

“Like a Good Neighbor.....”
Integrate with Other State Databases to
Help Improve Follow-Up

2008 National EHDI Conference

Michelle Garcia, Au.D., CCC-A

Erin Estrada, BS

Michigan Department of Community Health
Early Hearing Detection and Intervention Program

Overview

- Background on Michigan
- Integration with other state databases
 - Newborn Screening
 - Vital Records
 - Electronic Birth Certificate (EBC)
 - Birth Defects Registry (BDR)
 - Children's Special Health Care Services (CSHCS)
 - Michigan Care Improvement Registry (MCIR)

Michigan Legislation

- Screening
 - Medicaid policy
 - More than 15 Medicaid births then hospitals required to screen infants
 - Standard of care
- Reporting
 - Mandated reporting as of February 23, 2006



2006 Michigan Data

- 126,338 births
- 123,754 screened (97.9%)
- 1,882 infants did not pass final hearing screen
- 101 children have permanent hearing loss
- 25 children late onset hearing loss
- 33/101 children enrolled in Part C



Reporting Hearing Screening 95 Michigan Birthing Hospitals

Hospital can report initial hearing screens two ways

1. Metabolic blood card

– 90 hospitals

LAST NAME		FIRST NAME				GENDER MALE <input type="checkbox"/> FEMALE <input checked="" type="checkbox"/>	
BIRTH DATE		BIRTH TIME (Military)		BIRTH WT. (gms)		WHS GESTATION	
SPECIMEN DATE		COLLECTION TIME (Military)		NICU/SPECIAL CARE? <input type="checkbox"/> NO <input type="checkbox"/> YES		SINGLE BIRTH <input type="checkbox"/> MULTIPLE BIRTH <input type="checkbox"/>	
MEDICAL RECORD #		Collected By: (Initials)		ANY RBC TRANSFUSION? <input type="checkbox"/> NO <input type="checkbox"/> YES		BIRTH ORDER A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/>	
LAST NAME		FIRST NAME		ANY TPN FEEDING? <input type="checkbox"/> NO <input type="checkbox"/> YES		ANTIBIOTICS? <input type="checkbox"/> NO <input type="checkbox"/> YES	
				HISPANIC NON-HISPANIC		WHITE	
				BLACK		AMERICAN INDIAN	
				ASIAN/PACIFIC ISLAND.		MIDDLE EASTERN	
				MULT-RACIAL		MOM/BABY STEROID TX? <input type="checkbox"/> NO <input type="checkbox"/> YES	


Please completely fill shapes when entering hearing results

HEARING SCREENING RESULTS

SCREENED							
DATE SCREENED							
M	M	D	D	Y	Y		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Left Ear: <input type="checkbox"/> Pass <input type="checkbox"/> Refer	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Right Ear: <input type="checkbox"/> Pass <input type="checkbox"/> Refer	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Test Method: <input type="checkbox"/> AABR <input type="checkbox"/> DPDAE	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> ABR <input type="checkbox"/> TEOAE	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NOT SCREENED	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Equipment Failure	<input type="checkbox"/> Newborn discharged
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Restlessness	<input type="checkbox"/> Environmental noise
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other _____	<input type="checkbox"/> NICU hearing pending
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Refused
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Transfer to another facility
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

MI Dept. of Comm. - Hhb.
Card Expires: 01/05
By: Authority of Act 388
MCL 333.2451

1234567



Hearing Results: Enter demographics on top copy.
Detach this sheet before blood collection. Enter results

2. Electronic Birth Certificate

- 5 pilot hospitals

EHDI

EHDI Information - Initial Screen Results

Was a Hearing Screen Performed?	<input type="text"/>	Reason Hearing Screening Not Performed:	<input type="text"/>
Date Screened :	Screen Method:	Results of Left Ear:	Results of Right Ear:
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

EHDI Information - Secondary Screen Results

Was a Second Hearing Screen Performed?	<input type="text"/>	Reason Hearing Screening Not Performed:	<input type="text"/>
Date Screened :	Screen Method:	Results of Left Ear:	Results of Right Ear:
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Newborn Screening

- Share Database
- Benefits
 - Demographic Information
 - Primary Care Physician
 - Hearing Results
 - Automated Follow-Up System
 - Improve Metabolic Quality Assurance

Screening Data

Hearing Results - PerkinElmer LifeCycle

Specimen

Main

Query Screen

Demographics

Demographics [OLD]

