH	1/15/2014	2/25/2016	Unknown	=	13	No
4	Star, Shining BH	1/15/2014	6/22/2016	Venous	=	10	No

Info about retests done

Ability to spot possible problems:
Why are there so many children with reports shown 1 day apart?



Same report except retest only for Open Case Type

Limits: no address, parent name, Med provider, etc. to generate a mailing list, but gives a smaller list with a higher priority for retesting.

Black Hawk Jurisdiction, Children Next Test Due Sept.1, 2016-Nov. 30, 2016 , >30 days overdue, Open cases

Patient Name	DOB	Last BLL Date	Last Test Type	Interp Code	Last BLL	Confirm-atory
A	3/25/2012	6/14/2013	Venous	=	12	Yes
B	12/24/2012	12/24/2013	Venous	=	20	Yes
C	2/6/2014	5/9/2016	Capillary	=	23	No
D	7/31/2015	8/1/2016	Capillary	=	10	No
E	1/15/2014	2/25/2016	Unknown	=	13	No
F	5/4/2014	6/14/2016	Capillary	=	10	No
G	6/12/2015	6/16/2016	Capillary	=	10	No
H	1/16/2013	7/21/2014	Venous	=	37	No
I	9/14/2011	6/21/2013	Venous	=	18	Yes
J	7/15/2015	7/19/2016	Venous	=	12	No
K	6/28/2014	8/3/2016	Capillary	=	10	No
L	8/18/2014	8/10/2016	Capillary	=	18	No
M	10/21/2012	7/27/2016	Capillary	=	16	No
N	11/20/2014	6/17/2016	Capillary	=	15	No
O	12/24/2011	11/20/2014	Venous	=	15	No
P	8/4/2015	8/8/2016	Capillary	=	13	No
Q	6/1/2015	6/21/2016	Capillary	=	10	No
R	7/9/2014	7/28/2016	Capillary	=	31	No

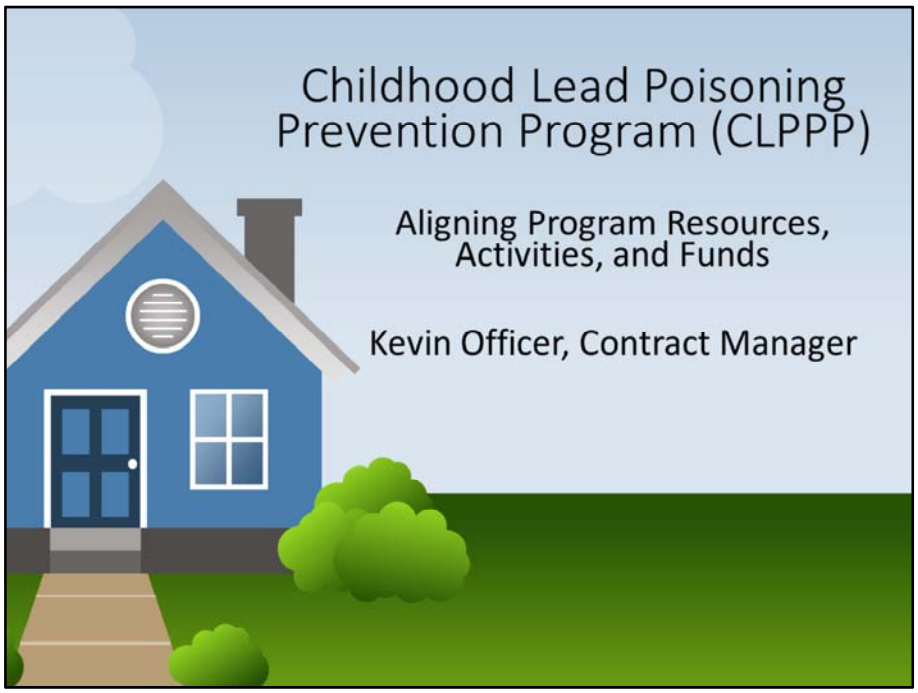
Using Reports, Multiple Uses

July 2016 Anonymous Tests Adults

Patient_Name	DOB	BLL Date	Spec Type	Test Qual	BLL	Lab	Clinic	Notes
[redacted]		7/22/2016	Venous	<	3			
		7/8/2016	Venous	<	3			
		7/27/2016	Venous	<	3			
		7/19/2016	Venous	<	2			
		7/28/2016	Venous	<	3			
		7/25/2016	Venous	<	3			
		7/26/2016	Venous	<	3			
		7/25/2016	Venous	<	3			
Mouse, Mickey	12/6/1988	7/12/2016	Venous	<	2			
Mouse, Mickey	12/6/1988	7/27/2016	Venous	<	2			
[redacted]		7/29/2016	Venous	=	2			
		7/20/2016	Venous	<	3.3			
		7/25/2016	Unknown	=	3			
		7/25/2016	Venous	<	1			
Dumpty, Humpty	4/29/1965	7/12/2016	Venous	=	5			
Dumpty, Humpty	4/29/1965	7/27/2016	Venous	=	4			
[redacted]		7/21/2016	Venous	<	3			
		7/28/2016	Venous	=	3			
		7/19/2016	Unknown	=	3			
TheDog, Pluto	4/6/1985	7/27/2016	Venous	<	2			
The Dog, Pluto	4/6/1985	7/12/2016	Venous	<	2			
[redacted]		7/5/2016	Venous	<	5			

- Ran it to make a list of adult results sitting in the Anonymous jurisdiction i.e. I need to clean up (address, etc.)
- However it also lets me spot three sets of tests that need to be checked
  - All three have 2 tests on 7/12/16 and 7/27/16 – Why? Lab error, Clinic error, ELR system problem? Where Tested?
- The bottom set is probably in HHLPSS as two different people because of how submitted – may need to merge.

Adult Blood Lead
Questions?
Kathy Leinenkugel, IDPH
Occupational Health & Safety Surveillance Program



In November 2015 the CLPPP began a 5-year (2016-2020) strategic planning process. The overall objective of this strategic planning process is to work towards "Aligning Program Resources, Activities, and Funding".

- 5-Year Strategic Planning Process (2016 – 2020)
- Kick-off meeting: November 2015 Focus Group Discussion
  - Purpose
  - Workgroups
    - Data
    - Clinical Case Management
    - Environmental Case Management
  - 2016 – 2020 Workplan
    - http://idph.iowa.gov/lpp/childhood-lead
- Communication and Outreach
  - Regional Meetings
  - ListServ
  - Information and Training Webinars

Aligning Program Resources, Activities, and Funds

- In November 2015 the CLPPP began a 5-year (2016-2020) strategic planning process. With the overall objective of "Aligning Program Resources, Activities, and Funding".

- Kick-Off Event: November 2015 Focus Group Discussion.

- PURPOSE: The purpose of this meeting was to bring together a specific group of local partners (CLPPP case managers) to assist IDPH in developing a 5-year plan for better aligning current CLPPP services with available resources (i.e., funding and staff) and improving data management and reporting requirements.

- WORKGROUPS: Focus group participants included IDPH staff from the Lead Program, Maternal Child Health, Environmental Health, and local CLPPP case managers. Focus group participants took part in large group and small breakout group discussions about CLPPP case management activities and services they provide under the lead program grant. Three workgroup teams were formed to address program areas related to data, clinical case management, and environmental case management.

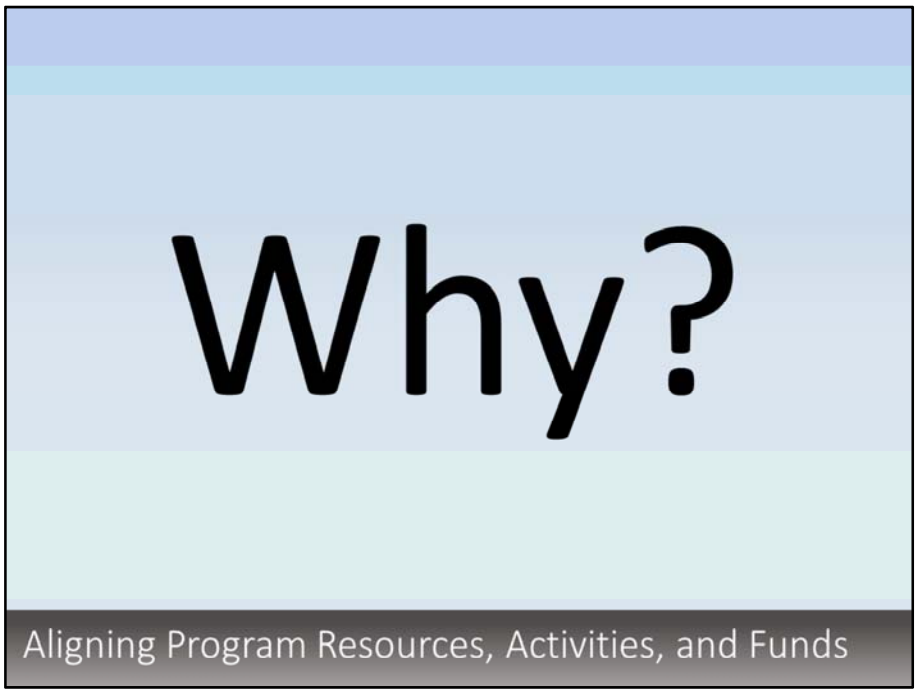
- Each workgroup team was tasked with reviewing specific program related activities or processes (focus areas). We challenged case managers by asking them to identify areas

of the program or activities that could either be eliminated or modified.

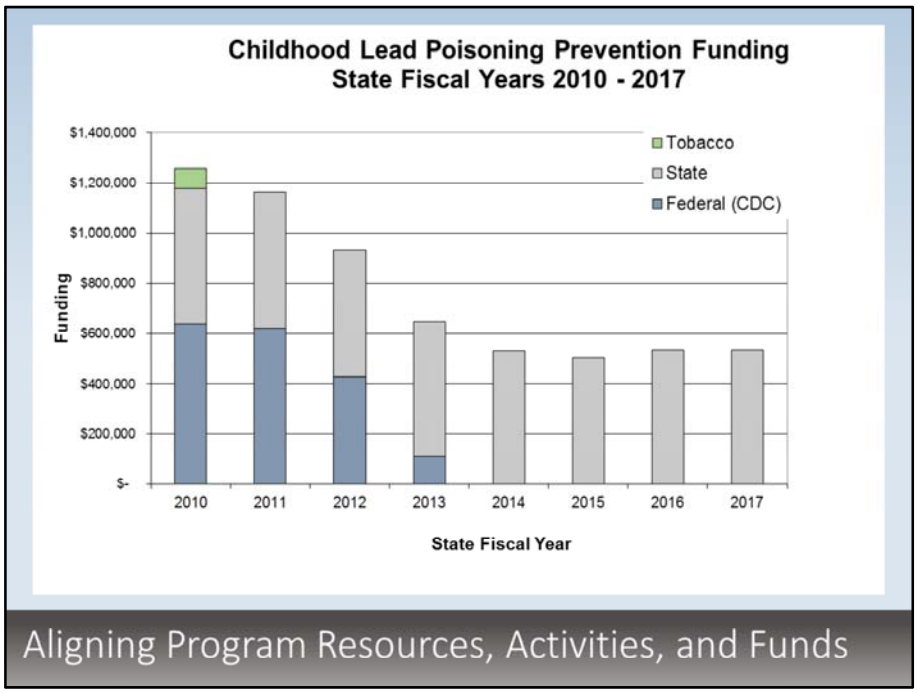
- 5-Year WORKPLAN (2016-2020): A five year workplan was developed from workgroup team discussions. The workplan lays out priority areas for further discussion, target dates, and responsibilities.

- A workplan document resulting from those efforts can be found on our website at http://idph.iowa.gov/lpp/childhood-lead under Program Planning.

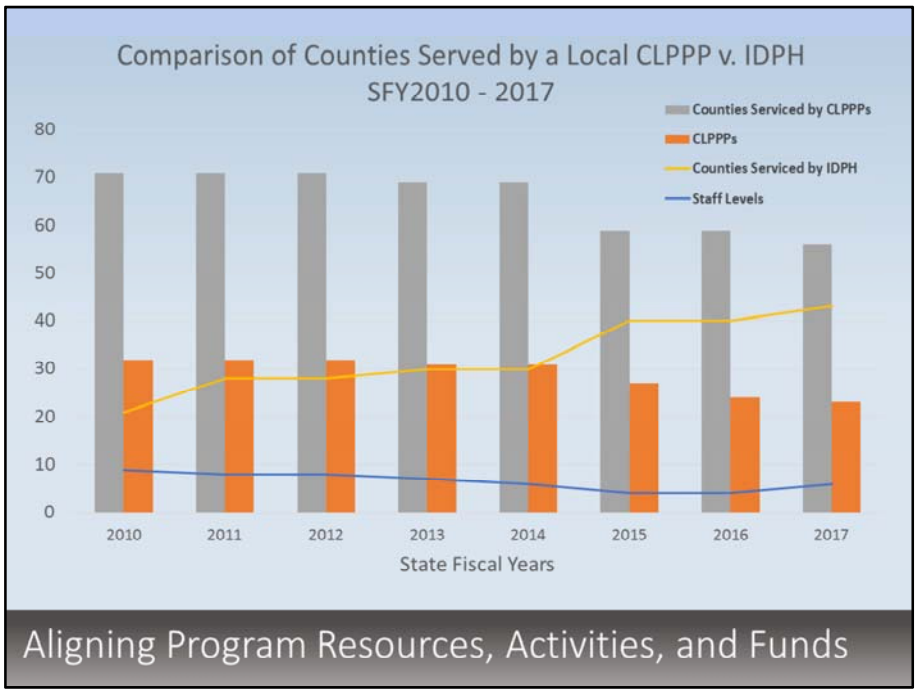
- Communication and outreach to local partners was a common discussion point within all three workgroups. In the future the lead program will address this through holding regional meetings, developing a listserv, and holding informational and training webinars.



Why is aligning CLPPP resources, activities and services, and program funding important?



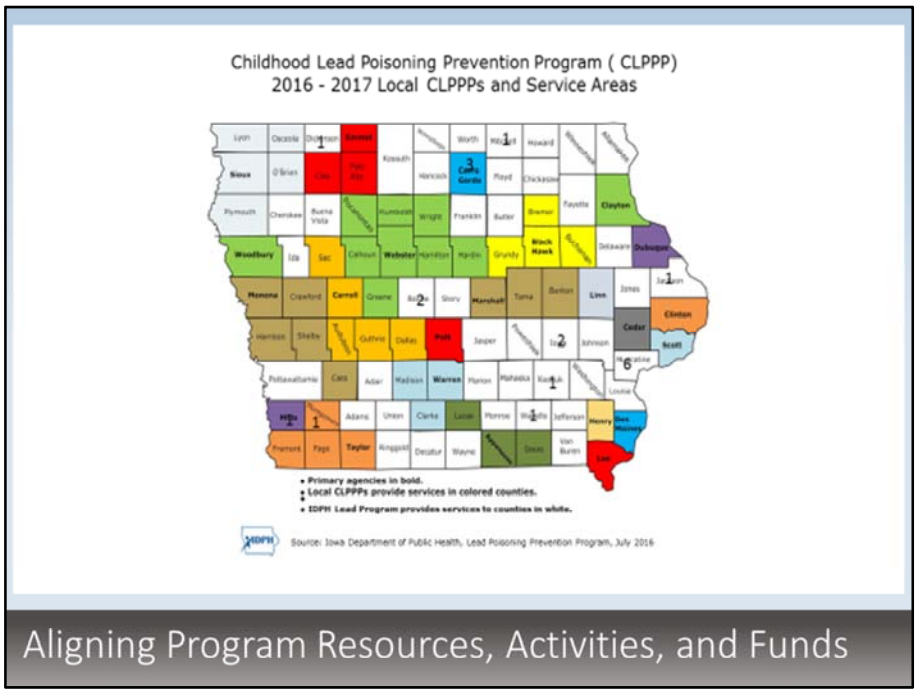
- A reduction in program funds over the years is one of the primary reasons for needing to align programs and services.
- In 2010-2011 the CLPPPs operating budget was over $1.2M in funds received from CDC (51%, $639,412), tobacco settlement funds (6%, $76,388), and state appropriated funds (43%, $539,596).
- CDC funds were used to support local CLPPPs. State and tobacco funds supported lead staff, state hygienic lab, data systems, and other program budget items.
- Federal funding continued to decrease until FY2014 when CDC funding for CLPPPs was eliminated. To date, CDC no longer provides support to state childhood lead programs.
- From FY2010 to FY2014 the CLPPP budget was reduced by approximately 50%.
- From FY14 to FY17, state appropriated funds have been used to support the CLPPP. 53 percent or $285,432 funds local CLPPPs. The remaining 47 percent of state funds support lead staff, HHLPSS, state lab, etc.



- This graph compares the number of counties served by local CLPPPs and IDPH from FY2010 to FY2017.
- The graph is another illustration for the need to better align resources (staffing) with program activities and services.
- Although funding steadily declined from FY2010 to FY2014, the number of local CLPPPs and counties they provided lead program services to remained fairly constant over that same time period.
- From FY14 to FY15 and on though FY17 we began to see a decline in #CLPPPs and service area covered.
- Primarily due to loss in CDC funds resulting fewer grant funds available for local CLPPPs.
- From 2014 to 2017: loss of 8 CLPPPs/covering 13 counties. Increased IDPH counties covered from 30 to 43.
- Over same period lead program staff decreased. Including 2 certified EBL inspectors. 2 case managers responsible for 43 counties.

- Unsustainable trend. Currently CLPPP funds only cover 1.85 FTEs (0.95 FTEs for HHLPSS, 0.6 FTEs toward case management, contract management)

- Show map of FY17 CLPPPs

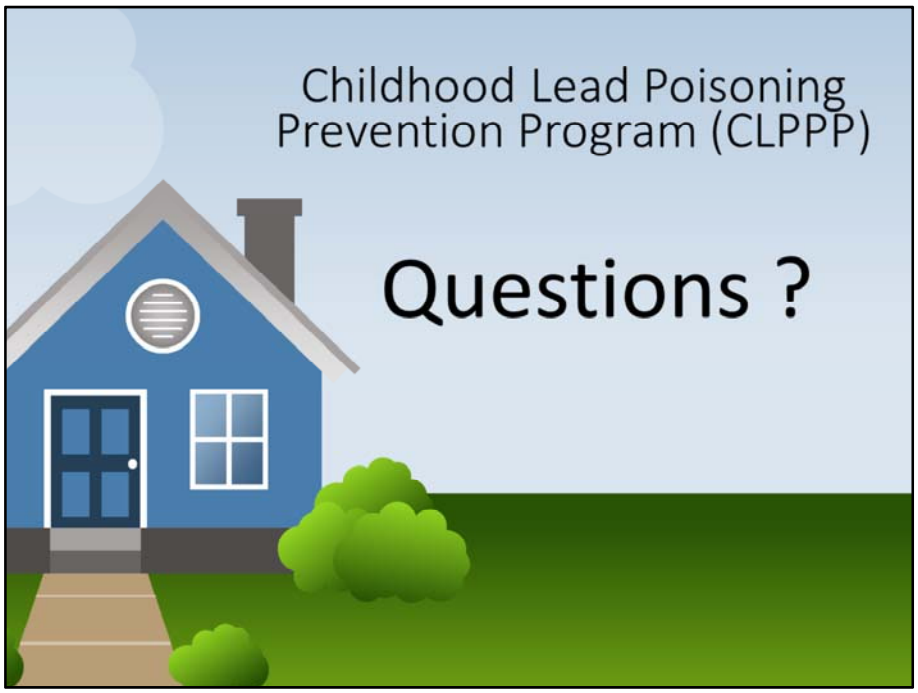


- Local CLPPPs = 23, Counties served = 56
- Lead Program Staff = Covers 43 counties throughout Iowa
- So far this year (2016) the lead program staff has conducted over 20 EBL inspections.
- The lead program conducts 30-35 EBL inspections annually.

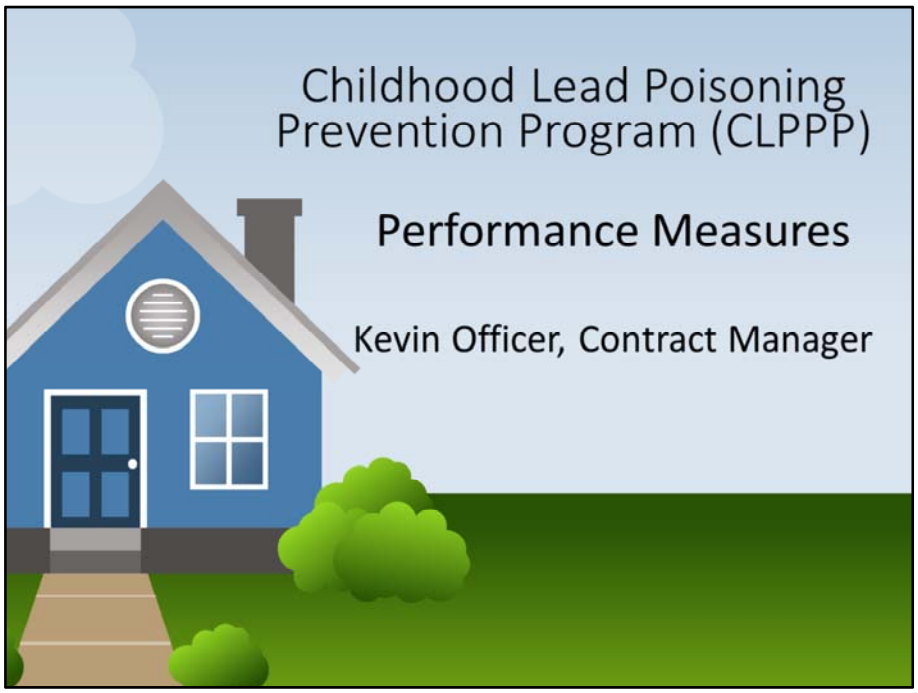
CLPPP Reorganization:

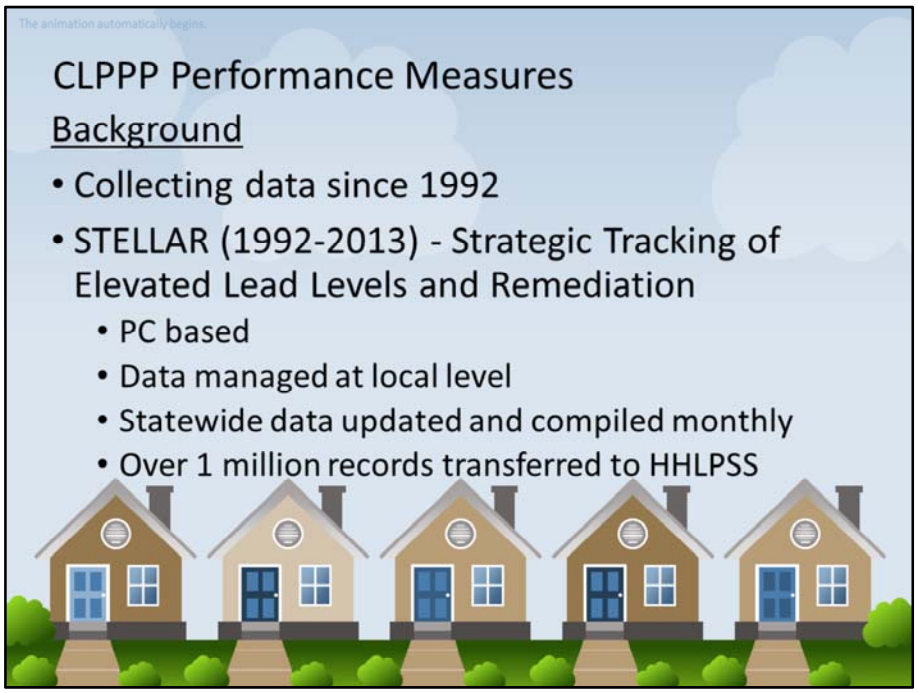
- Contract Management & Funding
  - Review funding formula
  - Use data to determine program needs (activities, services)
  - Restructure program model (regional, local, service based)
- IDPH Role in CLPPP
  - Contract management services
  - Subject Matter Expertise
  - Not provide case management services (clinical, environmental)
- Chapter 72 Rules
  - Update rules to reflect current program needs
  - Base needs on funding
  - Cutting required services and activities

Aligning Program Resources, Activities, and Funds


Childhood Lead Poisoning
Prevention Program (CLPPP)
Questions ?

BREAK


Childhood Lead Poisoning Prevention Program (CLPPP)
Performance Measures
Kevin Officer, Contract Manager

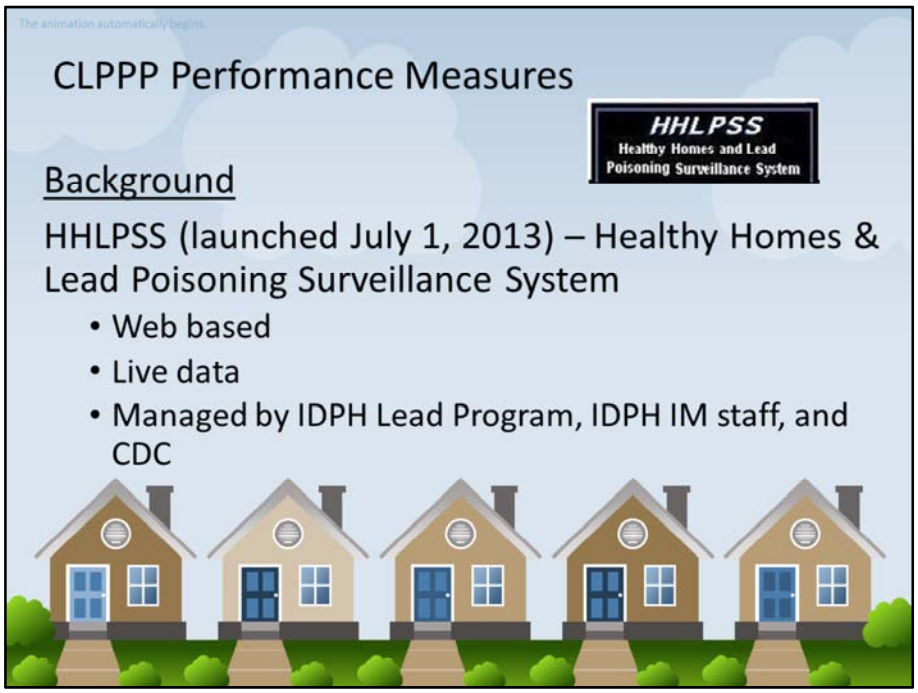


Background

Since 1992, the Iowa Department of Public Health (IDPH) has been maintaining a database on blood lead testing done in Iowa (children & adults) and case management activities.

STELLAR (1992-2013) - Strategic Tracking of Elevated Lead Levels and Remediation

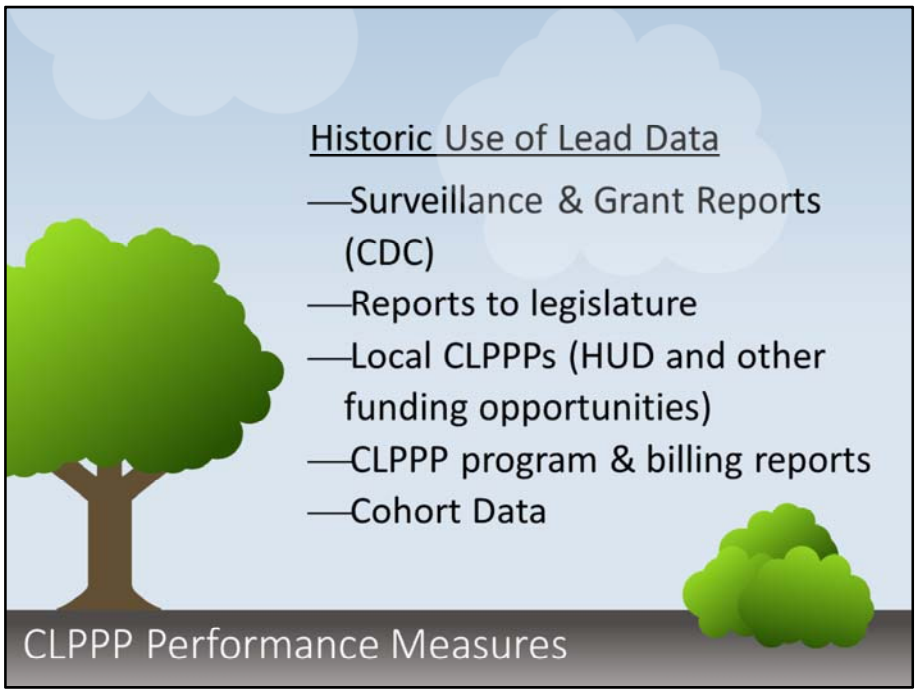
- PC based
- Data managed at local level
- Statewide data updated and compiled monthly
- Over 1 million records transferred to HHLPSS

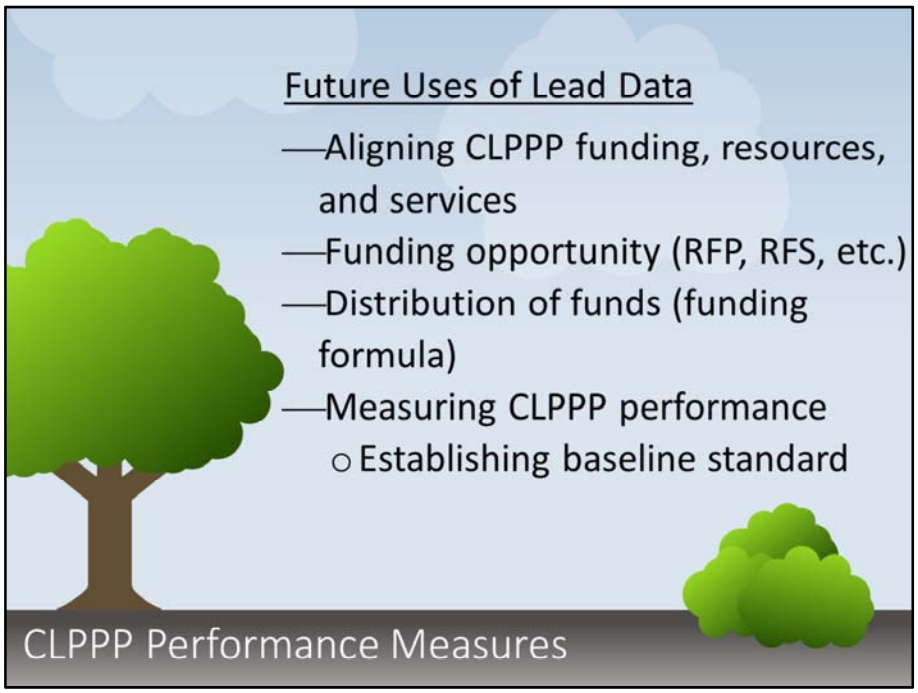


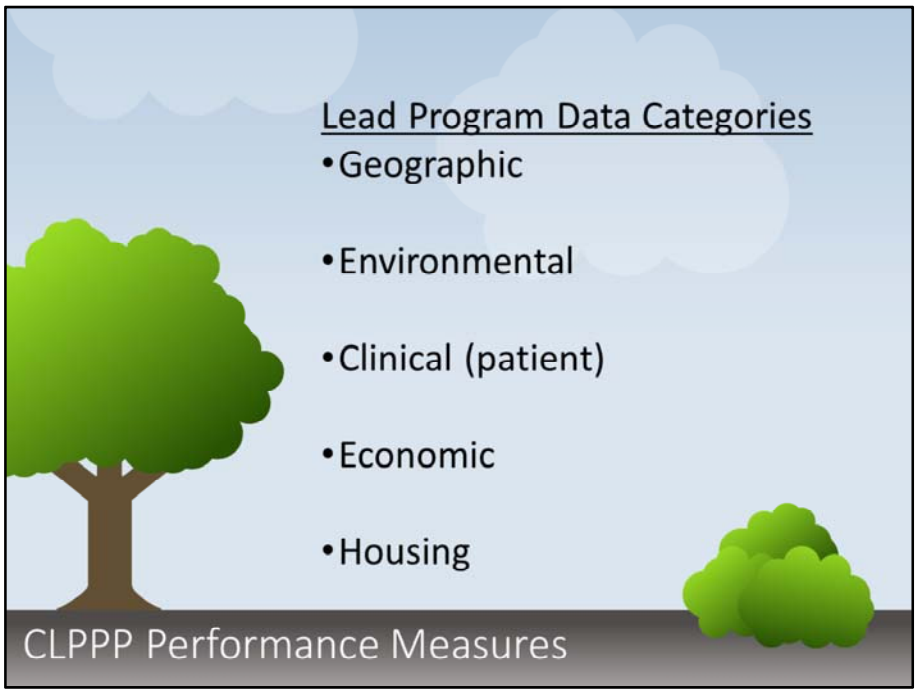
Background

HHLPSS (launched July 1, 2013) – Healthy Homes & Lead Poisoning Surveillance System

- Web based
- Live data
- Managed by IDPH Lead Program, IDPH IM staff, and CDC

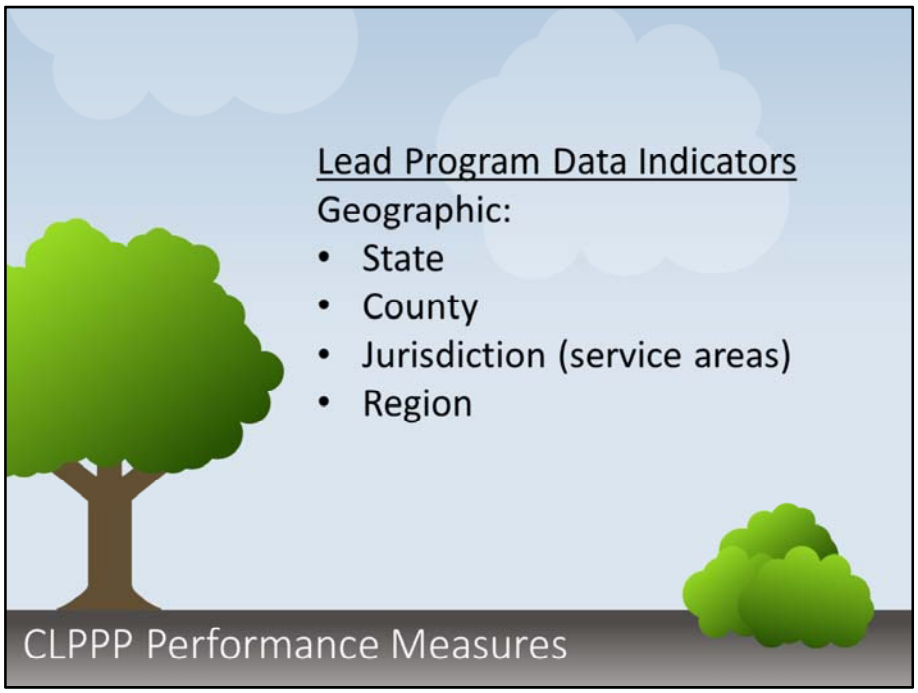

Historic Use of Lead Data
—Surveillance & Grant Reports (CDC)
—Reports to legislature
—Local CLPPPs (HUD and other funding opportunities)
—CLPPP program & billing reports
—Cohort Data
CLPPP Performance Measures


Future Uses of Lead Data
—Aligning CLPPP funding, resources, and services
—Funding opportunity (RFP, RFS, etc.)
—Distribution of funds (funding formula)
—Measuring CLPPP performance
○ Establishing baseline standard
CLPPP Performance Measures

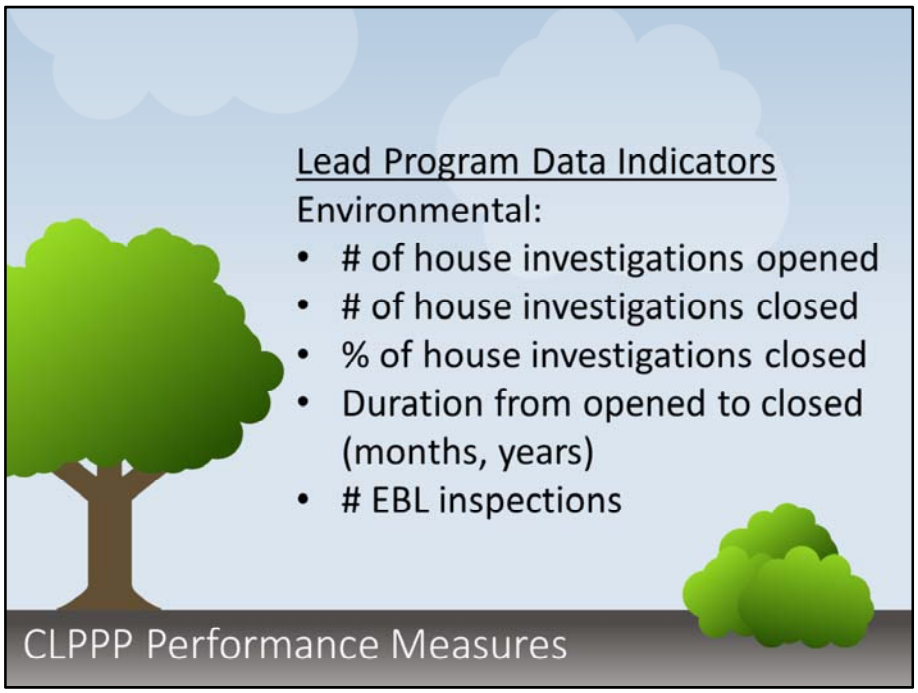


Lead Program Data Categories

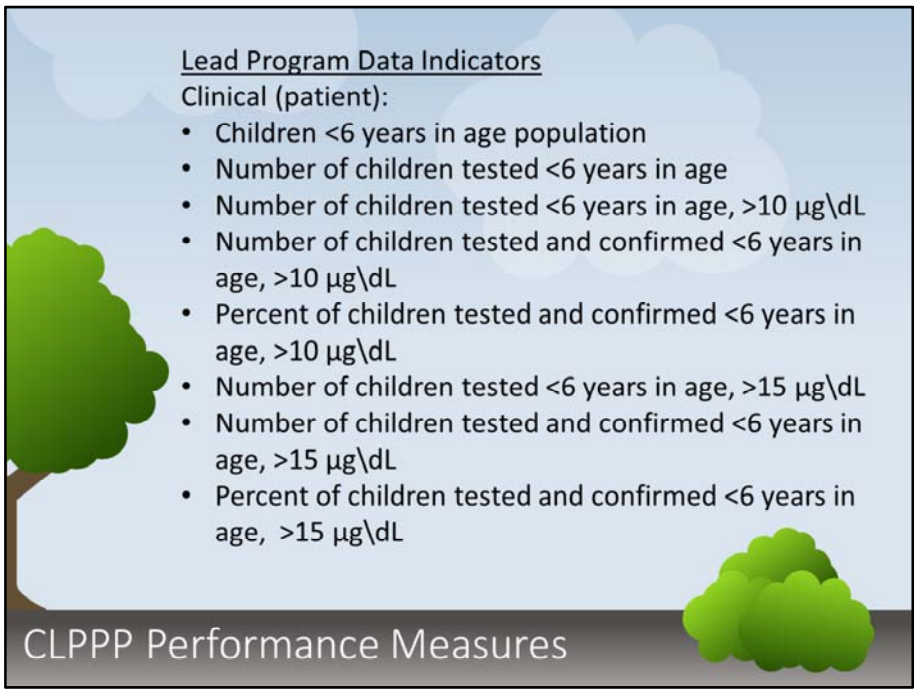
- Geographic
- Environmental
- Clinical (patient)
- Economic
- Housing
- Rental v. owner occupied