Supervisor Review

Configuration

Hearing

Ready 1 rows

First name: Last name:

<< Kit no: Asc. no: >>

DOB: NICU Gender:

Intial and Rescreen results Diagnostic results

<< Edit Add Save Cancel >>

Date screened: Date entered:

Left Ear	Right Ear	Test Method
<input type="radio"/> 1. Pass	<input type="radio"/> 1. Pass	<input checked="" type="radio"/> 1. AABR <input type="radio"/> 3. DPOAE
<input checked="" type="radio"/> 2. Fail	<input checked="" type="radio"/> 2. Fail	<input type="radio"/> 2. ABR <input type="radio"/> 4. TEOAE

Incomplete screening

<input type="radio"/> 1. Eq. Failure	<input type="radio"/> 2. Discharged	<input type="radio"/> 3. Pending
<input type="radio"/> 4. Refused	<input type="radio"/> 5. Restless	<input type="radio"/> 6. Env. Noise
<input type="radio"/> 7. Transfer	<input type="radio"/> 8. Deceased	
<input type="radio"/> 9. Other:	<input type="text"/>	

Diagnostic Data

Specimen

Main

Query Screen

Demographics

Demographics [OLD]

Supervisor Review

Configuration

Hearing

First name: Last name:

<< Kit no: Asc. no: >>

DOB: NICU Gender:

Intial and Rescreen results Diagnostic results

<< Edit Add Save Cancel >>

Date diagnosed: Date entered:

Test Method

- 1. OAE
- 2. Immittance
- 3. Click ABR
- 4. Tone Brust ABR
- 5. Bone ABR

Diagnosis Code

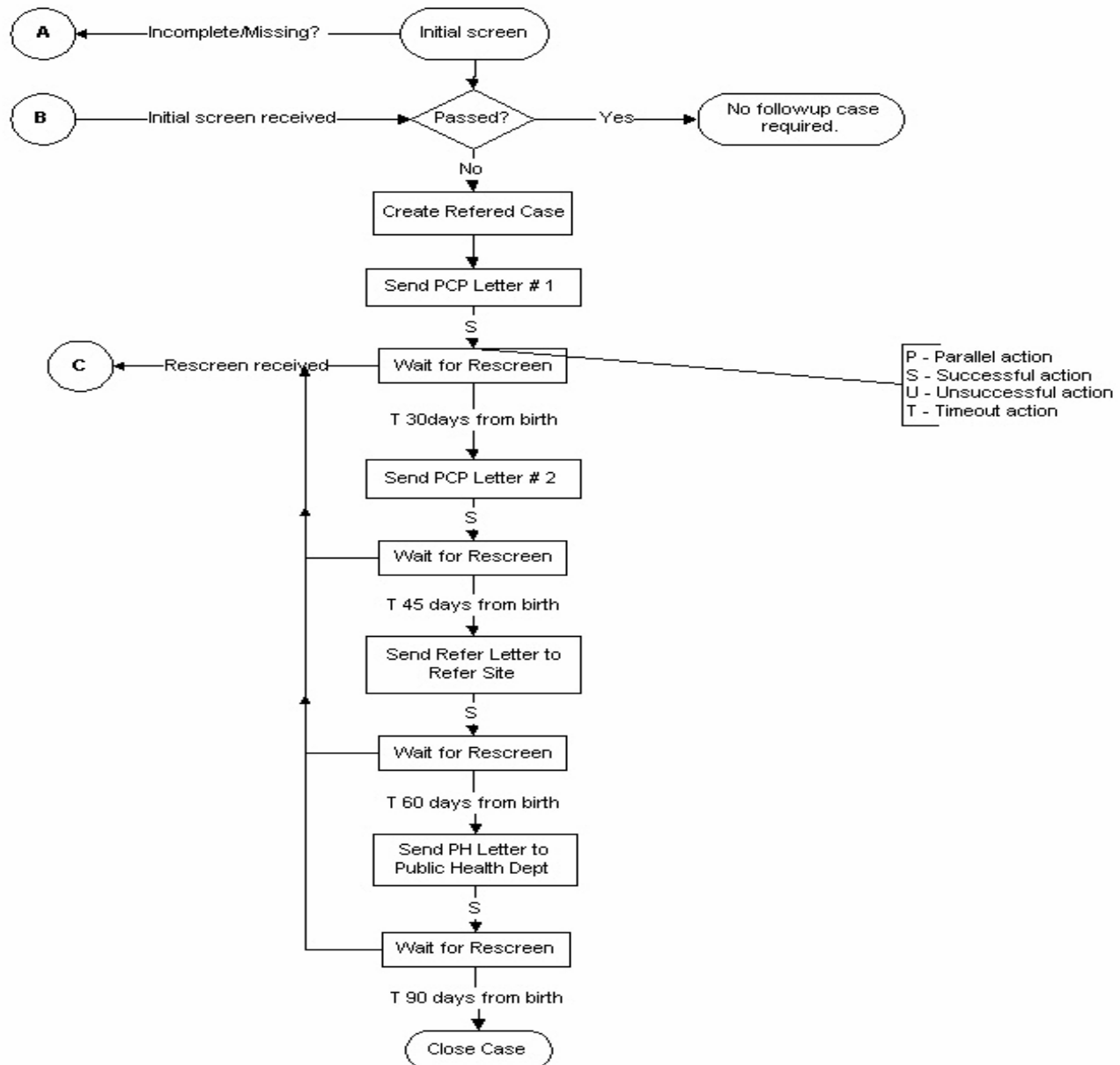
Test Results

RE	LE	
<input type="checkbox"/>	<input type="checkbox"/>	Within Normal Limit
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sensorineural
<input type="checkbox"/>	<input type="checkbox"/>	Conductive
<input type="checkbox"/>	<input type="checkbox"/>	Mixed
<input type="checkbox"/>	<input type="checkbox"/>	Mild
<input type="checkbox"/>	<input type="checkbox"/>	Moderate
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Severe
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Profound
<input type="checkbox"/>	<input type="checkbox"/>	Auditory Dys-synchronous
<input type="checkbox"/>	<input type="checkbox"/>	Undetermined






Newborn Hearing Screening

- Automated Follow-Up System
 - Follow-up database allows tracking of all referrals (missed, incomplete, unilateral and bilateral referrals)
 - Action tree allowing to contact primary care provider, re-screen site, and if needed public health nurse to help with follow-up









Hearing Followup Process Flow



File View Actions

 New
  Reports
  Edit Note
  Close case
  Perform action


Views

-  All actions
-  Scheduled actions
-  History
-  Requestors
-  Specimen
-  Diagnoses
-  Treatments
-  Notes

Last Name: [Redacted]
 First Name: [Redacted]
 Middle Initial: [Redacted]
 Date of Birth: [Redacted]
 Social Security: [Redacted]
 Sex: [Redacted]

Language: [Redacted]
 Address: [Redacted]
 Address 2: [Redacted]
 City: [Redacted]
 State: [Redacted]
 Zip Code: [Redacted]


Phone: [Redacted]
 Phone2: [Redacted]
 Phone3: [Redacted]
 Fax: [Redacted]
 Email: [Redacted]
 County: [Redacted]

Case	Unsat	Serum Rings	Created	Closed	Closed by	Close reason	Comment
 Neonatal			12/22/2004				