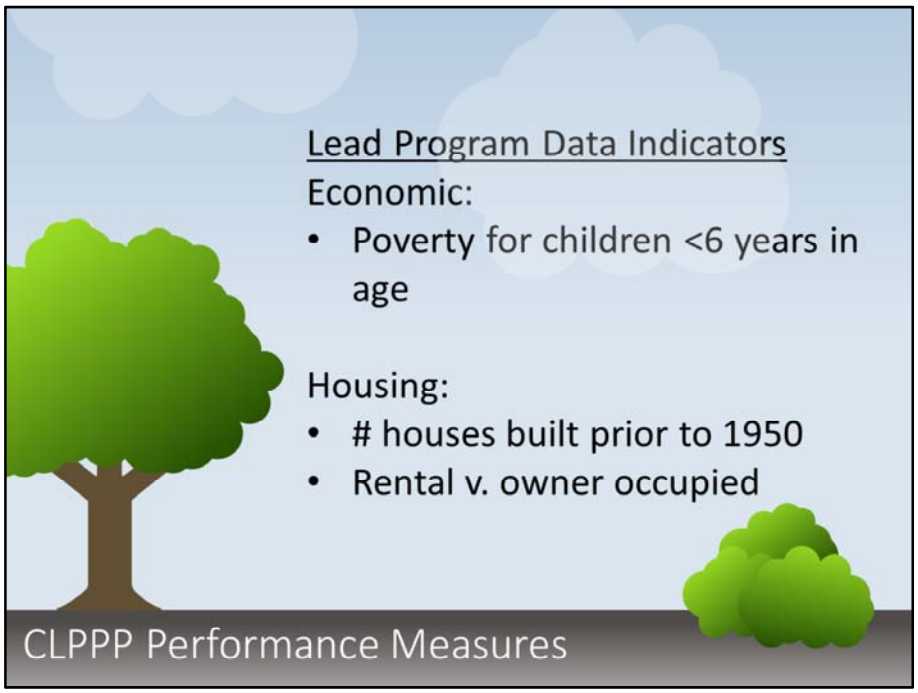
Lead Program Data Indicators
Geographic:
State
County
Jurisdiction (service areas)
Region



Environmental:
# of house investigations opened
# of house investigations closed
% of house investigations closed
Duration from opened to closed (months, years)
EBL inspections

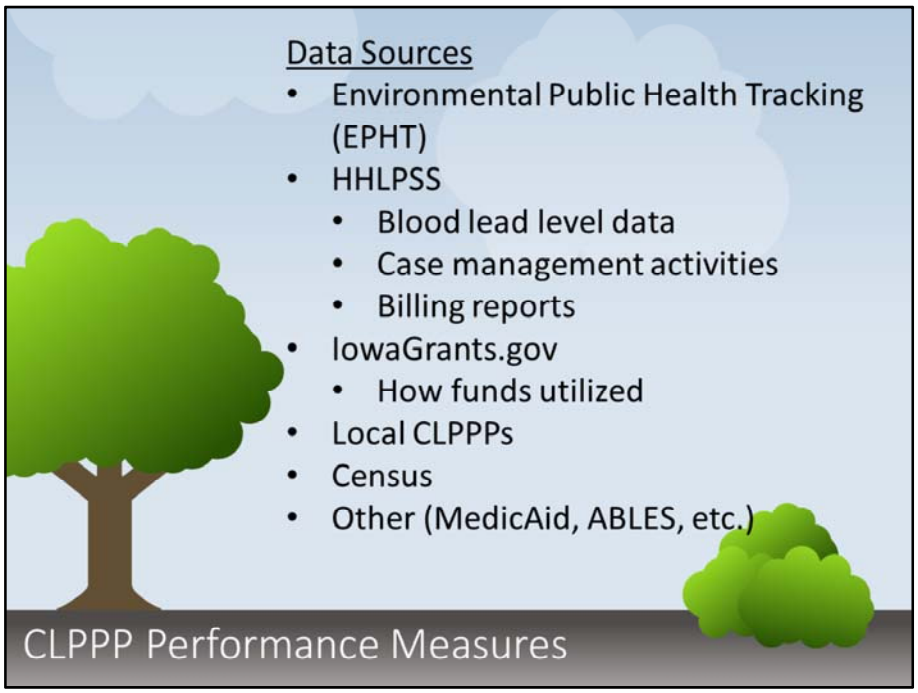


Clinical (patient):
Children <6 years in age population
Number of children tested <6 years in age
Number of children tested <6 years in age, >10 µg\dL
Number of children tested and confirmed <6 years in age, >10 µg\dL
Percent of children tested and confirmed <6 years in age, >10 µg\dL
Number of children tested <6 years in age, >15 µg\dL
Number of children tested and confirmed <6 years in age, >15 µg\dL
Percent of children tested and confirmed <6 years in age, >15 µg\dL



Economic:
Poverty for children <6 years in age

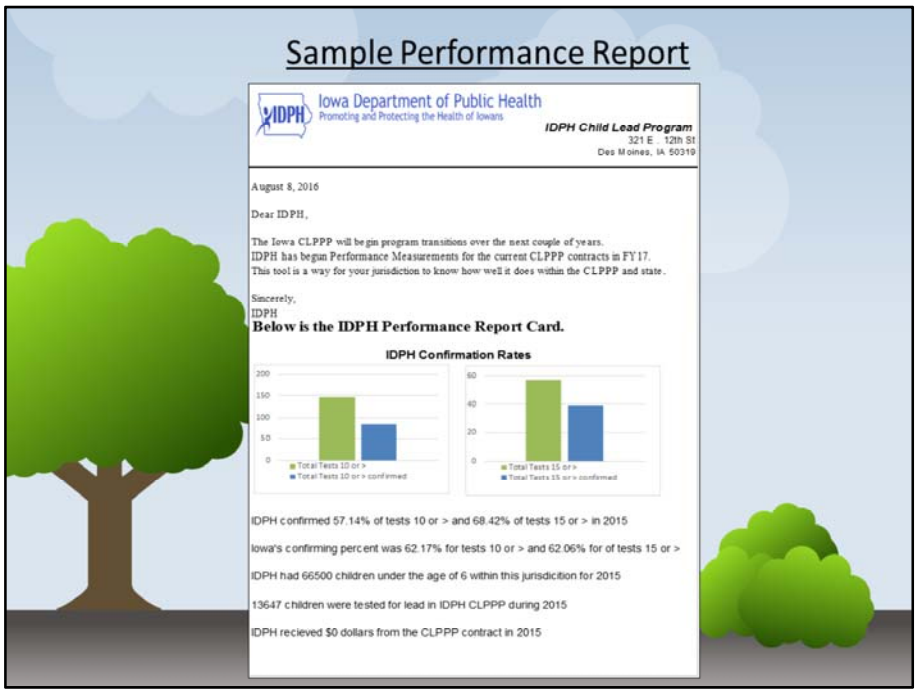
Housing:
houses built prior to 1950
Rental v. owner occupied



Data Sources
Environmental Public Health Tracking (EPHT)
HHLPSS
- Blood lead level data
- Case management activities
- Billing reports

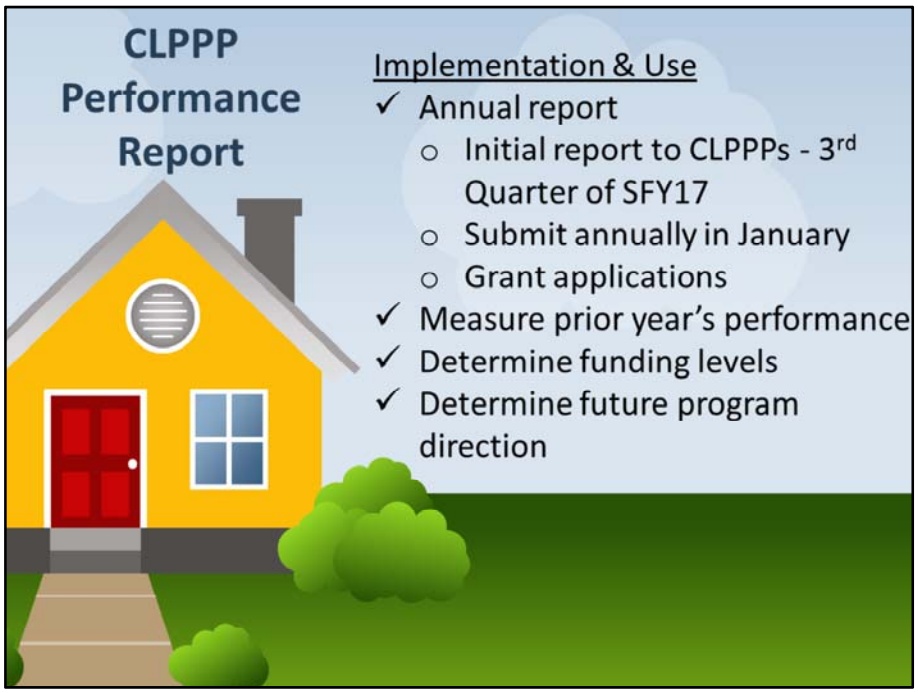
IowaGrants.gov
- How funds utilized

Local CLPPPs
Census
Other (MedicAid, ABLES, etc.)



Here's an example of what a performance report may look like.

Reports would be uploaded to grant site and located on CLPPP website.



Implementation & Use

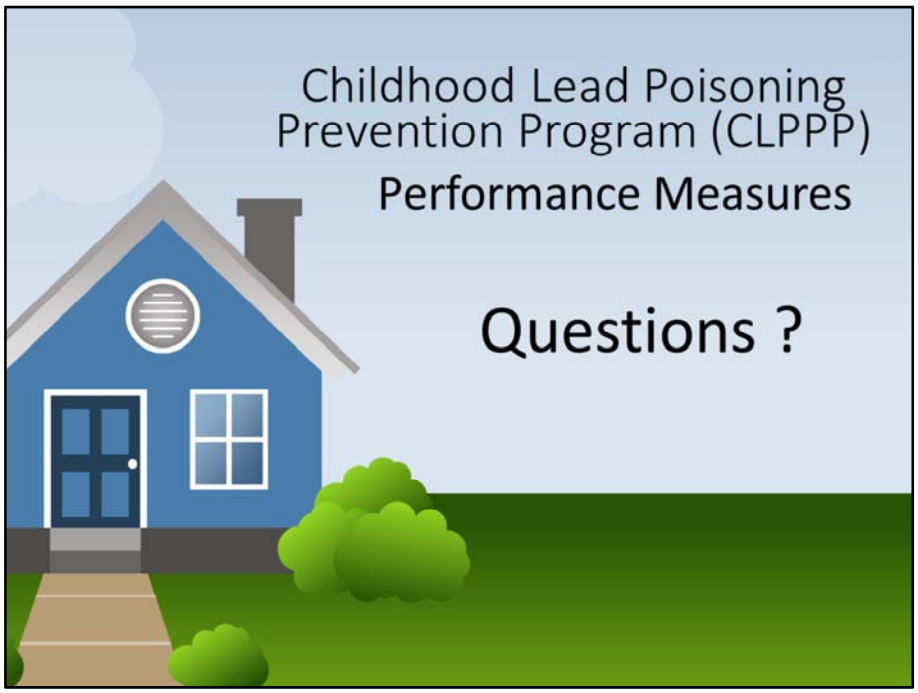
Annual report

- Initial report to CLPPPs - 3rd Quarter of SFY17
- Submit annually in January
- Grant applications

Measure prior year's performance

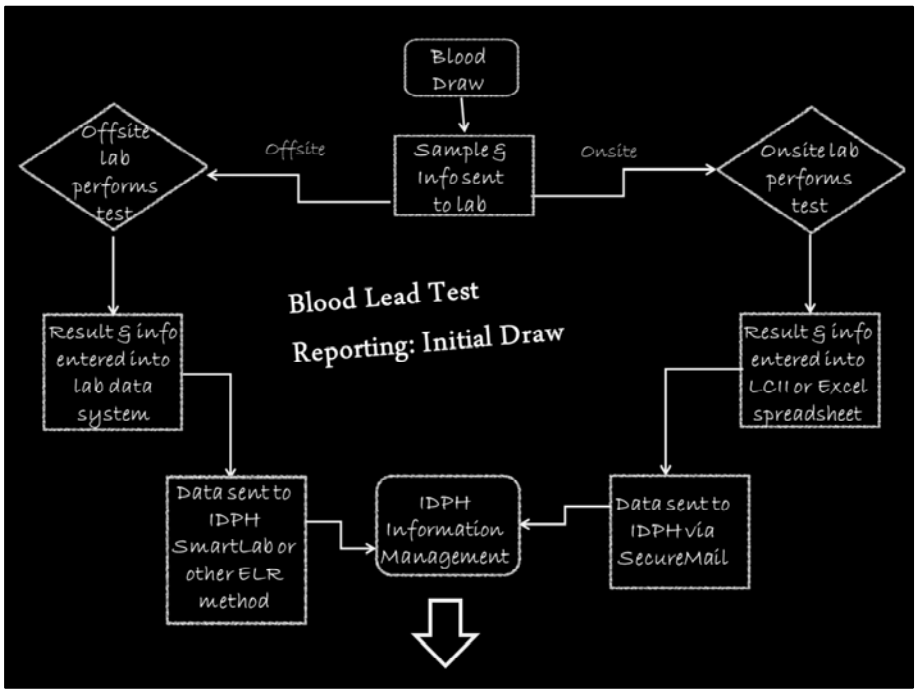
Determine funding levels

Determine future program direction

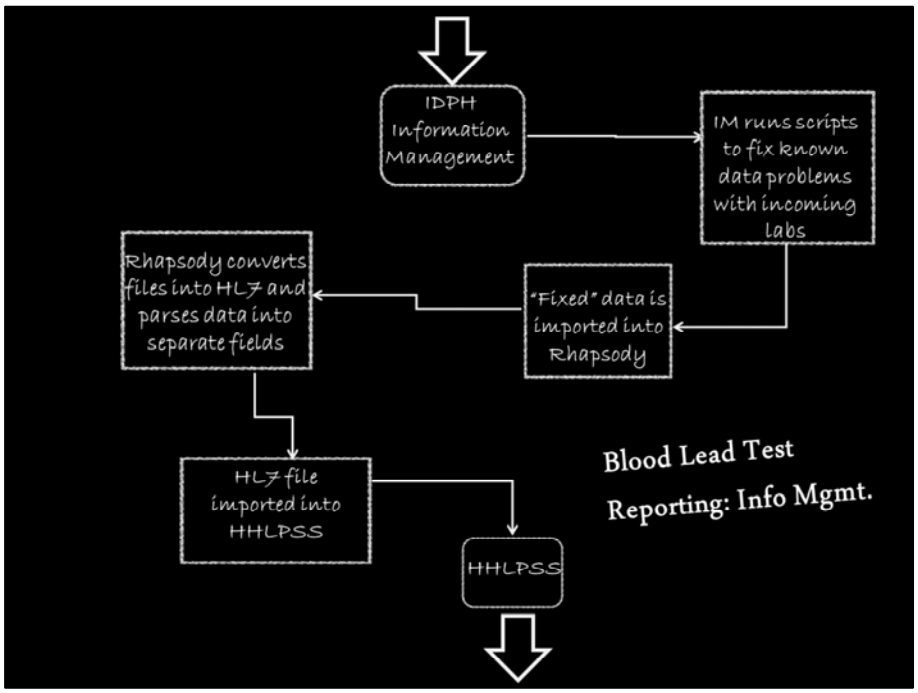

Childhood Lead Poisoning
Prevention Program (CLPPP)
Performance Measures
Questions ?

LUNCH

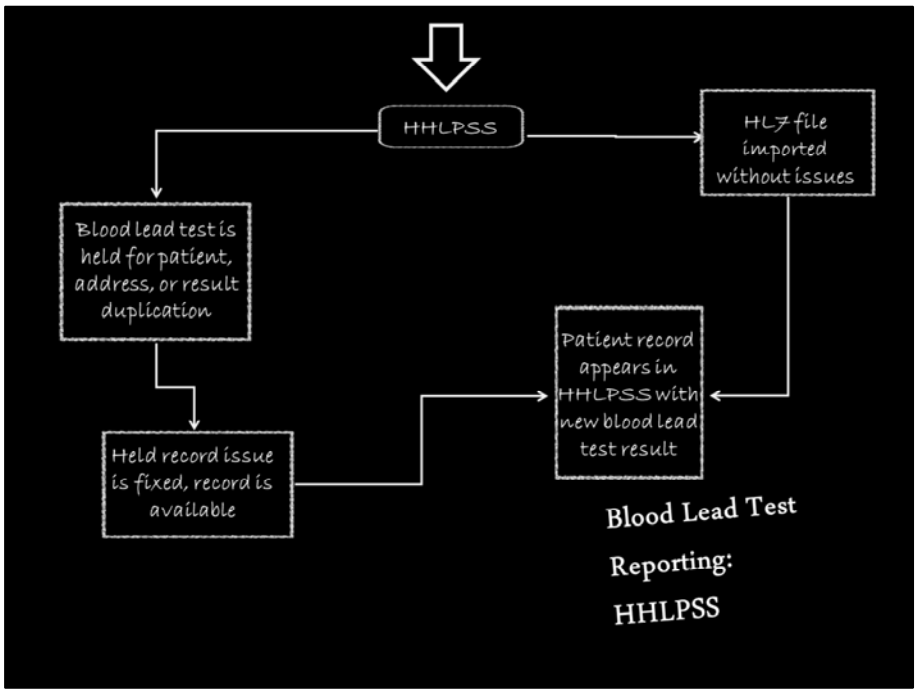
The purpose of this presentation is to give you “big picture” overview of how data collection works, in addition to talking about HHLPSS: its functionality and limitations, how we update the software, and the various organizations involved in obtaining the data and their responsibilities for ensuring the accuracy of the data that is in HHLPSS.



1. Sample is drawn at healthcare provider's location = doctor's office, WIC clinic or local public health office, or hospital
2. Sample is either processed on site (like a hospital or Lead Care II location) or sent off site to a reference lab or the State Hygienic Lab
3. Onsite hospital or LCII locations perform the test and get a result
4. That result and the required demographic information is entered into the LCII Software report which produces an .xml file, or into the Excel spreadsheet
5. XML file or Excel Spreadsheet is sent to IDPH via SecureMail
6. Offsite reference lab or Hygienic Lab performs the test and gets a result
7. That result and all the required information get entered into that organizations data system, and data extract is done
8. The data extract containing all required pieces of information is sent to IDPH via SmartLab or other ELR (electronic lab reporting) method

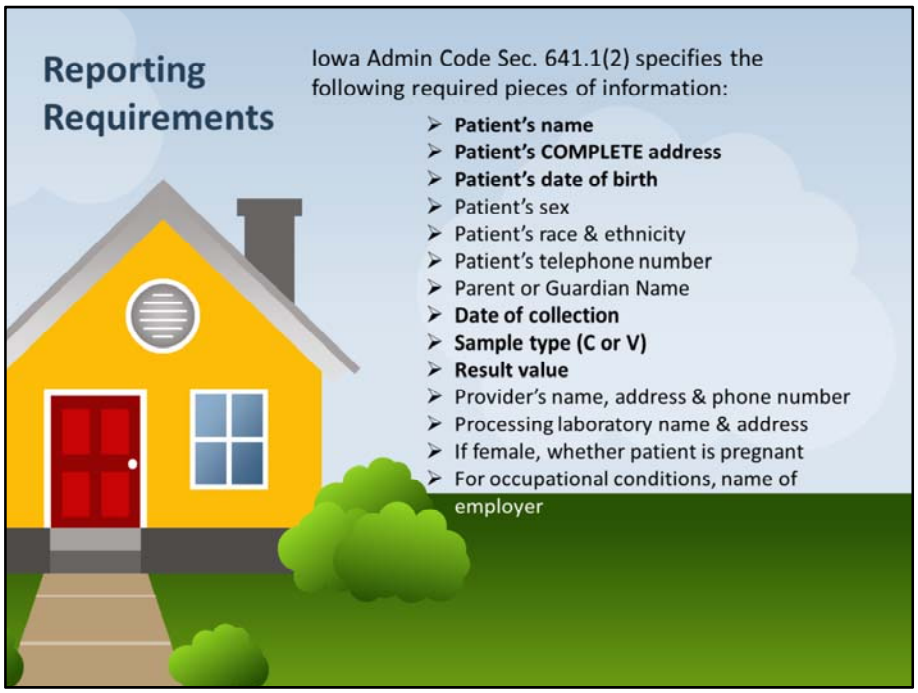


1. Data arrives at IDPH Information Management
2. If data is missing or in the wrong format (i.e., 0 or no result, or dates are in incorrect format), IM runs scripts to "fix" the data because the system will not accept incorrect or incomplete data. We go by each lab location's limit of detection. In LCIIs, limit of detection is <3.3. Other lab locations, it's <1. Many lab locations still have <5 as their limit of detection.
3. Fixed data gets dropped into Rhapsody, IDPH's data parsing software, which picks up the e-mail message, separates the attached file, and
4. Parses out the individual data elements of each file (i.e. first name, middle initial, last name, street, city, state, zip, etc.)
5. The parsed fields are imported into corresponding fields in HHLPSS

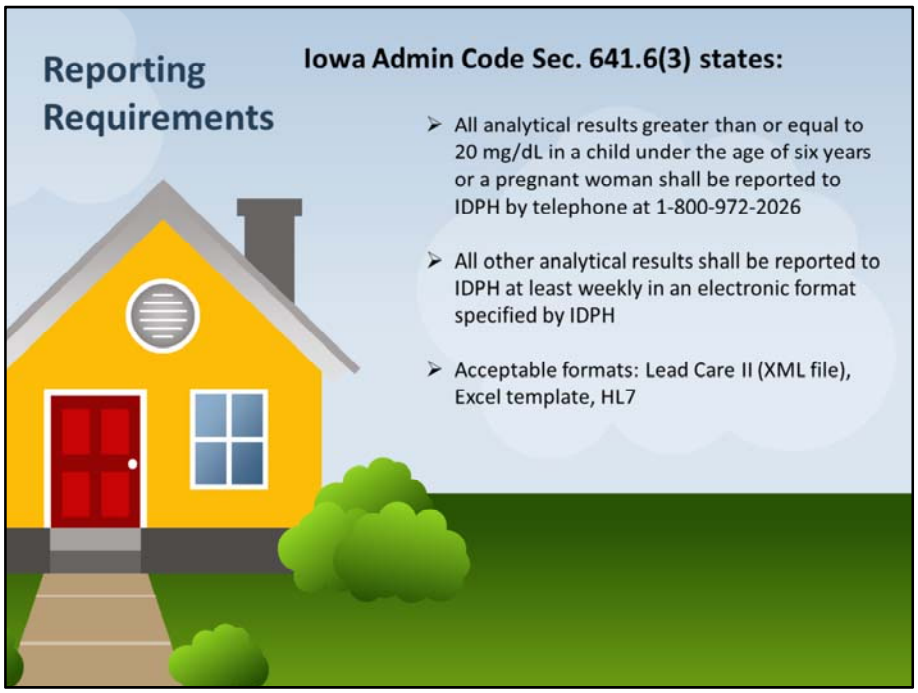


In HHLPSS, two things happen: the result is either directly imported into the system, or is held for patient, address or result deduplication

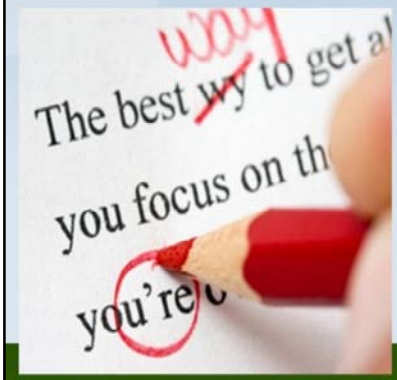
1. If the blood test is imported directly, the patient record appears in the system as you see it with the new blood lead test result in a separate screen.
2. If held, the issue is fixed by me, and the record is manually imported into the system. The patient record appears in HHLPSS with the most recent address information and blood test result.



Here are the data elements that are REQUIRED to be reported: NOTE: elements in bold are the MINIMUM required to import a record into HHLPSS. If ANY of these data elements are missing or in an incorrect format, the record WILL NOT import into HHLPSS.


Reporting Requirements
Iowa Admin Code Sec. 641.6(3) states:
All analytical results greater than or equal to 20 mg/dL in a child under the age of six years or a pregnant woman shall be reported to IDPH by telephone at 1-800-972-2026
All other analytical results shall be reported to IDPH at least weekly in an electronic format specified by IDPH
Acceptable formats: Lead Care II (XML file), Excel template, HL7

HHLPSS Data



Local Public health can:

- Edit any information on the Patient Info screen
- Enter data in notes on open cases
- Enter data under Environmental tab related to inspections

IDPH staff can modify most other data related to blood tests, addresses, providers, and labs

HHLPSS Data

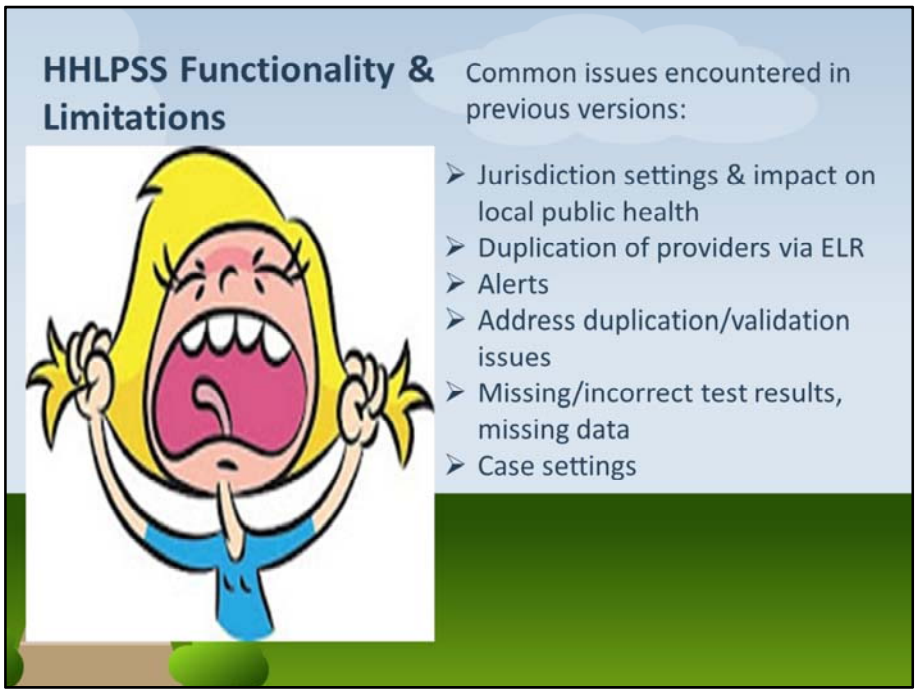
Local Public Health can assist in clarifying:

- Medical Providers are responsible for completing all required data elements in Lead Care II report or lab requisition
- Labs are responsible for capturing required data elements and timely reporting of results

The CDC's goal is to distribute a new build of HHLPSS once every three months. This is what happens in the Department each time a new build is released:

Once the build arrives from the CDC, it is loaded onto a TEST site by Information Management. The Lead Program staff work with the new build on the TEST site, to make sure everything is working. In some cases, things that worked in previous versions, are broken in the current build. Some ELR functions in the previous build lead to duplicating addresses; previous versions duplicated providers.

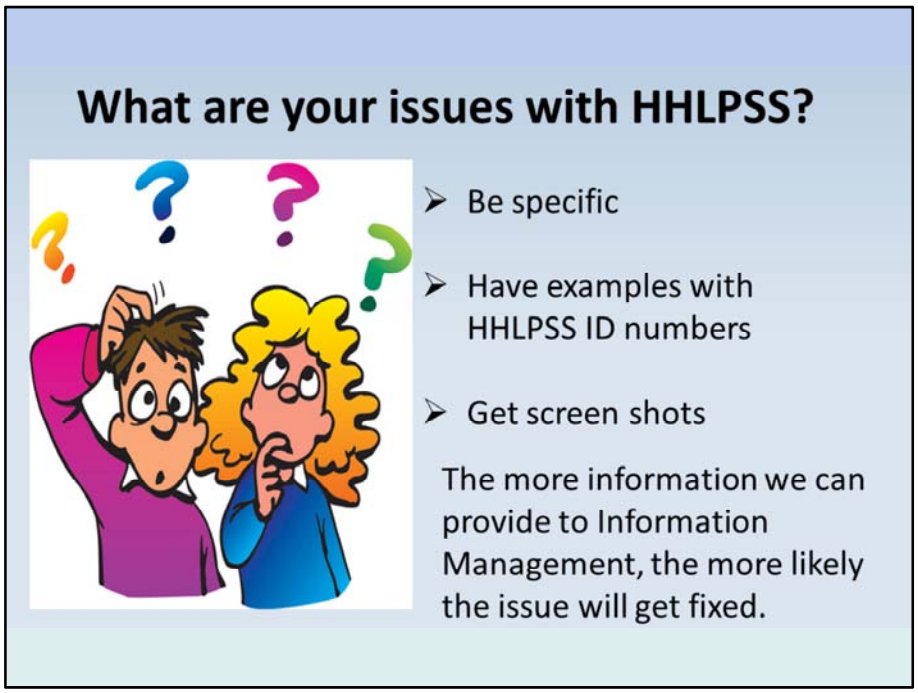
Once the build has been thoroughly tested, flaws and all, it is loaded onto the PRODUCTION site. I've been informed by Info Mgmt that we do not skip builds, regardless of its issues.



As you are probably well aware, there have been issues with the application. Here are some:

- Jurisdiction: some addresses were showing up in the wrong jurisdiction, putting kids into counties where they didn't belong
- initial versions duplicated providers to the nth degree; we haven't yet cleaned that up
- alerts were not getting to the correct person so follow-up could be initiated immediately. We still call or send an e-mail if we get notice of a high lead result via phone or fax
- the previous version did not always pick up addresses that were already in the system, resulting in duplication of addresses, particularly if the address has apt or lot numbers
- Some of the scripts IM wrote to correct missing data was changing test results to <3.3 if a '0' was present in a result value

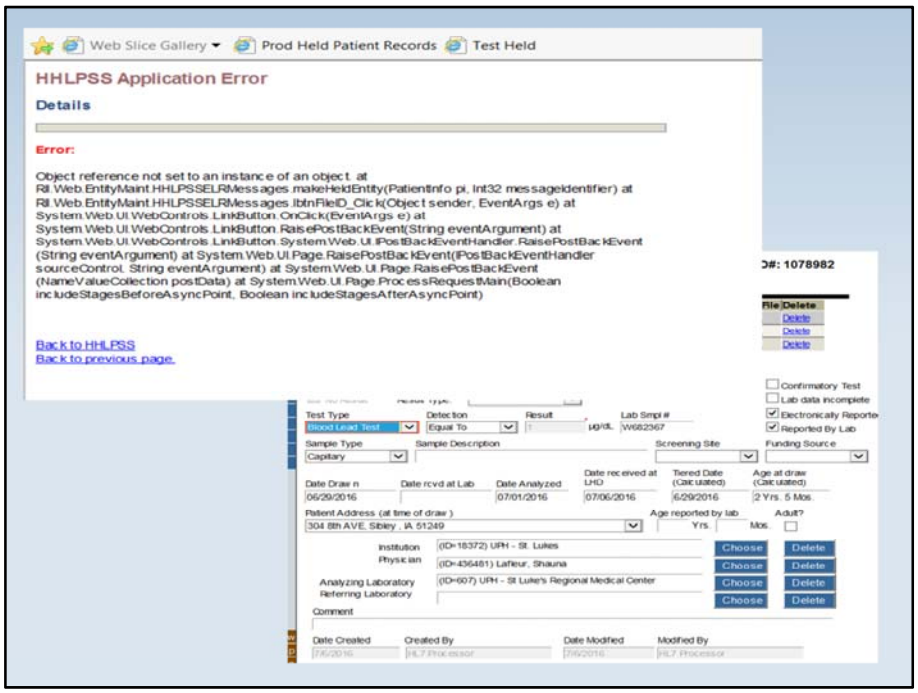
Limitations: HHLPSS was designed specifically for surveillance, NOT case management. CDC likely did not consult with local public health programs when the software was being designed.



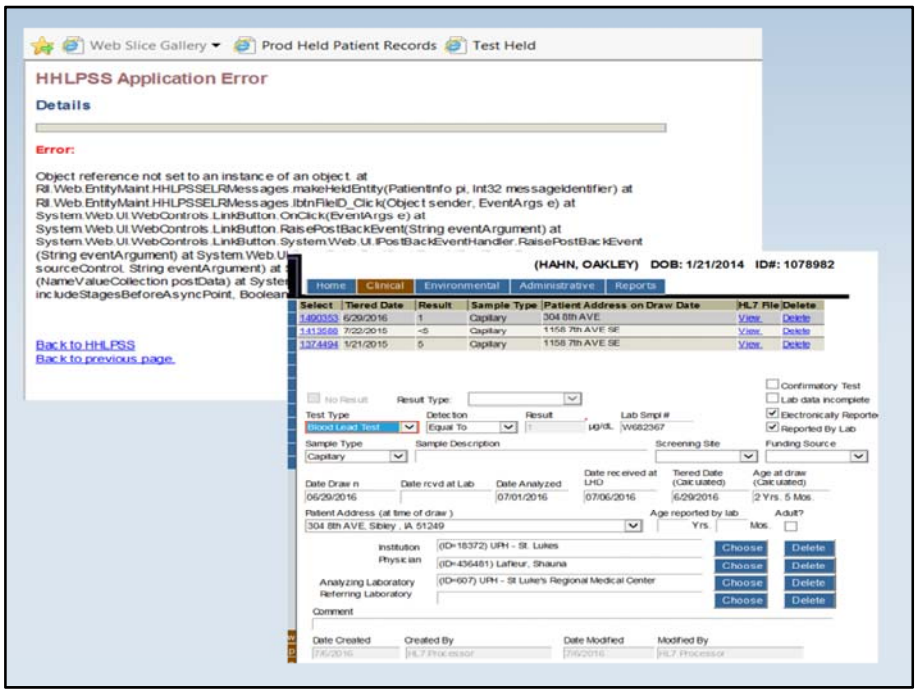
1. Be Specific: What were you doing when the issue came up? What should have happened? What actually happened?