All Actions

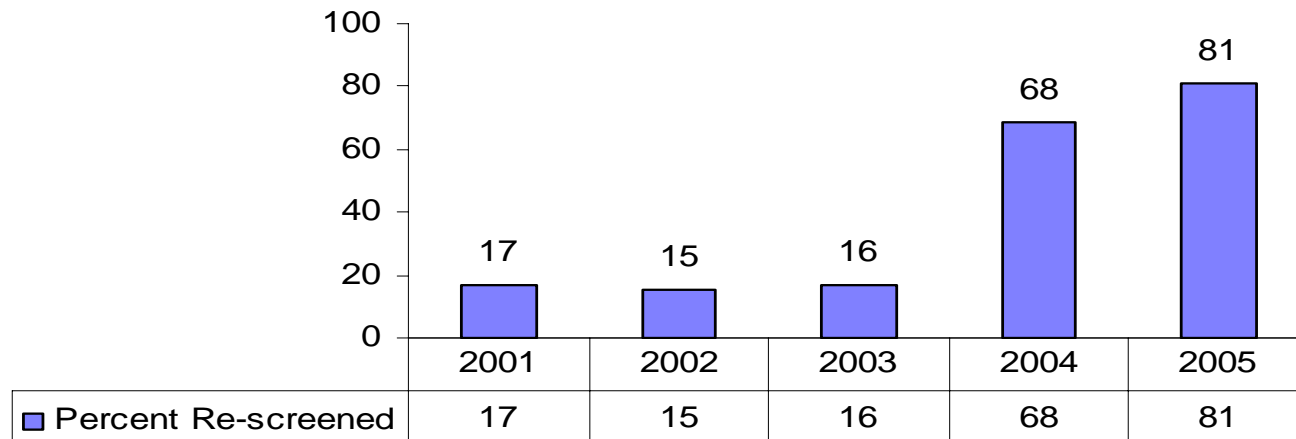
Status	Name	Created	Activation	Timeout	Completed	Determination	Assigned
<input type="checkbox"/> Activated	Hearing Public Health Rescreen	2/14/2005	2/14/2005			Hearing - Screen Referred	
<input type="checkbox"/> Time out	Hearing Rescreen Received After Refer Site Letter?	1/31/2005	1/31/2005	2/14/2005	2/14/2005	Hearing - Screen Referred	
<input checked="" type="checkbox"/> Completed	Hearing Refer Site Rescreen	1/30/2005	1/30/2005		1/31/2005	Hearing - Screen Referred	
<input type="checkbox"/> Time out	Hearing Rescreen Recieved After 2nd Letter?	1/18/2005	1/18/2005	1/30/2005	1/30/2005	Hearing - Screen Referred	
<input checked="" type="checkbox"/> Completed	Hearing PCP 2	1/15/2005	1/15/2005		1/18/2005	Hearing - Screen Referred	
<input type="checkbox"/> Time out	Hearing Rescreen recieved After 1st Letter?	12/27/2004	12/27/2004	1/15/2005	1/15/2005	Hearing - Screen Referred	
<input checked="" type="checkbox"/> Completed	Hearing PCP 1	12/22/2004	12/22/2004		12/27/2004	Hearing - Screen Referred	
<input checked="" type="checkbox"/> Unsuccessfully completed	Hearing Rescreen received already?	12/22/2004	12/22/2004		12/22/2004	Hearing - Screen Referred	
<input checked="" type="checkbox"/> Completed	Hearing Assign Requestors - Automated	12/22/2004	12/22/2004		12/22/2004	Hearing - Screen Referred	

Action Notes:

Note	Level	Date	User
			

How Well is it Working?

Figure 1b: Percent Rescreened among Referred for Follow-Up, 2001-2005^a



No. Re-Screened	608	492	582	2,975	3,598
No. Referred	3,597	3,248	3,536	4,356	4,442

New Follow-Up Actions

- Undetermined and Conductive Transient
 - 5 months after initial diagnostic
 - 1 month after the first letter

	2004	2005	2006
Undetermined	79	122	62
Conductive Transient	72	73	168

New Follow-Up Actions

- 2 Letters in 2007
 - In other state database
 - Notification that child has a suspected hearing loss
 - Loss to follow-up
 - Loss to follow-up report twice per year
 - If child in another database send new letter



Electronic Birth Certificate (EBC)

Hospital Level

- Reporting hearing screens
- Collection of risk indicators

State Level

- Verifies child has both metabolic and birth certificate
- Gathers new demographic information
- Follow-up on risk indicators

Advantages of linking with EBC

- Gather New Demographic Data
 - Infant First and Last Name
 - Maternal and Paternal Race and Ethnicity
 - Maternal and Paternal Education
 - Pay Source
 - Mother's Maiden Name
 - Attendant Physician First and Last Name
- Hearing Screen Results (initial and re-screen)

Advantages of linking with EBC Risk Indicators

- 30 Risk Indicators
- Includes
 - NICU Admission
 - Seizures or Serious Neurological Dysfunction
 - Birthweight <1500 grams
 - 5 Minute APGAR Score <6
 - Congenital Heart Condition
 - Cleft Palate/Cleft Lip
 - Down Syndrome
 - Cytomegalovirus

Birth Defects Registry Overview

- Established by Act 236 of 1988
- Requires passive reporting by hospitals
- Defined list of reportable conditions
- Limited to under 2 years
- Purpose is for a source of statistical data and surveillance of birth defects trends

Information Collected

- Case Specifics
 - Name and address
 - SSN, Medical Record Number
 - Mother's Information
- Reportable Diagnostics
- Procedures Provided
- Live Birth Data
- Mortality Data

Other Projects for BDR

- Evaluation of Case Referrals
 - Review of Cases
 - Early On, CSHCS Referrals
 - Survey Families and Physicians
- Additional Collaborations with Early ON, CSHCS, Medicaid
 - Basic Statistical and Comparison Data
- Program Evaluation
- Coverage
- Trends/Outcomes
- Quality Improvement Activities