2. Have examples: identify specific records and get the HHLPSS ID number of the record you were working in

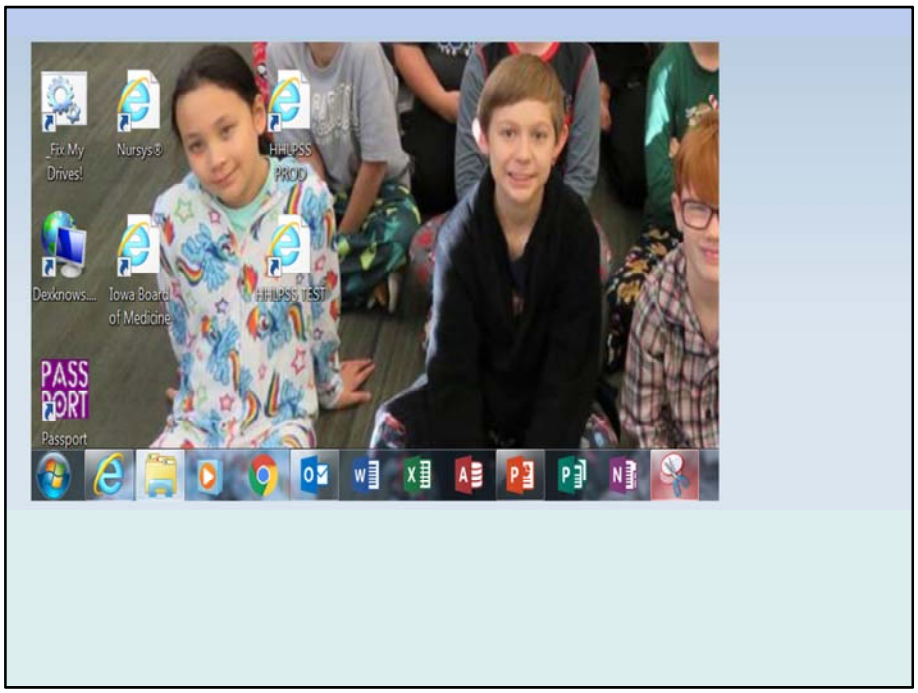
3. Get screen shots: cannot emphasize this enough; we need documentation to forward to Information Management



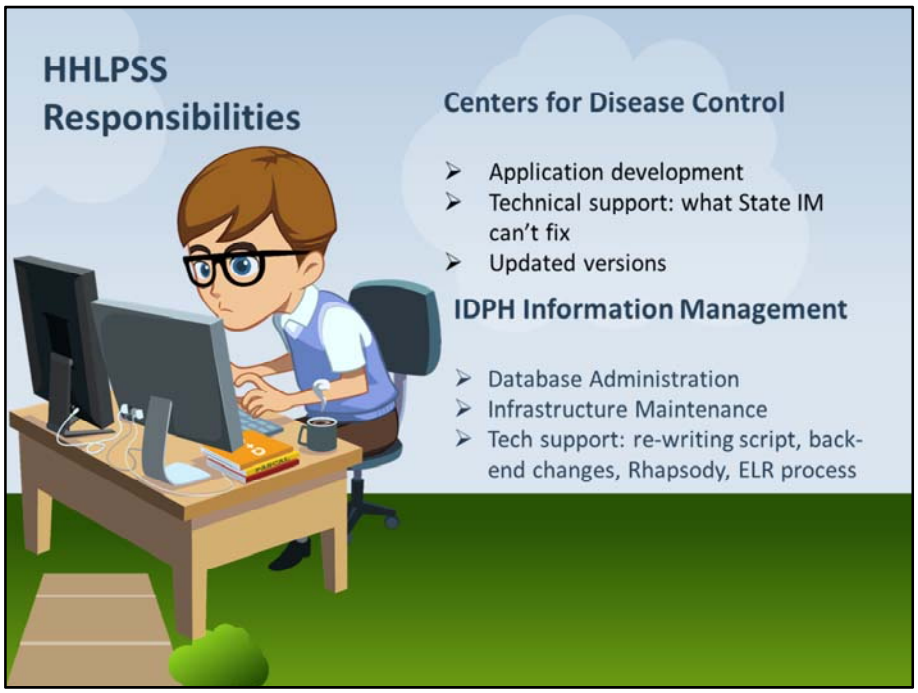
Here are some examples of screen shots. Error messages will look like this.



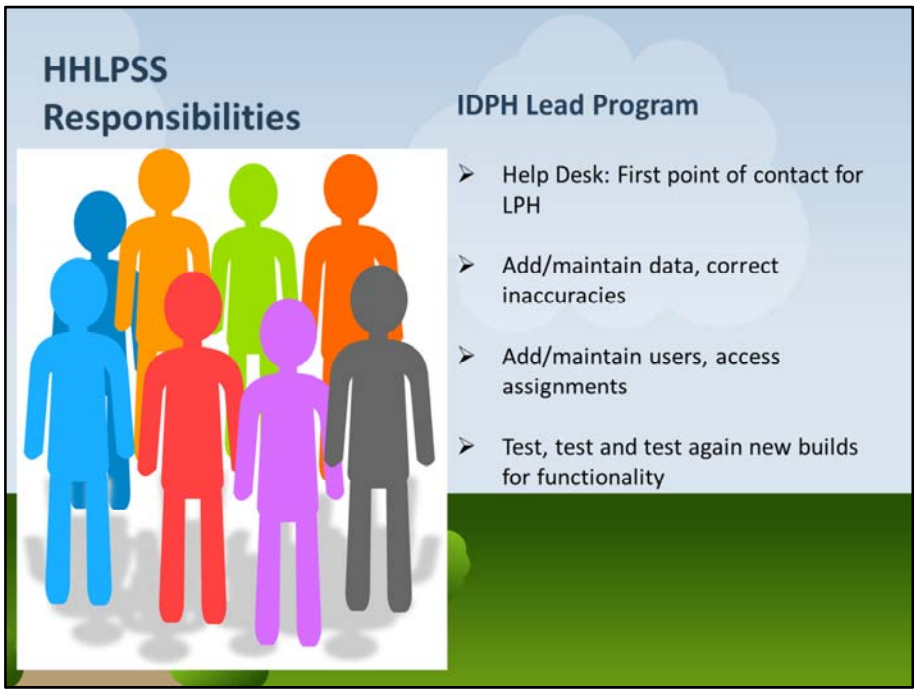
We will also need a screen shot of the patient record you found the error in.



To create a screen shot, use the Snipping Tool which can be found in your Start Menu. You can move the Snipping Tool icon onto your taskbar by clicking and dragging it there.



Here are the distribution of responsibilities as they relate to the HHLPSS application:



Here's what we have control over:

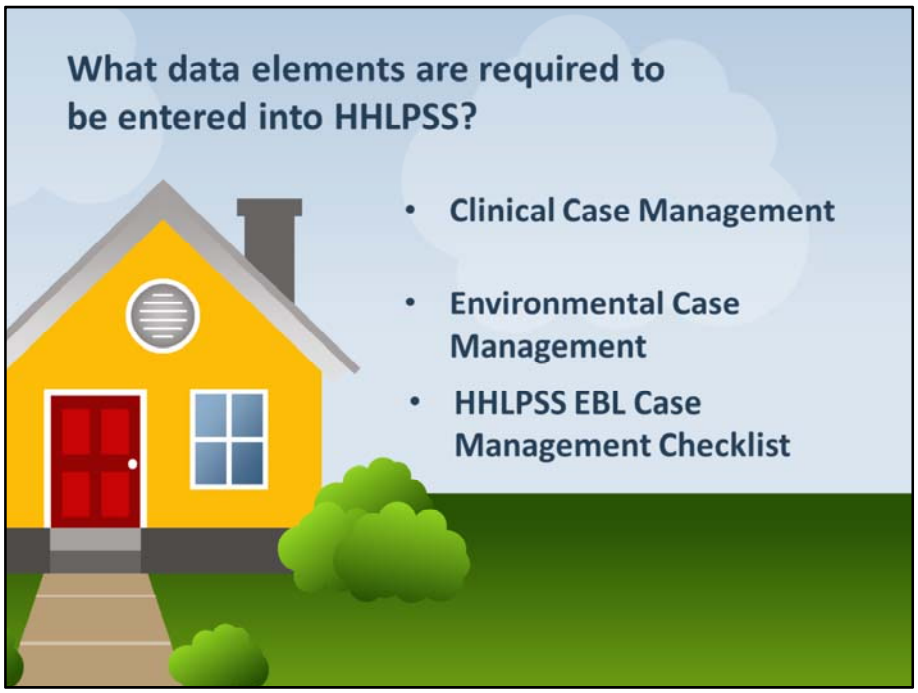
Here is what local public health programs can do to improve the functionality of HHLPSS.

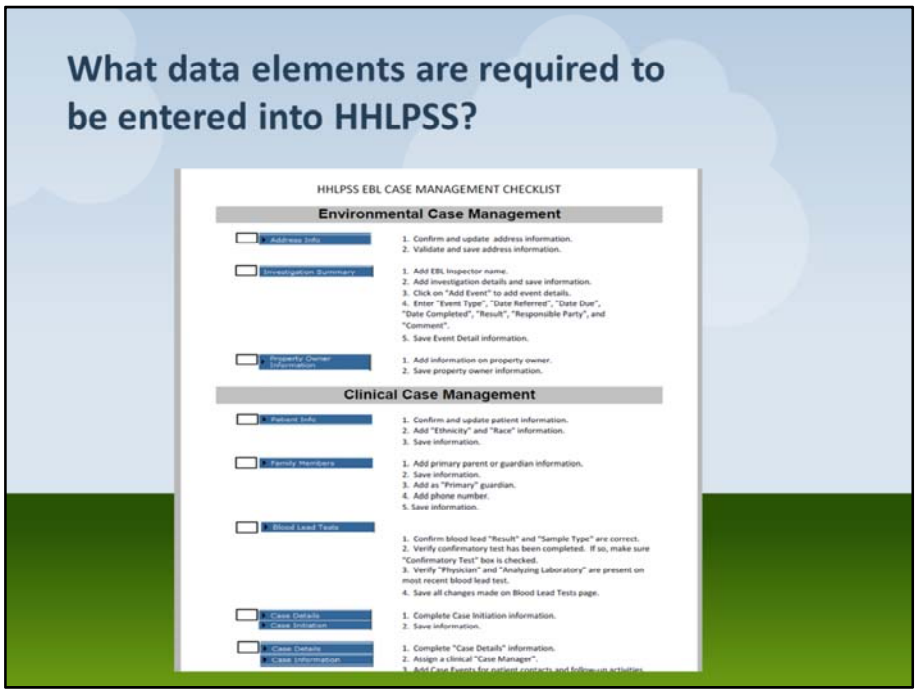
Questions???

Clinical tab, data issues:	Janet Lemmermann @ (515) 242-5200
Environmental tab:	Kevin Officer @ (515) 242-5902
Adult Leads (ABLES):	Kathy Leinenkugel @ (515) 281-4930
Reports:	Janet, Kevin or Kathy, depending on type of report you need

Here are the people to contact when you have HHLPSS questions. We can now take questions…..

HHLPSS
(Healthy Homes & Lead Poisoning Surveillance System)
Case Management Data Requirements
Kevin Officer, Contract Manager


What data elements are required to be entered into HHLPSS?
• Clinical Case Management
• Environmental Case Management
• HHLPSS EBL Case Management Checklist

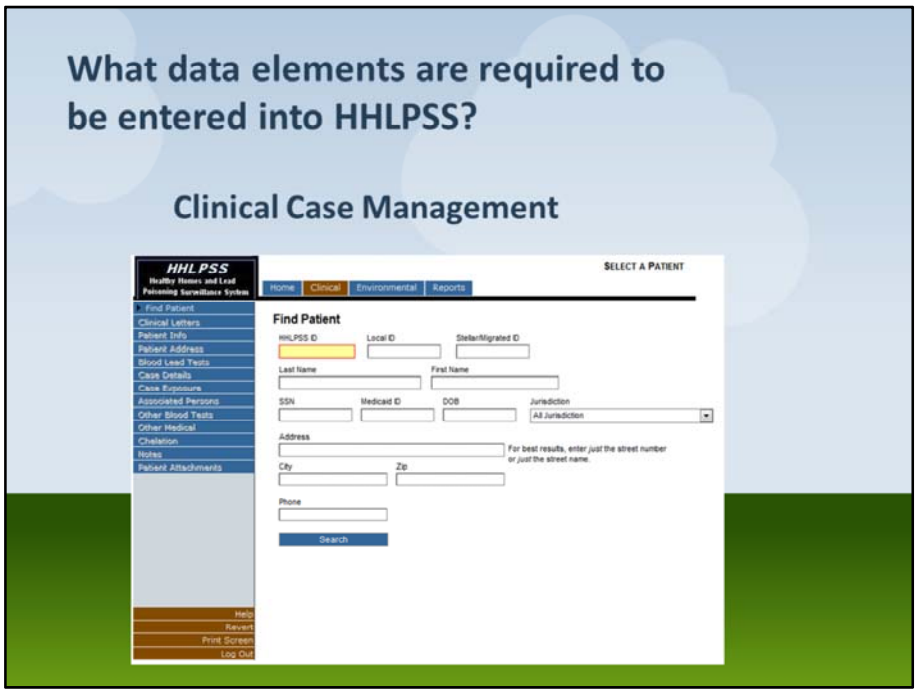


Case managers can use the HHLPSS EBL Case Management Checklist when entering patient and address record information into HHLPSS. The list contains required program elements and information that needs to be entered.

What data elements are required to be entered into HHLPSS?

HHLPSS Case Management Navigation Links:

- Patient Info
- Family Members
- Blood Lead Tests
- Case Details
- Case Initiation
- Notes
- Address Info
- Property Owner Information
- Case Details
- Case Information
- Patient Address
- Associated Persons
- Patient Attachments
- Upload Attachment
- Investigation Summary



Clinical case management main page for locating or finding a patient.

Clinical Case Management Navigation Links:

Patient Info

HHLPSS
Healthy Homes and Lead Poisoning Surveillance System

(SIMPSON, BARTHOLOMEW) DOB: 4/1/2012 ID#: 963040

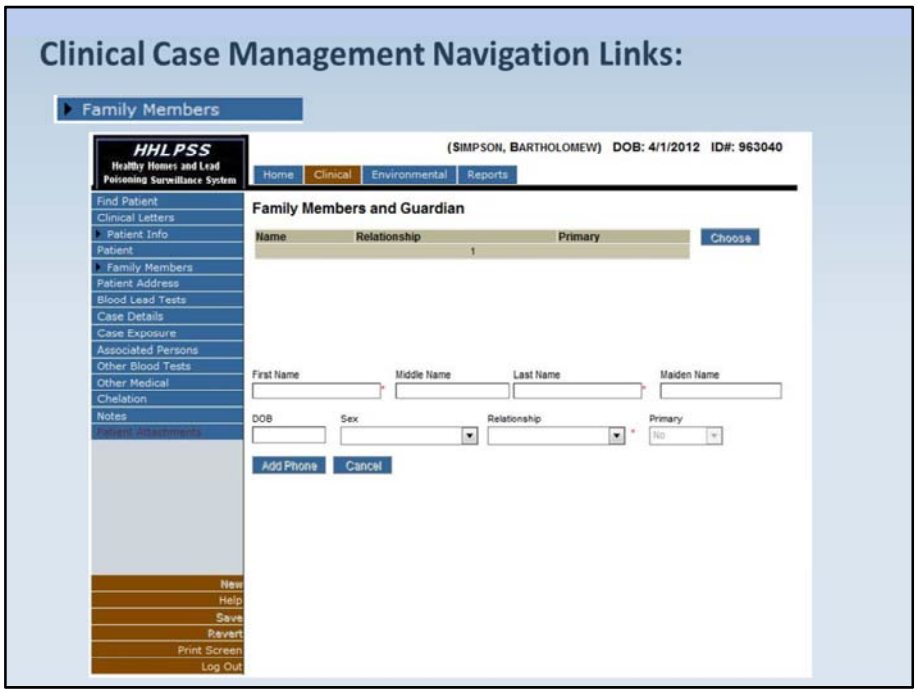
Home | Clinical | Environmental | Reports

Find Patient
Clinical Letters
Patient Info
Patient
Family Members
Patient Address
Blood Lead Tests
Case Details
Case Exposure
Associated Persons
Other Blood Tests
Other Medical
Chelation
Notes
Patient Attachments

Help
Save
Revert
Print Screen
Log Out

Last Name: Simpson | AKA
First Name: Bartholomew
Middle Name: JoJo
Case Type (Case Status): State Case (Open)
DOB: 04/01/2012
Current: 1 Yrs. 11 Mos.
Sex: Male
Twin
Local ID No.
Medical Rec
Max Blood Pb: 32
Reports: 1
SSN
Medicaid ID
Next Pb Date: 4/29/2013
Ethnicity: Select — Not Hispanic
Race: Select — White
Country of Birth
State/Province
Language
Interview in English?
Number: 321
Direction: E
Street: 12th
Type: ST
Direction
Apt.: 01
City: Des Moines
County: Polk
State: IA
Zip: 50319
Census Tract
Parcel No.
District
Follow-up received
Guardian Phone
Guardian First Name
Guardian Last Name
Patient Phone

1. Confirm and update patient information.
2. Add "Ethnicity" and "Race" information.
3. Save information.



1. Add primary parent or guardian information.
2. Save information.
3. Add as "Primary" guardian.
4. Add phone number.
5. Save information.

Clinical Case Management Navigation Links:

Blood Lead Tests

HHLPSS
Healthy Homes and Lead Poisoning Surveillance System

(SIMPSON, BARTHOLOMEW) DOB: 4/1/2012 ID#: 963040

Home | Clinical | Environmental | Reports

Find Patient
Clinical Letters
Patient Info
Patient Address
Blood Lead Tests
Case Details
Case Exposure
Associated Persons
Other Blood Tests
Other Medical
Chelation
Notes
Patient Attachments

Select	Tiered Date	Result	Sample Type	Patient Address on Draw Date	HL7 File	Delete
1192754	4/1/2013	±32	Venous	321 E 12th ST		Delete

No Result | Result Type: | Confirmatory Test | Lab data incomplete | Electronically Reported | Reported By Lab

Test Type: Blood Lead Test | Detection: Equal To | Result: 32 µg/dL | Lab Smpl #:

Sample Type: Venous | Sample Description:

Date Drawn: 04/01/2013 | Date rcvd at Lab: 04/03/2013 | Date Analyzed: 04/04/2013 | Date received at LHD: 03/31/2014 | Tiered Date (Calculated): 4/1/2013 | Age at draw (Calculated): 1 Yrs. 0 Mos.

Patient Address (at time of draw): 321 E 12th ST, Des Moines, IA 50319 | Age reported by lab: Yrs. Mos. | Adult?

Institution | Physician | Analyzing Laboratory | Referring Laboratory — Choose | Delete

Comment

Date Created: 3/31/2014 | Created By: lofficer | Date Modified: 3/31/2014 | Modified By: lofficer

New
Help
Save
Revert
Print Screen
Log Out

1. Confirm blood lead "Result" and "Sample Type" are correct.
2. Verify confirmatory test has been completed. If so, make sure
"Confirmatory Test" box is checked.
3. Verify "Physician" and "Analyzing Laboratory" are present on
most recent blood lead test.
4. Save all changes made on Blood Lead Tests page.

Clinical Case Management Navigation Links:

- Case Details
- Case Initiation

HHLPSS
Healthy Homes and Lead Poisoning Surveillance System

(SIMPSON, BARTHOLOMEW) DOB: 4/1/2012 ID#: 963040

Home | Clinical | Environmental | Reports

Find Patient
Clinical Letters
Patient Info
Patient Address
Blood Lead Tests
Case Details
Case Initiation
Case Information
Case Disposition
Disposition History
Case Exposure
Associated Persons
Other Blood Tests
Other Medical
Chelation
Notes
Patient Attachments
Help
Save
Revert
Print Screen
Log Out

Case Type

Case Status: Open

Reason for Case Initiation (Surveillance Case Only): Met State Case Criteria

Case-Making Blood Result(s)

Date	Pb Value	Type	Patient Address at Draw Date
4/1/2013	32	Venous	321 E 12th ST #5

Case Initiation

Origin of case notification

. . . if Transfer, from where:

. . . if Other, specify:

Date of case making BLL: 04/01/2013

Date LHD first received notice

Date case first assigned to Case Manager

Case Manager home visit done?