Collaboration with the BDR

- Matches have been completed between EHDI/BDR databases
 - Use Hearing Loss Codes
 - ICD 389
 - Notify BDR if EHDI has confirmed hearing loss
 - Helps validate information
 - Complete follow-up for babies we don't have confirmed hearing loss but BD has hearing loss

Children's Special Health Care Services (CSHCS)

- Created to find, diagnose and treat children in Michigan who have chronic illness or disabling conditions
- Provides for a wide range of specialty health care and community support services. Promotes the development of service structures which offer health care that is:
 - Family centered
 - Coordinated
 - Community based
 - Culturally competent

- Serves eligible children from birth to age 21 and individuals over age 21 who have Cystic Fibrosis or certain blood coagulation disorders (Hemophilia).
- Approximately 28,000 persons enrolled in the CSHCS Program



How does CSHCS Help Improve Follow-Up?

- Access to database
- If child is enrolled in CSHCS, copy the report and complete follow-up

Biannual Matching

- December 2007
 - CSHCS Query, DOB of 2006 only 389 codes
 - 64 hearing loss cases in CSHCS
 - EHDI had 54 cases
 - Need to complete on a quarterly/annual basis

CSHCS

- Able to document some intervention information
 - Enrolled into CSHCS
 - Hearing Aid
 - Cochlear Implant



Michigan Care Improvement Registry (MCIR)



- ❖ 4.7 million records
- ❖ Over 55 million shot records
- ❖ 9,000 user log-ins to MCIR every day
- ❖ 2,227 provider sites submitted data in 2006

General Information

Person: Jingleheimer-Schmidt, John [Print](#) [Print Help](#)
 Birth Date: 02/09/1997 [Home](#) [Exit](#)
 Provider: Overdue [View](#)

Person	Reports	Reminder/Recall	Import/Export	My Site	Administration	School/Childcare	Other
Add/Find	Roster	Deduplication	Vaccine Deduplication	Information	Status	History	

Person Information MCIR ID : 1234567890AB

Name:	John Jacob Jingleheimer-Schmidt	DOB:	02/09/1997	Gender:	Male
Address:	312 South First Street NW Apt 3E Kalamazoo, MI 49009-1773	Age:	10yrs 4mos	County:	Kalamazoo
Phone:	(517)555-1212	Contact	Andy Warhol (P/G)		

High Risk Conditions

Influenza Screening Notification

Immunizations	Lead	EPSDT	NBS	NBH	Other	Invalid Doses
Series	Dose 1	Dose 2	Dose 3	Dose 4	Dose 5	Dose 6
DTaP	04/16/1997 DTaP 8wks 3days	06/11/1997 DTaP 16wks 3days	08/27/1997 DTaP 27wks 3days	05/07/1998 DTaP 1yr 2mos	08/26/2002 DTaP 5yrs 6mos	Due 08/26/2009 Tdap Up-to-date
Polio	04/16/1997 OPV 8wks 3days	06/11/1997 OPV 16wks 3days	08/27/1997 OPV 27wks 3days	08/26/2002 IPV 5yrs 6mos		Series Complete
MMR	02/25/1998 MMR 1yr 16days	08/26/2002 MMR 5yrs 6mos				Series Complete
HIB	04/16/1997 Hib-PedvaxHIB 8wks 3days	06/11/1997 Hib-PedvaxHIB 16wks 3days	08/27/1997 Hib-PedvaxHIB 27wks 3days	02/25/1998 Hib-PedvaxHIB 1yr 16days		Series Complete
HEPB	02/12/1997 HepB (Ped) 3days	04/16/1997 HepB (Ped) 8wks 3days	08/27/1997 HepB (Ped) 27wks 3days			Series Complete
Varicella	10/22/1998 Varicella 1yr 8mos					DUE NOW Varicella

General Information

Person: Deising, Lucy
 Birth Date: 07/04/2003
 Provider: Eligible

[Print](#) [Print Help](#)
[View](#) [Home](#) [Exit](#)

- [Person](#) | [Reports](#) | [Reminder/Recall](#) | [Import/Export](#) | [My Site](#) | [Administration](#) | [School/Childcare](#) | [Other](#)
- [Add/Find](#) | [Roster](#) | [Deduplication](#) | [Vaccine Deduplication](#) | [Information](#) | [Status](#) | [History](#)

If this is not the correct person you may [Search Again](#) or [Add Person](#).