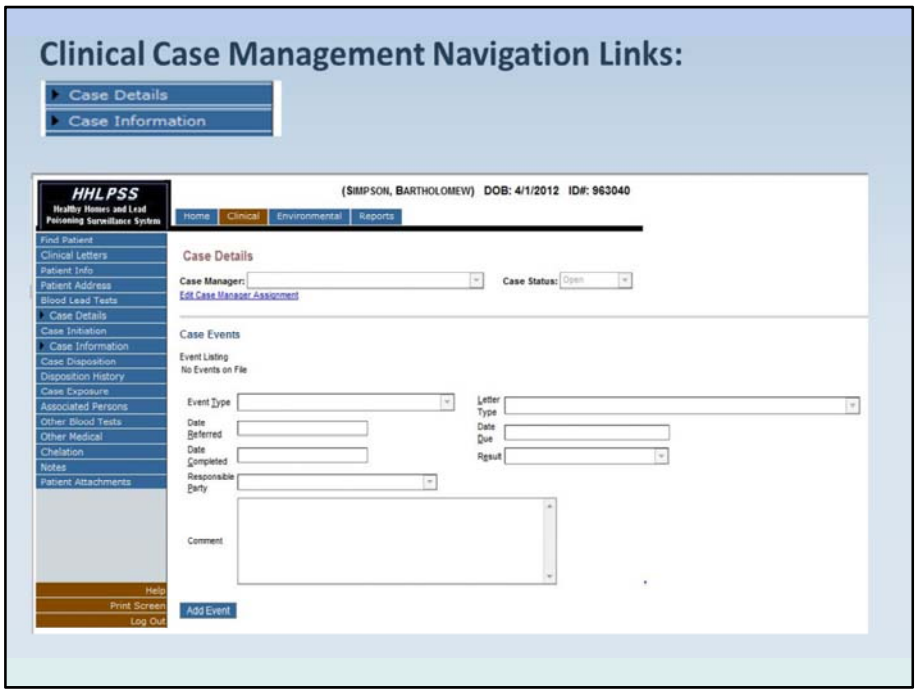
Date of first home visit

Date environmental health notified case

Primary residence environmental investigation done?

Date of initial environmental investigation

1. Complete Case Initiation information
2. Save information.



1. Complete "Case Details" information.
2. Assign a clinical "Case Manager".
    - Click on Edit Case Manager Assignment to assign a case manager
    - Once assigned, click on Assign Case Manager to assign a case manager to the patient.
3. Add Case Events for patient contacts and follow-up activities completed.
4. Save events.

Note: For clinical case managers it is important to enter the proper case event codes for contract billing and tracking purposes. Refer to the HHLPSS Billing Code Requirements located on your grant site in IowaGrants.gov.

Clinical Case Management Navigation Links:

Patient Address

HHLPSS
Healthy Homes and Lead Poisoning Surveillance System

(SIMPSON, BARTHOLOMEW) DOB: 4/1/2012 ID#: 963040

Home | Clinical | Environmental | Reports

Find Patient
Clinical Letters
Patient Info
Patient Address
Blood Lead Tests
Case Details
Case Exposure
Associated Persons
Other Blood Tests
Other Medical
Chelation
Notes
Patient Attachments
Help
Print Screen
Log Out

Patient Address

Address Id	Address	Resided From	Resided Untill	Investigation Status	Delete	Edit
558081	321 E 12th Street Des Moines IA 50319			Open	X	Edit
451640	1100 East 6th Street Apt/Suite 4 Des moines IA 50316			Not A Case	X	Edit

Address Id: 558081

Line 1: 321 E 12th Street | Apt/Ste #: 5 | Line 2: | Census Tract:
City: Des Moines | State: IA | Zip: 50319 | County: Polk | Census Block:

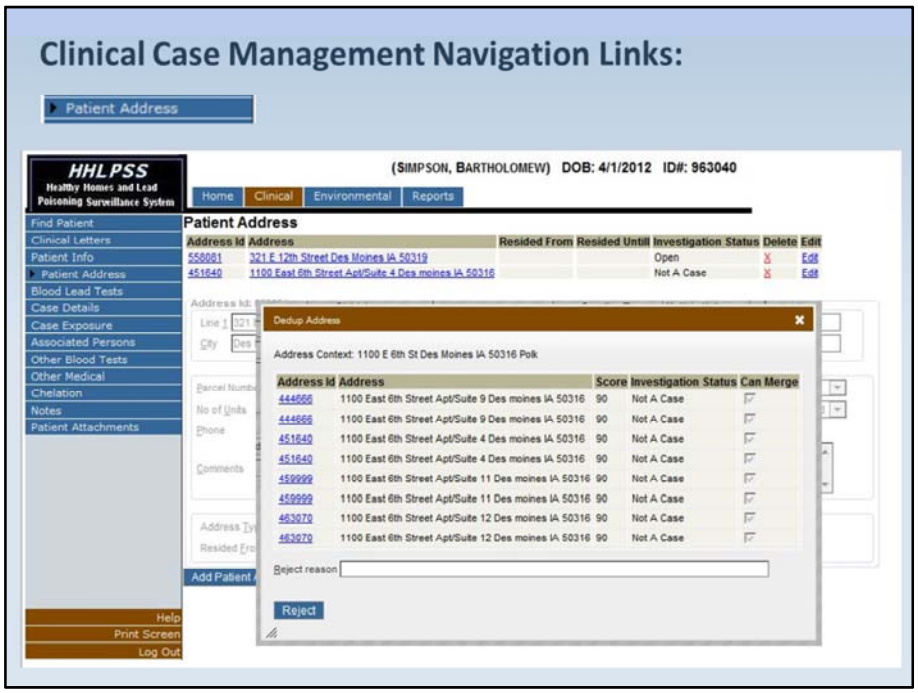
Parcel Number: | District: | Dwelling Type: Single Family
No of Units: | High Risk Structure? | Ownership Type: Owner Occupied
Phone: | Year Built: 1942

Comments: Primary address where child was exposed to lead paint hazards.

Address Type: Primary Home | Address Status: Primary | Last Known Address
Resided From: | Resided Untill: | Currently Lives At

Add Patient Address

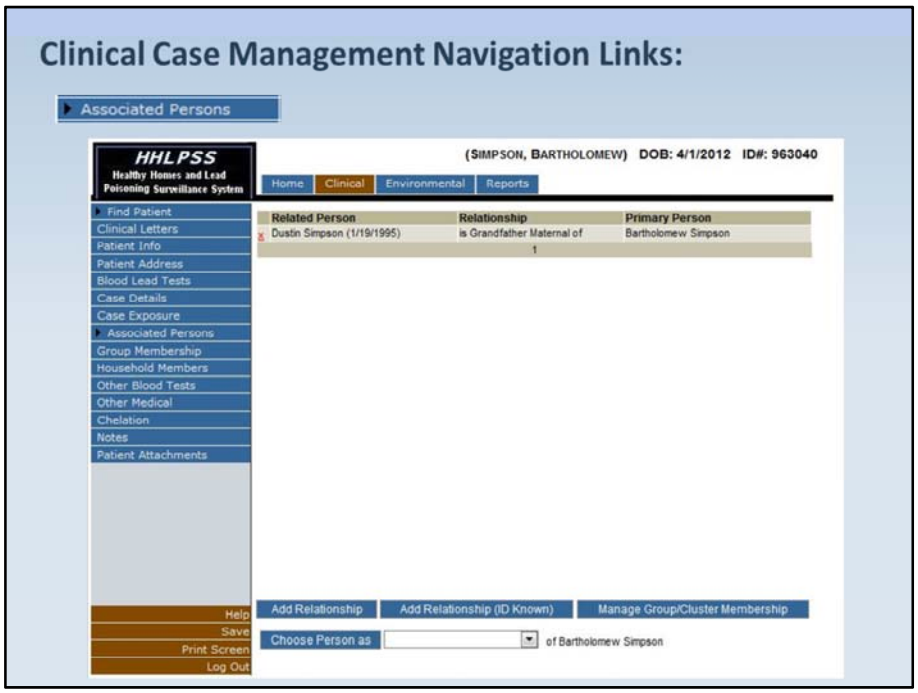
1. Veirfy Patient Address.
2. Validate Address
1. Add additional notes to patient records.
3. Save Address
4. Dedup address, if necessary.



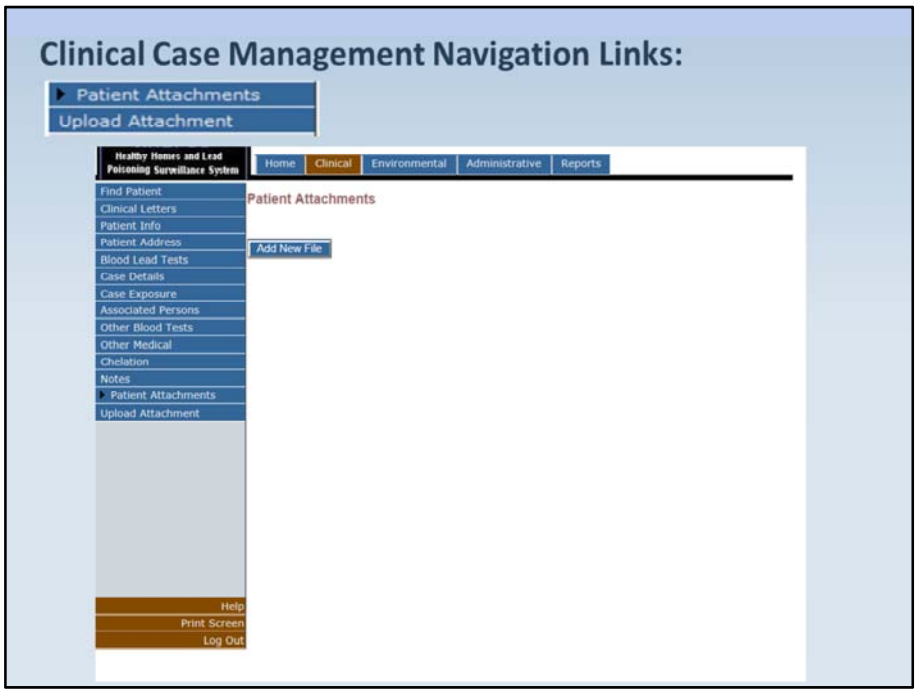
Dedup address, if necessary.

- HHLPSS may determine that there are similar, duplicate addresses in the system.
- If this occurs, a pop-up window will open and require you to either select a similar address
- Or reject the addresses listed because they are not the same address.
- This occurs a lot with apartment addresses and addresses with multiple associated units.

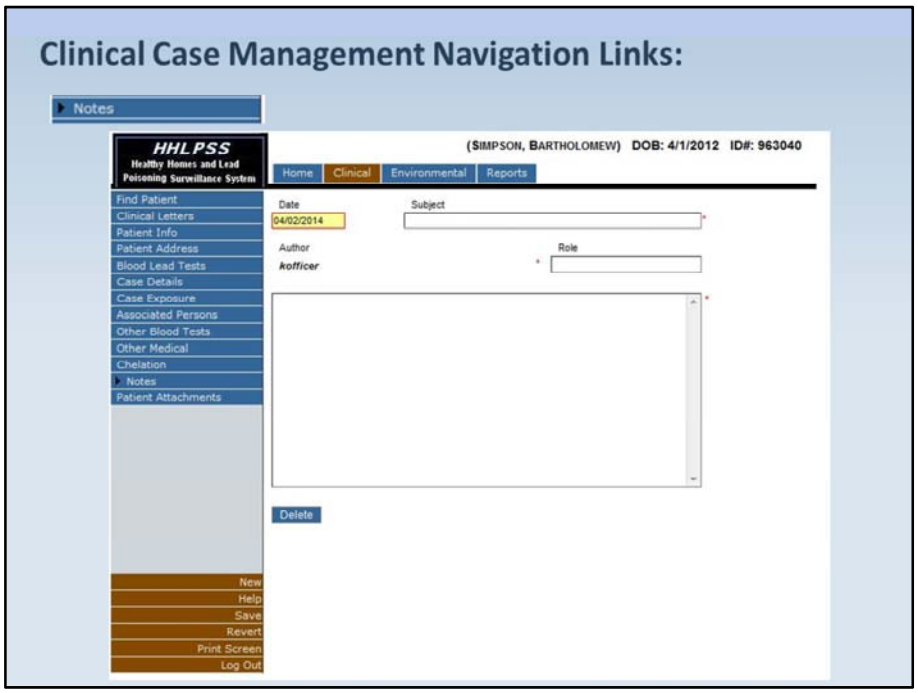
The deduplication process prevents HHLPSS from creating two HHLPSS IDs for the same address.



1. Add "Associated Persons" that are currently in HHLPSS. This includes siblings, parents, other current or former members of the household.

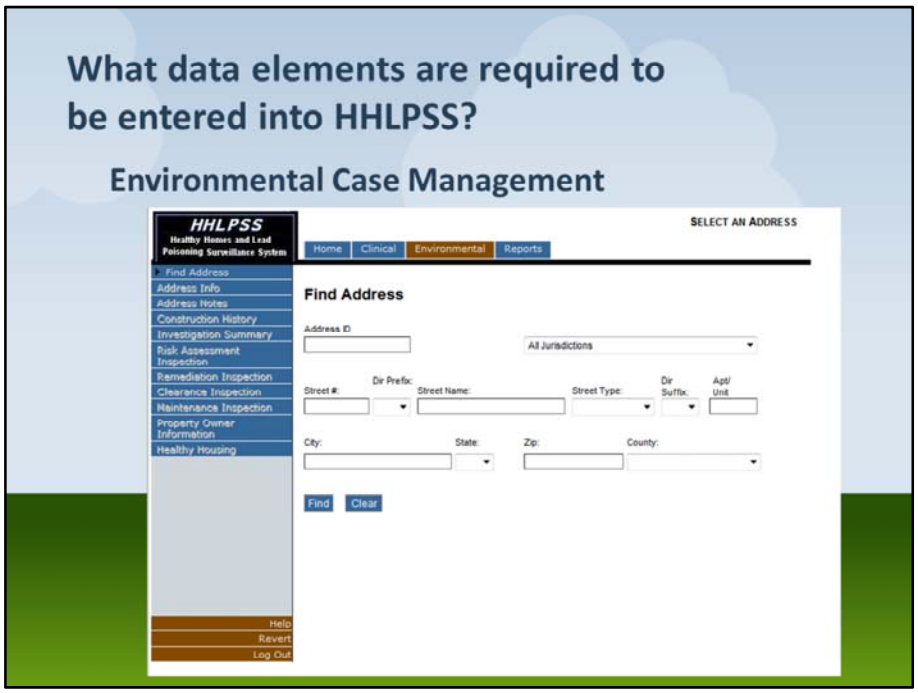


1. Upload documents pertinent to patients case. Documents may include lab results, doctor's notes, EBL inspection results, etc.



1. Add additional notes to patient records.

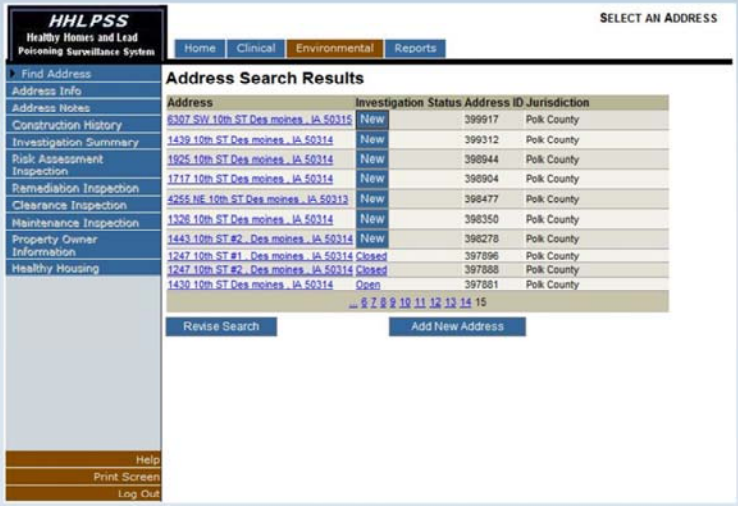
Note: Clinical case managers should add notes to patient records when the patient is not an open case, but a contact has made, or some other billable activity has occurred. In order for the contact or activity to show up on the monthly billing report "Child Contact" must be entered into the Subject field.



1. Main page for locating or finding an address.
2. Enter HHLPSS address ID (if known) or enter address information.
3. Address can also be linked to from the patient address record.

Note: Different navigational links on environmental tab than clinical.

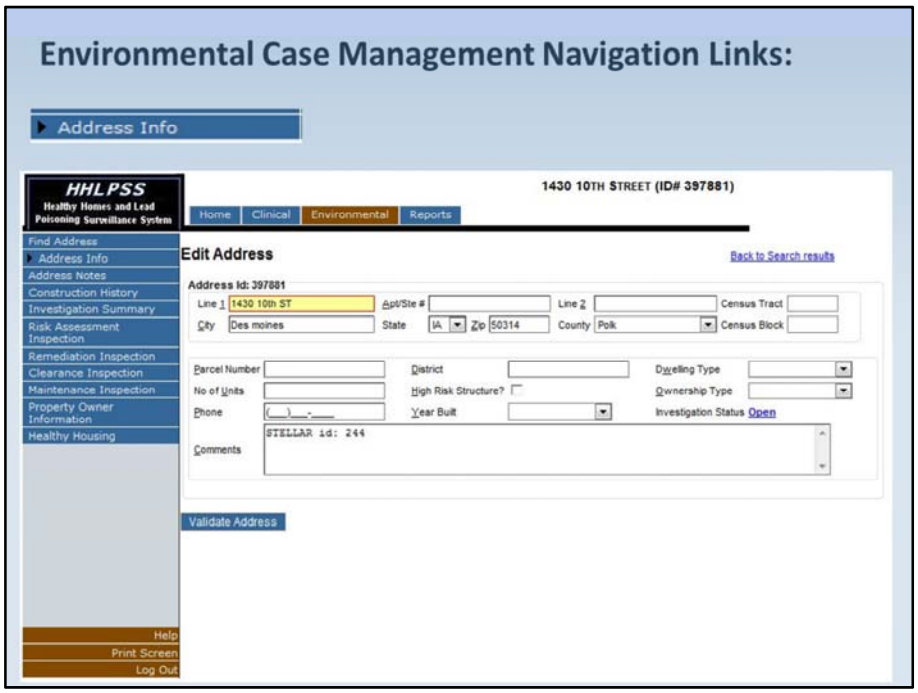
Environmental Case Management Navigation Links:



1. A search of the address may produce a list of similar addresses to choose from.

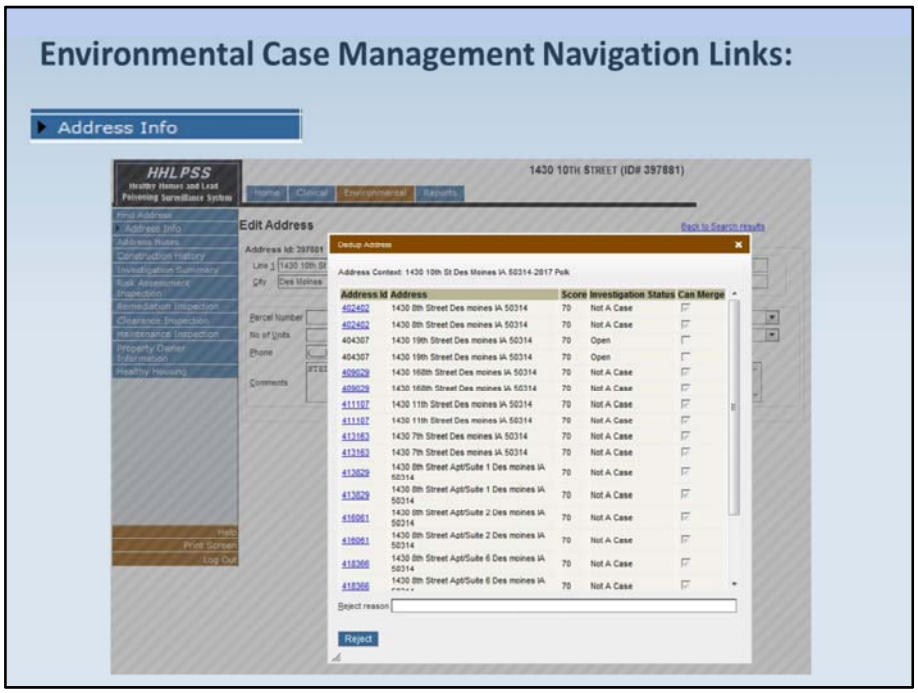
2. Generally, the address will either be an “Open” or “Closed” address.

3. Select the appropriate address by clicking on the address link.



1. Confirm and update address information.

2. Validate and save address information.



Dedup address, if necessary.

- HHLPSS may determine that there are similar, duplicate addresses in the system.
- If this occurs, a pop-up window will open and require you to either select a similar address
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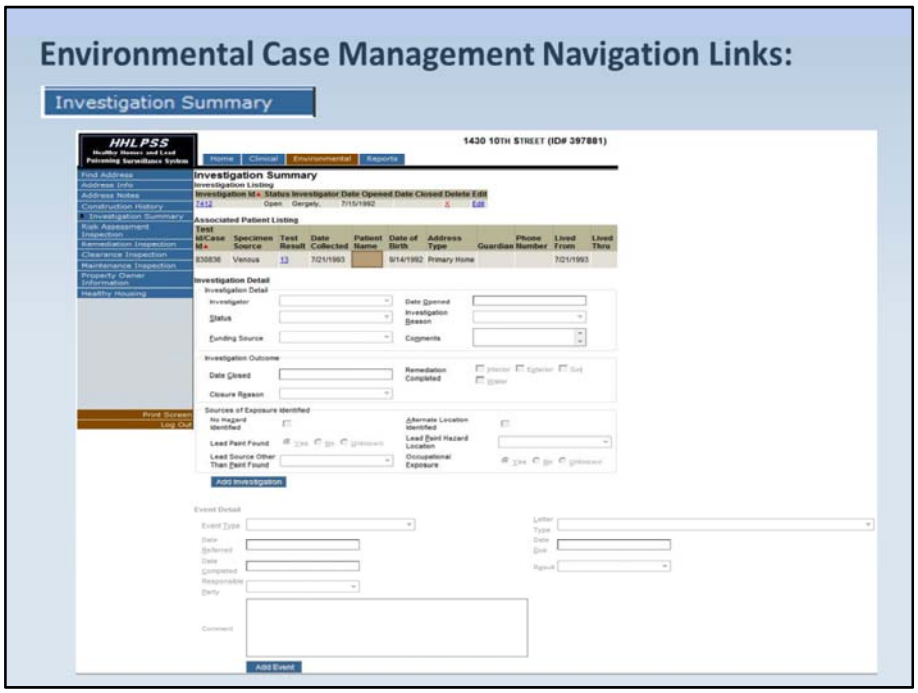
- This occurs a lot with apartment addresses and addresses with multiple associated units.

The deduplication process prevents HHLPSS from creating two HHLPSS IDs for the same address.



1. Add EBL Inspector name.

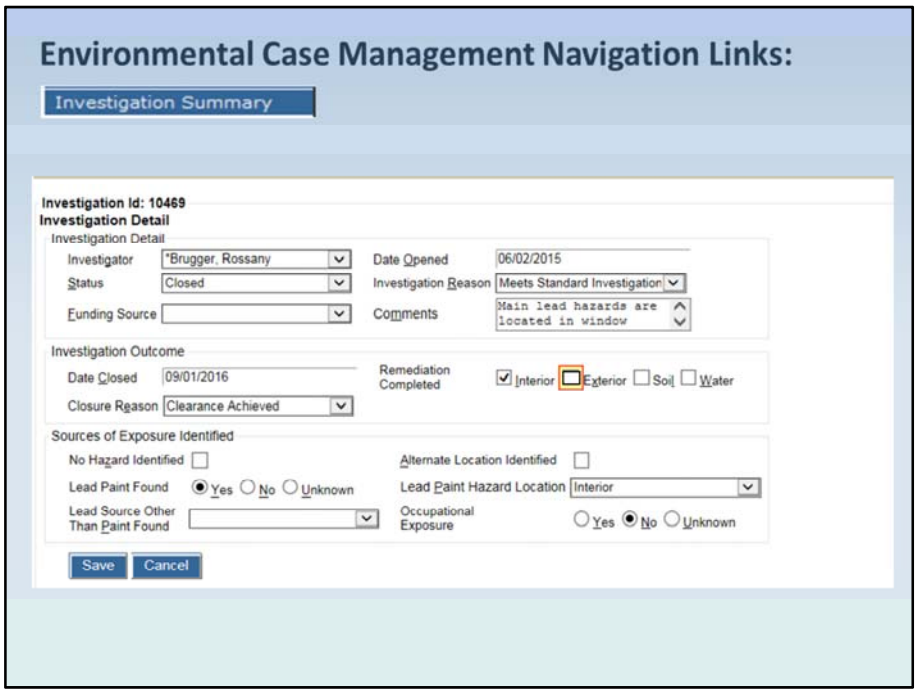
2. Add investigation details and save information.

3. Click on "Add Event" to add event details.

4. Enter "Event Type", "Date Referred", "Date Due", "Date Completed", "Result", "Responsible Party", and "Comment".

Note: For environmental case managers it is important to enter the proper case event codes for contract billing and tracking purposes. Refer to the HHLPSS Billing Code Requirements located on your grant site in IowaGrants.gov.

5. Save Event Detail information.

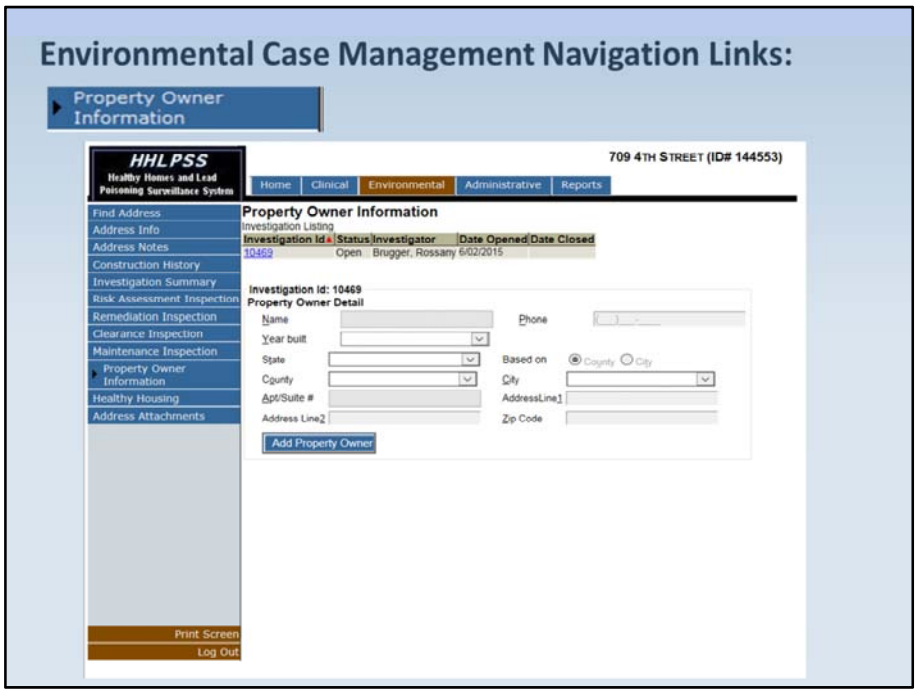


Closing and address

1. Change Status from Open to Close under Investigation Detail section.

2. Enter Date Closed, Closure Reason, and where remediation was completed.

3. Save information.



1. Add information on property owner.

2. Save property owner information.

Environmental Case Management Navigation Links:

Additional Environmental Case Management Links

- Address Notes
- Address Attachments
- Construction History
- Healthy Housing

1. Address information can be provided in these additional areas of environmental case management, but are not required by CLPPP.

Additional Case Management Documents

Case Management Protocols

Care Plan Checklist

Child's name: _____ **County:** _____

Date of birth: _____

The following plan/checklist must be followed once a child has a venous blood lead level greater than or equal to 10 µg/dL. Write the person who is responsible for the activity on the appropriate line. Once the activity has been completed check the box indicating that it was done and enter the appropriate event in HHLPSS.

ACTIVITY:	PERSON RESPONSIBLE:	DONE
1) **Home Nursing Visit**	_____	☐

Each child with a venous blood lead level greater than or equal to 15µg/dL must receive a home nursing visit. During the visit, the nurse should provide information on lead poisoning, assess the family's needs, collect race and other information, and make a referral to a dietician. If the child's venous level is greater than or equal to 20 µg/dL, make a referral to the Early ACCESS program or the Area Education Agency (AEA) for a developmental assessment (see Activity 6). This should be the first contact with a lead-poisoned child's family and may be done during the environmental investigation, if one is necessary.

[redacted]	HHLPSS Clinical Information:	**Case Details, Case Information**
[redacted]	HHLPSS Clinical event code:	**Follow-up Home Visit-Nurse** **Initial Home Visit-Nurse**

Action Level ≥ 15 µg/dL

2) **Nutritional evaluation/counseling**	_____	☐

Each child with a venous blood lead level greater than or equal to 15 µg/dL must be referred to a dietician who will review the importance of calcium, iron, and vitamin C intake and, if needed, suggest involvement in supplemental food programs such as WIC.

[redacted]	HHLPSS Clinical event code:	**Nutrition**

Action Level ≥ 15 µg/dL

HHLPSS Guidance Manual

IDPH
Iowa Department of Public Health

Healthy Homes and Lead Poisoning Surveillance System (HHLPSS)

Guidance Manual

May 2014

Version 1

Both of these case management documents can be found in your Contract Document component on IowaGrants.gov.

HHLPSS
(Healthy Homes & Lead Poisoning Surveillance System)
Case Management Data Requirements
Questions?

BREAK

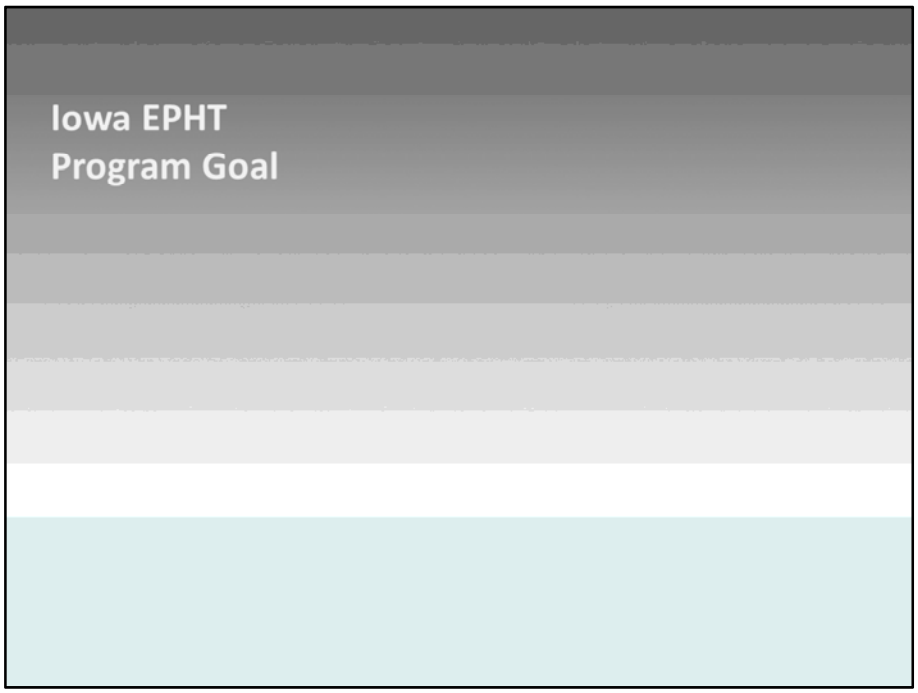
Who am I:
Rob Walker, Environmental Epidemiologist / Biostatistician within the Bureau of Environmental Health Services. I am not part of the Lead program as…
I work within the Environmental Public Health Tracking grant. This is an almost $900K CDC grant with the goal to provide information that can be used to plan, apply, and evaluate actions to prevent and control environmentally related diseases. I am the national co-chair of the lead workgroup that works to standardize lead data nationwide.

What does the Tracking program do:
The largest part of the funding is to develop & maintain a web based portal for data dissemination.
The portal address is on the Pen and Trinket you received.
We will cover more on what data we have in a few moments
Additionally, Tracking trains and builds capacity for state and local partners to use the data and develop actions around it.

Why is Tracking here:
When the Lead program switched from STELLAR to HHLPSS, the data is stored in a new way – within hundreds of SQL tables. The Tracking program was familiar with this structure, as it is how all of our other data is stored. The Tracking program also needs lead data to submit

to the CDC as part of the grant.
The Tracking Program is considered the Data Stewards of the lead data. We are the gatekeepers.

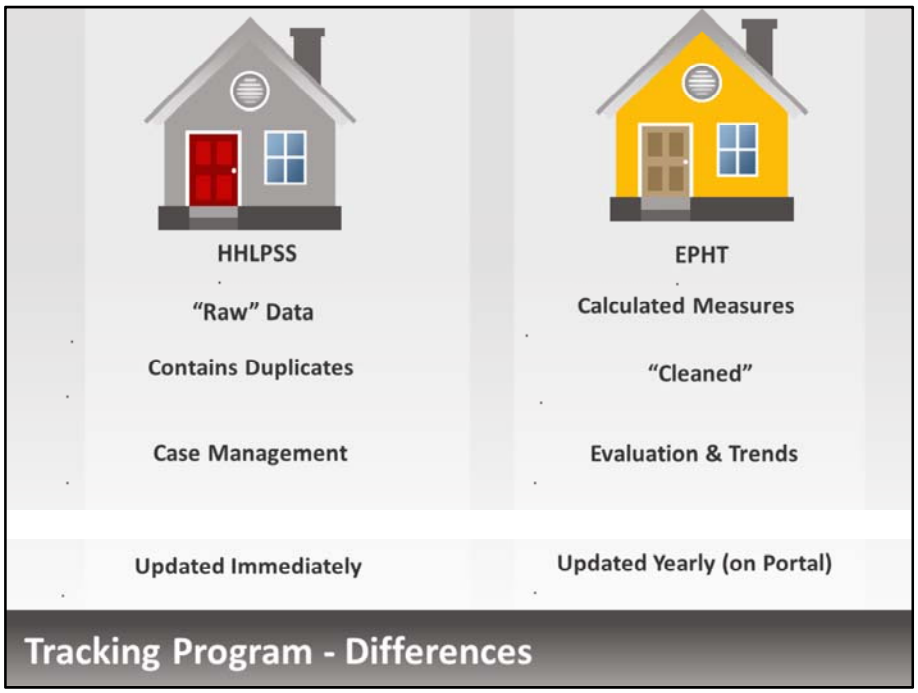
Tracking's Role:
Provide the Lead Program with the information and data needed to make programmatic decisions and improvements. Provide the local public health and jurisdictions with data to assist with improving the health of Iowans



What is the goal of the Tracking program?
Our ultimate goal is to transform data into actions.
We do this by allowing others to review data on the public portal, by assisting state and local partners and providing data for specific projects.

We review and track Public Health Actions and Success Stories – so if I provide data to your jurisdiction don't be surprised if I follow-up with a form for a PHA.

Examples of past lead projects were: Analyzing and matching the school data and Conducting a geocoding series for Dubuque



So we all know what HHLPSS is and what information is being collected. What is Tracking data and how is it different?

Tracking data is derived from the HHLPSS database.

HHLPSS is "raw" data that has not been cleaned yet. The back-end data still contains duplicates and deleted records

Tracking takes these data and converts them into NCDM's (Nationally Consistent Data Measures) that were approved by the CDC and the National Lead program. These data can now be compared across years, counties, jurisdictions, and even states.

When should I use HHLPSS data or Tracking data?

HHLPSS is your case management tool and used to identify new cases and record actions.

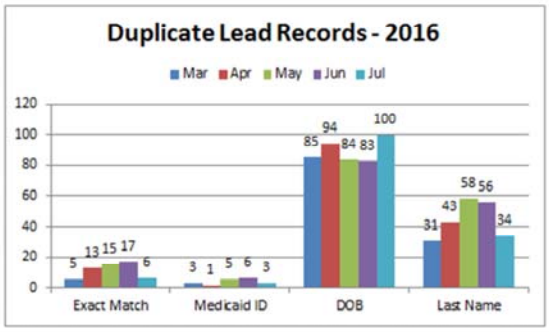
Tracking is for presenting data, program evaluation and identifying trends in the data.

Why are there so many duplicates?

With any database, the quality of the data is only as good as what is put in. We combined 33 databases to create HHLPSS. This duplicated a ton of data and the lead program has

worked hard to reduce this.
To make future data better, we will rely on the labs and locals to ensure that the best data is going into the system.

Monthly Totals	Exact Match	Medicaid ID	DOB	Last Name	TOTAL Worked
Mar	5	3	85	31	124
Apr	13	1	94	43	151
May	15	5	84	58	162
Jun	17	6	83	56	152
Jul	6	3	100	34	143



Deduping

The EPHT has developed a number of reports to assist the Lead Program in removing duplicates in HHLPSS

1. **Exact Match** – Matches children with the same name and DOB

2. Medicaid ID – Matches children with same Medicaid ID and a combination of DOB, name and address

3. Date of Birth error – Matches children with a wrong day or month in the DOB

4. Last Name Error – Matches children who have the same first name, DOB and address – but different last name.

These are checked monthly. The data since 2013 has been cleaned, and working on some of the older. More than 6 years of age of the current date will not be cleaned.

Why don't I have same access as STELLAR

Database much more complicated
Security – Need firewalls and extra security with all the hacking
HIPAA
<u>The Privacy Rule permits covered entities to disclose protected health information, without authorization, to public health authorities who are legally authorized to receive such reports for the purpose of preventing or controlling disease, injury, or disability.</u>
Using the data for purposes not outlined in code/contract

Why are we not 4 times the national average/ data changed?

Since 2013 we have been using the NCDM's. All past data was recalculated to normalize to national standards.
We were comparing apples to oranges, but now more like Honeycrisp to Granny Smith.