Personal Information : MCIR ID : 30230280077

Legal Last Legal First Middle Suffix

Alias Last Alias First Mother's Maiden Name

Birthdate Gender* Male Female Multiple Birth of

Responsible Party : [Add New](#)

Nancy Deising 439 Thomas St Se Grand Rapids MI 49503 Kent County Current (04/24/2006)
(616)241-2725

High Risk Conditions :

Influenza Screening Notification

Additional Information **Lead**

Spec. Date	Spec. Id	Reported	Sample Type	Result (µg/dL)
05/15/2006	06-135-02988	05/23/2006	Venous	11 ■ ?
03/03/2006	06-062-03084	03/10/2006	Venous	15 ■
12/20/2005	05-354-02430	01/06/2006	Venous	18 ■
09/15/2005	0525802893	09/29/2005	Venous	37 ■
09/14/2005	6732	09/20/2005	Capillary	46 ■

Birth Facility Information :

Name State County

MCIR options :

Person does not receive medical care in Michigan Person is deceased
 Person is migrant Use alias name on reports

General Information

Person: Deising, Lucy
 Birth Date: 07/04/2003
 Provider: **Eligible**

[Print](#) [Print Help](#)
[View](#) [Home](#) [Exit](#)

Person	Reports	Reminder/Recall	Import/Export	My Site	Administration	School/Childcare	Other
Add/Find	Roster	Deduplication	Vaccine Deduplication	Information	Status	History	

If this is not the correct person you may [Search Again](#) or [Add Person](#).

Personal Information : MCIR ID : 30230280077

Legal Last	<input type="text" value="Deising"/>	Legal First	<input type="text" value="Lucy"/>	Middle	<input type="text" value="Kristine"/>	Suffix	<input type="text"/>
Alias Last	<input type="text"/>	Alias First	<input type="text"/>	Mother's Maiden Name	<input type="text" value="Gallert"/>		
Birthdate	<input type="text" value="07/04/2003"/>	Gender*	<input type="checkbox"/> Male <input checked="" type="checkbox"/> Female		<input checked="" type="checkbox"/> Multiple Birth		<input type="text" value="1"/> of <input type="text" value="2"/>

Responsible Party : Add New

Marcy Deising 430 Thomas St So Grand Rapids MI 49503

Current (04/24/2006)

10-14 venous

- ◆ Provide caregiver lead education
- ◆ Provide follow-up testing (3 months)
- ◆ Local public health encouraged to provide family nursing visits (lead assessment and education); suggested within 30 days
- ◆ Additional information at 517.335.8885
- ◆ [more...](#)

Spec. Date	Spec. Id	Reported	Sample Type	Result (µg/dL)
05/15/2006	06-135-02988	05/23/2006	Venous	11 ■ ?
03/03/2006	06-062-03084	03/10/2006	Venous	15 ■
12/20/2005	05-354-02430	01/06/2006	Venous	18 ■
09/15/2005	0525802893	09/29/2005	Venous	37 ■
09/14/2005	6732	09/20/2005	Capillary	46 ■

Birth Facility Information :

Name	<input type="text" value="Spectrum Hlth-Butterworth"/>	State	<input type="text" value="MI"/>	County	<input type="text"/>
------	--	-------	---------------------------------	--------	----------------------

MCIR options :

- | | |
|---|--|
| <input type="checkbox"/> Person does not receive medical care in Michigan | <input type="checkbox"/> Person is deceased |
| <input type="checkbox"/> Person is migrant | <input type="checkbox"/> Use alias name on reports |

General Information

Person: Spit, John
Birth Date: 02/21/2000
Provider: Overdue

[Print](#) [Print Help](#)
[Home](#) [Exit](#)
[View](#)

Person

Add/Find

Personal

Legal Las

Alias Last

Birthdate

Responsib

Party Tes

Spit 123 T

Address M

Birth Faci

Name

Additi

Spec. Da

01/04/20

09/14/20

06/02/20

03/03/20

12/17/19

08/19/19

07/30/19

02/25/19

MCIR opti

Person

Person

Person

Upda

Provider Lead Assessment - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Save a Copy Print Email Search Review & Comment Sign

Select Text 61%

PHYSICIAN and HEALTH DEPARTMENT FOLLOW-UP

According to Diagnostic Blood Lead Level

µg/dL	ACTION
<10	<ul style="list-style-type: none">Reassess and test again (if age appropriate) in 1 year. Provide anticipatory guidance (at appropriate language and reading level) to eliminate exposure sources.
10-14	<ul style="list-style-type: none">Confirm test results with a venous blood lead level (BLL).Provide lead poisoning prevention pamphlets and anticipatory guidance to prevent further exposure to lead. Venous BLL again in 3 months.Refer to local PH for family nursing visits for lead assessment and education. (Timeframe determined by local resources; suggested within 2 weeks.)
15-19	<ul style="list-style-type: none">Confirm test results with a venous blood lead level (BLL).Refer to local PH for family nursing visits.Provide or refer for follow-up venous BLL in 3 months. Refer for social services as needed.If BLL's persist (i.e., two venous BLLs in this range at least 3 months apart), proceed according to actions for BLLs 20-44.
20-44	<ul style="list-style-type: none">Confirm test results with a venous blood lead level (BLL).Physician to provide thorough physical assessment and clinical management and refer to local PH for coordination of care as soon as possible.Refer other children under age 6 and pregnant women who live or spend time at this residence for blood lead tests.Local PH staffs provide nursing and environmental investigations in the home within 5 working days of the referral. (Recommend joint visit if possible.)EBL Environmental Investigation: EBL investigations require a trained and Certified Inspector/Risk Assessor. (Refer for lead hazard control as needed.)Follow-up venous blood lead test every 1-3 months for the first 2-4 tests after initial identification. Repeat test every 3 months as level declines.
45-69	<ul style="list-style-type: none">Confirm test results with a venous blood lead level (BLL).Clinical management includes chelation therapy.Refer A&AP to local PH for nursing and environmental investigation, to be done within 48 hours of the referral. Lead hazard control should be completed before the child returns to residence.**Follow-up venous blood lead test every 2 weeks - 1 month for the first 2-4 tests after initial identification. Repeat test every month as level declines.
≥ 70	<ul style="list-style-type: none">Confirm test results with a venous blood lead level (BLL).Hospitalize child immediately and begin medical management, including chelation therapy. Refer immediately to local PH for nursing and environmental investigation (to be done within 24 hours of referral).Lead hazard control should be completed before the child returns to residence.**

Continuing follow-up care is needed until the child has two consecutive BLLs less than 10 µg/dL at least three months apart (MDCH). At that time, the child may be discharged from care. Blood lead levels may remain high for extended periods of time, depending upon the length of time and severity of exposure. During this time, encourage family to continue the prescribed food plan.

A CHILD, LESS THAN 6-YEARS-OLD, WITH A VENOUS BLL ≥ 20 Should Receive a Thorough Medical AND Developmental Evaluation by His/Her Primary Care Provider *

CLINICAL EVALUATION COMPONENTS

- MEDICAL HISTORY**
 - Symptoms?
 - Developmental history – Include mouthing activities and pica.
 - Previous BLL measurements?
 - Family history of lead poisoning?
- ENVIRONMENTAL HISTORY**
 - Age, condition, and ongoing remodeling or repairing of primary residence and other places where the child spends time (including secondary homes and day-care centers). Determine whether the child may be exposed to lead-based paint hazards at any or all of these places.
 - Occupational and hobby histories of adults with whom the child spends time. Determine whether the child is being exposed to lead from an adult's workplace or hobby.
 - Other local sources of potential lead exposure. (See "Possible Sources of Exposure" list reverse side.)
- NUTRITIONAL HISTORY**
 - Evaluate the child's daily diet and nutritional status using 24-hour recall.
 - Evaluate the child's iron status using appropriate laboratory tests.
 - Ask about the need for food stamps and WIC participation.
- PHYSICAL EXAMINATION**
 - Pay particular attention to the neurological examination and to the child's psychosocial and language development. This should be re-evaluated on a regular basis. Refer to Early On.* (Automatic referral for "Toxic Exposure")

* MDCH Lead Advisory Committee recommendations.
** Screening Young Children for Lead Poisoning, CDC, Nov 1997, pg 106.

Provider Guidelines Revised August 2005

Entire "Follow Up" document displays in a pop-up window if the 'Result' column heading is clicked.