Definitions that is used within the Tracking Portals and data:

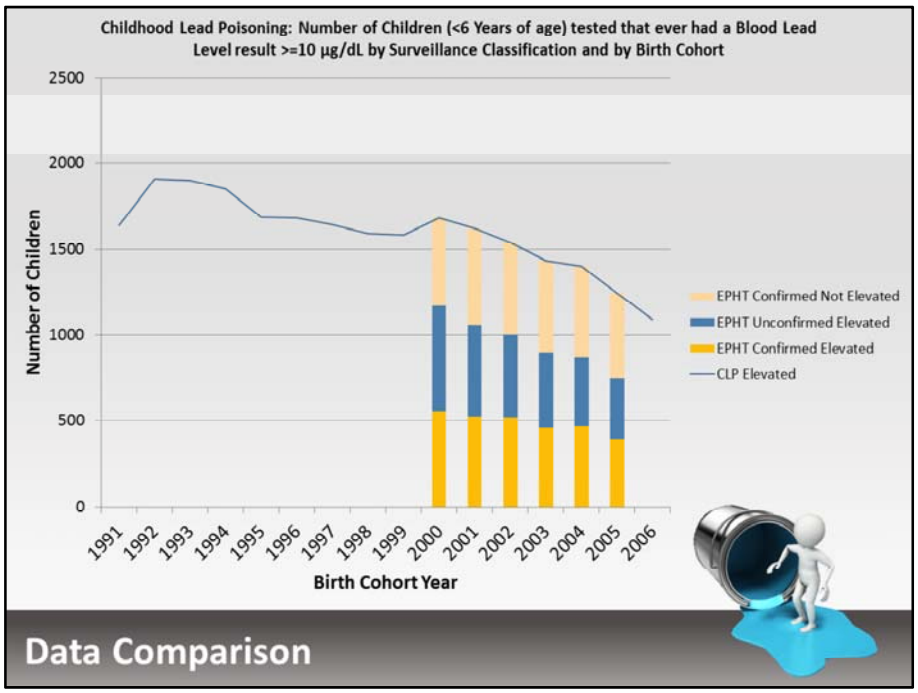
Confirmed – A venous test or a second screening test (capillary) done between 1 and 84 days (12 weeks) of a previous screen

Unconfirmed – A screening test that did not receive a second test within 84 days.

Birth Cohort – All children born within the same calendar year – separated into 3 and 6 year groups.

Elevated EBL – A blood lead test that is equal to or greater than 10.

These are standard metrics decided by the CDC and adopted by Iowa and most other states. These are also some of the definitions that will be represented on the report cards each jurisdiction will be getting.



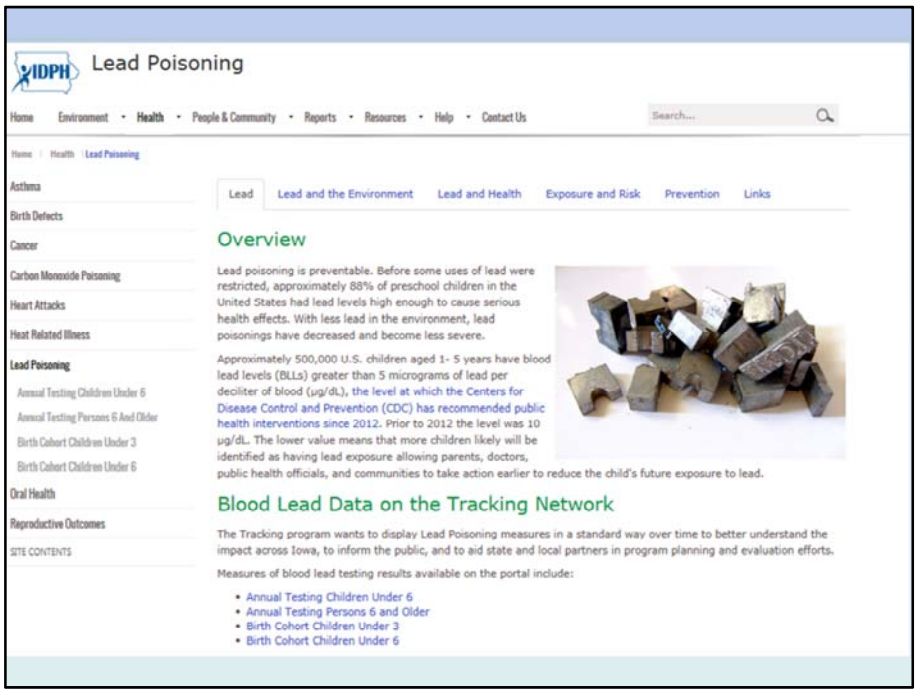
This is a quick representation of the numbers you saw in the past and how they relate to the numbers that are currently being presented.

The top line represents the Iowa lead numbers calculated the “old” way,
The light yellow is those children who we know did not have an elevated lead (confirmed not elevated)
The blue represents those children who had at least 1 test 10 or greater but did not have a confirmatory test (venous or a capillary test within 12 weeks)
The dark yellow are those children confirmed to be 10 or greater

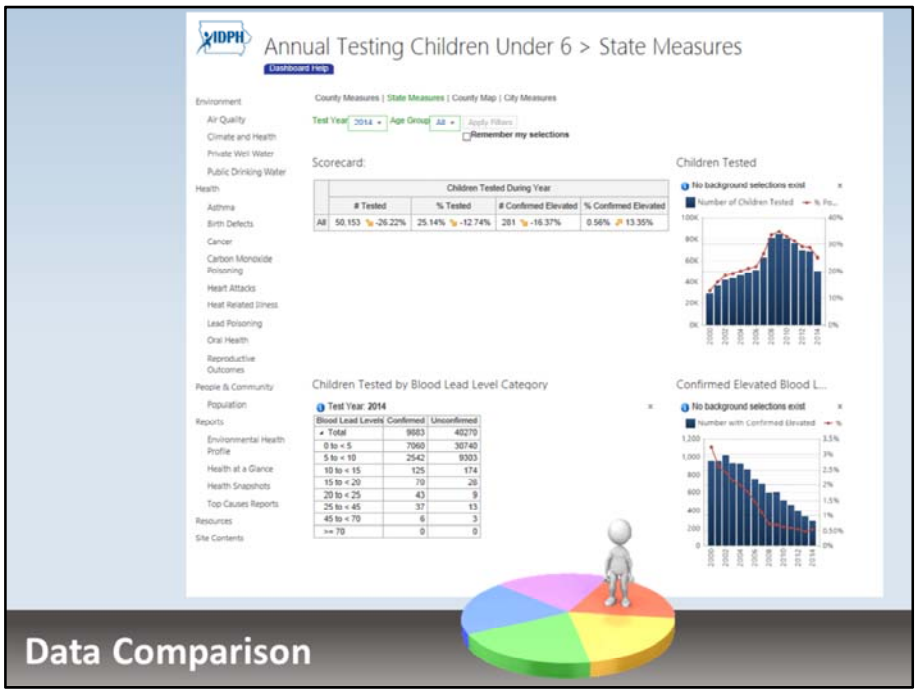
What data is on the Portal

We have data from 2000 through 2015 on the portal
Typically the data is updates in August/September when the census data is released

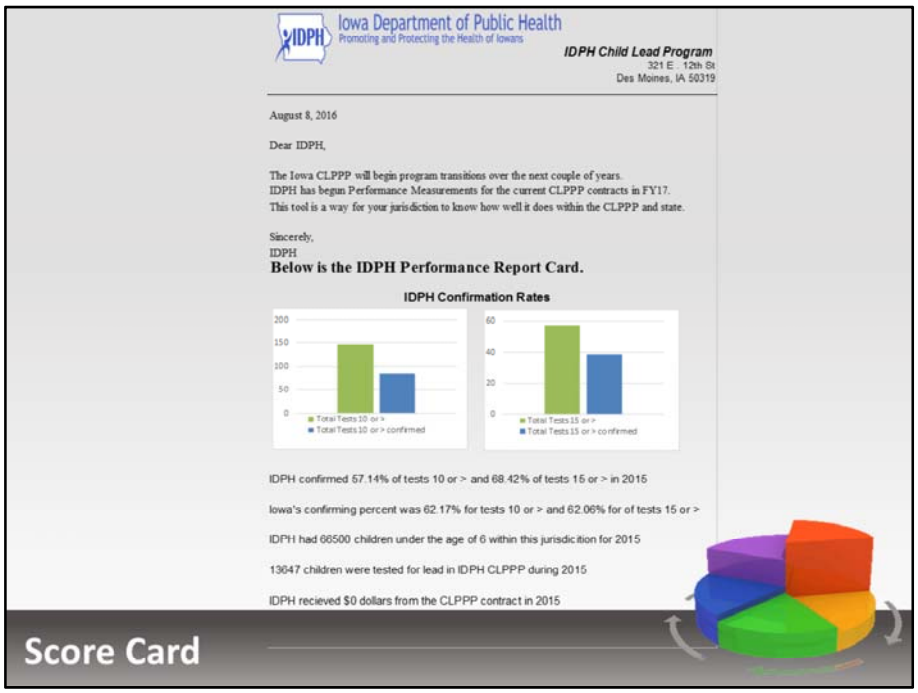
- Birth Cohort - <3 & <6
  - County, State & Map
- Annual Testing
  - County, State, City & Map
- Persons 6 and Older
  - 6-<16 & Adult
  - State & Map



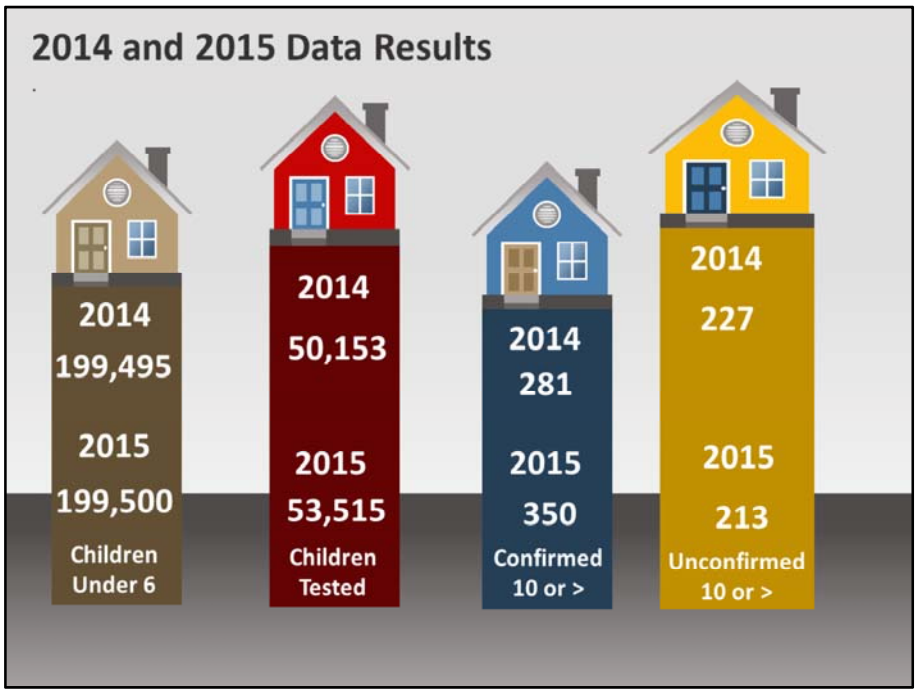
This is our public portal. It was launched on the first (redesigned). This is the gateway to access all the child and adult data.



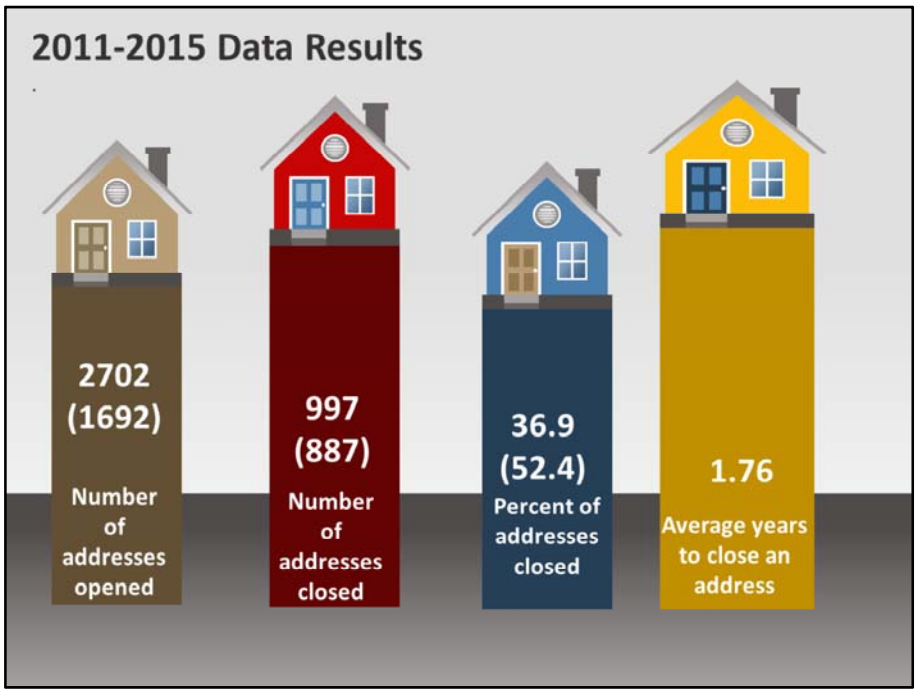
Here is a dashboard

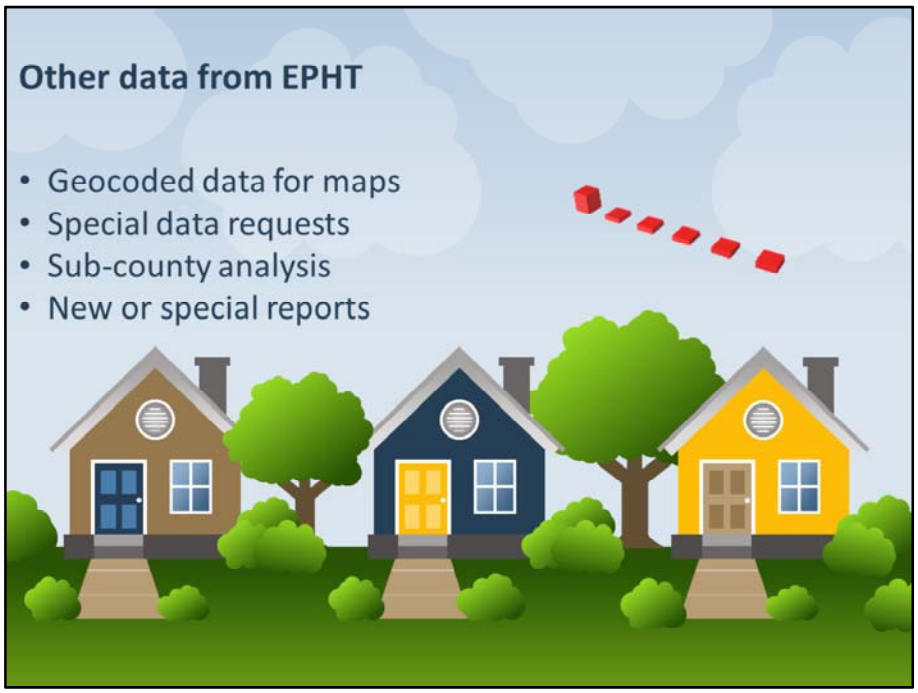


This is the Report Card that Kevin mentioned earlier.



This is the 2014 and 2015 data for the child lead program. This data is available on the public portal


2011-2015 Data Results
2702
(1692)
Number of addresses opened
997
(887)
Number of addresses closed
36.9
(52.4)
Percent of addresses closed
1.76
Average years to close an address



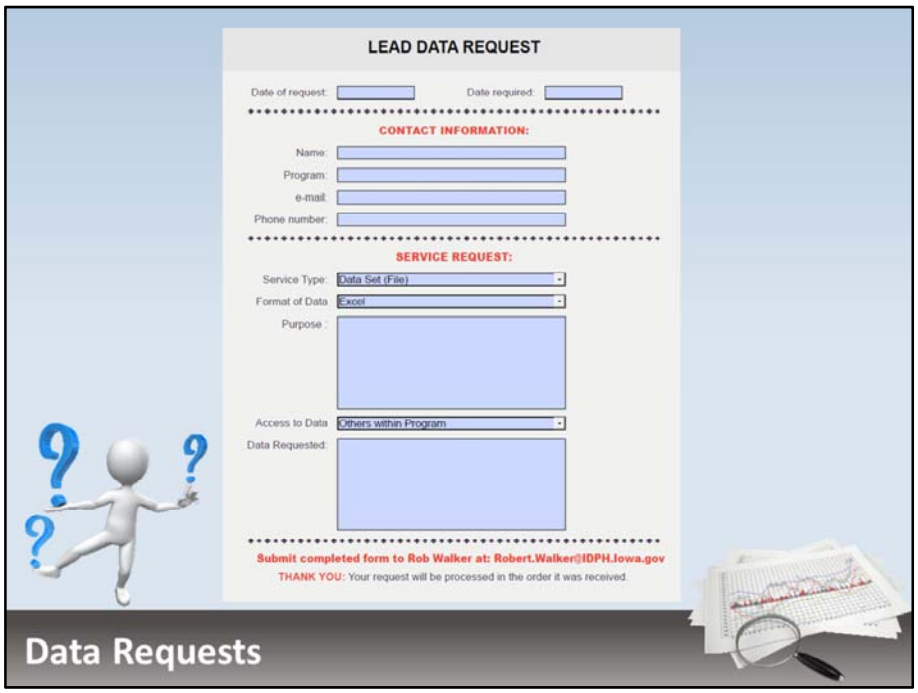
Geocoded Data:
We have Geocoded all lead data, with new years data finished by August.

Special data requests:
These data would be a request that would: 1. help your program improve services , 2. assist in a grant, 3. make contract work more efficient.

Sub-county analysis:
Currently, we have city level data available on the public portal for the 10 largest towns in Iowa.

New or special reports:
What can be done to improve services?

All data requests must be used for contract specific work. If not, then a DSA would need to be completed.



Here is an example of the lead data request. All requests must be submitted to me and will be processed in the order that they arrive. It may take up to 5 business days to complete a request, so do not wait to the last minuet to request data.

We would like to get some feedback and begin some discussions.

1. We all know "Funding" is a huge limitation, but not much we can do about that.

2. Reports, training, HHLPSS manual?

3.

4. An example on program improvement. Do you schedule children to get a 2nd capillary test exactly 12 weeks from the first? How many times does that family reschedule? Maybe that is an area where looking at 11 weeks may help get those "confirmed" values higher without having to conduct venous tests.

Childhood Lead Poisoning Prevention Program (CLPPP) Regional Meeting

8:30am – 9:00am	Check-in
9:00am – 9:15am	Introduction – Carmily Stone and Stu Schmitz
9:15am – 10:00am	Program Updates
10:00am – 10:30am	CLPPP Program Review – Kevin Officer
10:30am – 10:45am	Break
10:45am – 11:15am	Performance Measure Discussion – Kevin Officer
11:15am – 12:30pm	Lunch
12:30pm – 1:45pm	Healthy Homes Lead Poisoning Surveillance System (HHLPSS)
1:45pm – 2:00pm	Break
2:00pm – 3:00pm	Environmental Public Health Tracking (EPHT) – Rob Walker
3:00pm – 3:30pm	Conclusion and Final Questions