Person: Garnett, Michael

Birth Date: [REDACTED]

Provider: Up-to-Date

General Information

Person Reports Vaccine Mgmt Reminder/Recall My Site Administration S
Add/Find Roster Add Imm Hazard Information Status History

Personal Information :

Legal Last Garnett Legal First Michael Middle Vincent Christopher
Alias Last [REDACTED] Alias First [REDACTED] Mother's Maiden Name
Birthdate [REDACTED] Gender* Male Female Multiple Bi

Responsible Party : [Add New](#)

BRIGID GARNETT [REDACTED] Ingham County

High Risk Conditions :

Influenza Screening Notification

Additional Information

Patient ID [REDACTED]

Lead

EPSDT

If medica
then this
The color
status ba
RED - Du
Click on t

son Reports Vaccine Mgmt Reminder/Recall My Site Administration School/Childcare Other

/Find Roster Add Imm Hazard Information Status History

Personal Information :

Legal Last Garnett Legal First Michael Middle Vincent Christoph Alias First Mother's Maiden Name Gender* Male Female Multiple

Responsible Party : Add New

GID GARNETT Ingham County

Risk Conditions :

Influenza Screening Notification

Patient is due/overdue for EPSDT

Additional Information Lead EPSDT

Age-Time Factor (mos): 3 Label Date: 02/06/2007

Table with 3 columns: Date, Code, Description. Rows include medical examination for administrative purposes, office visits for established and new patients, and periodic comprehensive preventive medicine reevaluation.

Facility Information :

Facility Mich Capital Med Ctr, Penn Campus, Lansing State MI County

Options :

EPSDT detail is displayed on the detail tab when clicked. The tab header displays the child's age, the EPSDT Age-Time Factor used in assessing the status. The most recent Label Date, which when combined with the Age-Time factor allows one to determine the size of the screening window

Hovering the mouse over the EPSDT status box presents a status description.

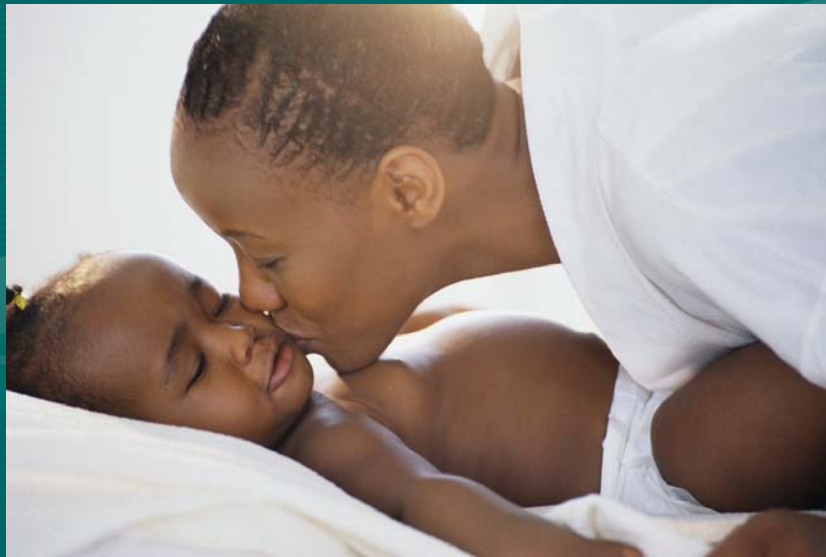
Dates of Service are displayed in reverse chronological order

Michigan Care Improvement Registry (MCIR)

- Advantages
 - Medical home information after 90 days
- Reaching primary care providers for babies to reduce loss to follow-up
 - Real name after 7 days
 - Verification of deceased information and moved out of state
 - Demographic information

MCIR

- In the future
 - Hearing Screen Results
 - Tabs that explain how to complete follow-up



Linkage with Other State Database

- Michigan Department of Education
 - Early Intervention Data Possibilities
 - Back door to get intervention information
 - Through HI supervisors group
 - Study to match data on annual basis and get aggregate data

Michigan EHDI projects

- Web-Based Reporting
 - Audiologist/ENT will be the only professionals that can enter diagnostic information
 - Audiologist will be able to look up child using 2 or more identifiers
- Online Training Module
 - Screeners and nurse managers
 - Nursing CEU's offered
 - Available state-wide

EHDI Contacts

Michelle Garcia, Au.D., CCC-A, Follow-Up Consultant
517/335-8878 or garciam@michigan.gov

Erin Estrada, BA, Data Analyst
517/335-8916 or estradae@michigan.gov

Kylie Sharp, Parent Consultant
517/335-8273 or sharpk@michigan.gov

Lorie Lang, MA, CCC-A, Audiology Consultant
517/335-9125 or langlo@michigan.gov