

# Critical Congenital Heart Disease Screening and Reporting



Missouri Department of Health and Senior Services

November 9, 2017

# CHD vs. CCHD

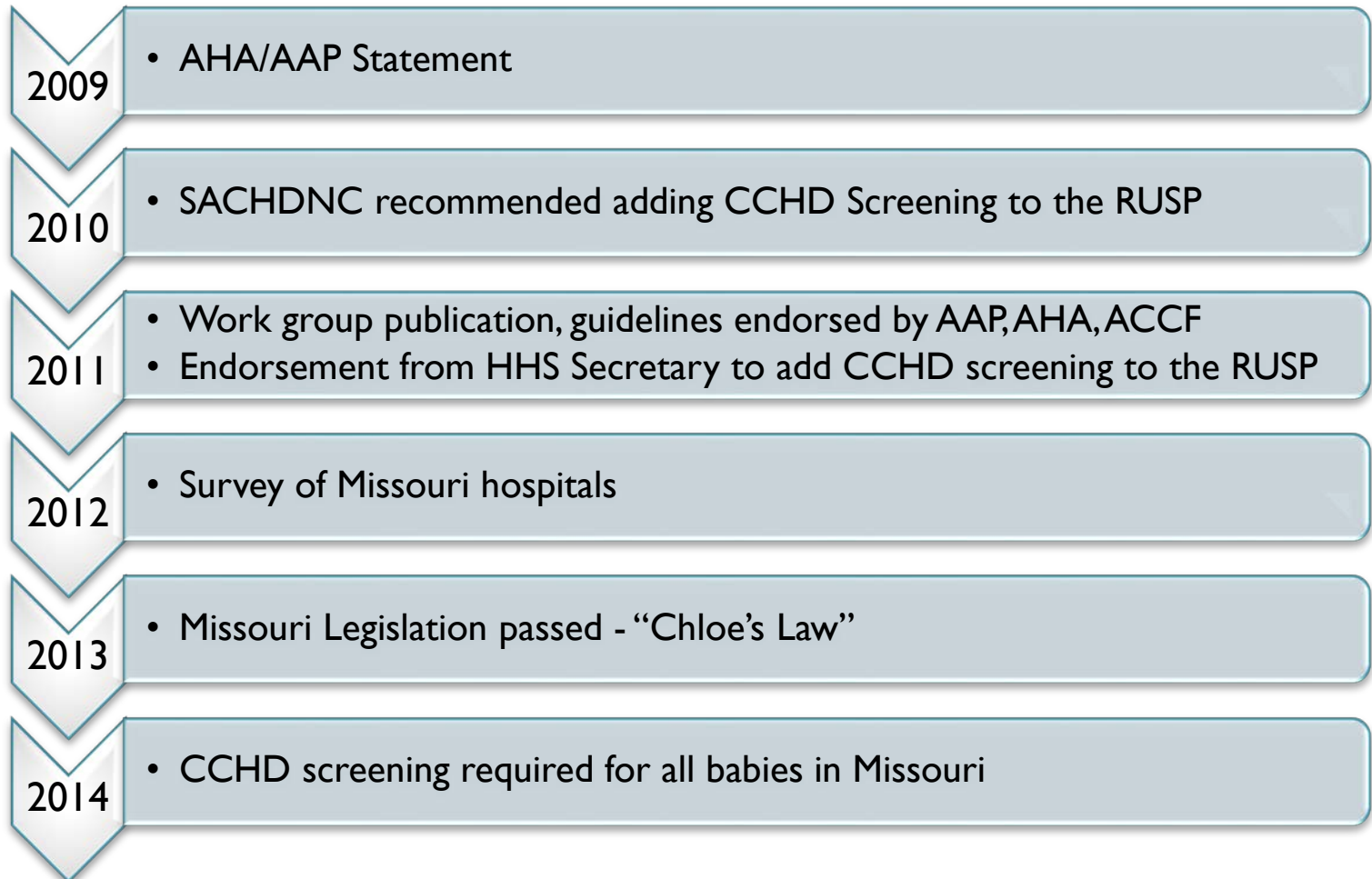
## Congenital Heart Defects (CHD):

- Present at birth and can affect the structure of a baby's heart and the way it works, varying from mild to severe.
- Affect approximately 1% of, or about 40,000, births per year in the United States.
- Most common type of birth defect.
- Leading cause of birth defect-associated infant illness and death.

## Critical Congenital Heart Defects (CCHD):

- Specific CHDs which require surgery or catheter intervention within the first year of life.
- About 1 in every 4 babies born with a heart defect has a CCHD.
- Typically lead to low levels of oxygen in the newborn and may be identified by pulse oximetry at 24 hours of age.


# Screening Background/Timeline




# Chloe's Law

- 191.334 Revised Statutes of Missouri
  - Every newborn born in Missouri must be screened for CCHD beginning January 1, 2014.
  - Screening shall be done by pulse ox or in another manner as directed by the department in accordance with AAP and AHA guidelines.
  - Results shall be reported to the parents or guardians and to the department in a manner prescribed by the department for surveillance purposes.
  - Facilities/Individuals shall develop and implement plans to ensure that newborns with a positive screen receive appropriate confirmatory procedures and referral for treatment as indicated.

# Voluntary Aggregate Reporting



Missouri Department of Health and Senior Services  
 P.O. Box 570, Jefferson City, MO 65102-0570 Phone: 573-751-6400 FAX: 573-751-6010  
 RELAY MISSOURI for Hearing and Speech Impaired 1-800-735-2966 VOICE 1-800-735-2466  
 Gail Vaeterling  
 Director



Jeremiah W. (Jay) Nixon  
 Governor

**Critical Congenital Heart Disease Aggregate Reporting Form**

The Department of Health and Senior Services requests that all ambulatory surgical centers, hospitals, birthing centers, and midwives who attend home births voluntarily provide aggregate Critical Congenital Heart Disease (CCHD) screening data monthly. Please complete the form below and mail to the Department of Health and Senior Services, Bureau of Genetics and Healthy Childhood, PO Box 570, Jefferson City, MO 65102 or fax to 573-751-6185.

For questions or concerns, please contact the Bureau of Genetics and Healthy Childhood at 573-751-6266.

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Ambulatory Surgical Center/ Birth Hospital/ Birthing Center/ Midwife: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Contact Phone Number: \_\_\_\_\_

Reporting Period for Month of: \_\_\_\_\_

Total Number of Newborns Screened	
Total Number of Newborns with a Negative Screen (Pass)	
Total Number of Newborns with a Positive Screen (Fail/Refer)	
Total Number of Newborns Not Screened Due to:	
Prenatal CCHD diagnosis	
Condition Unstable/ Required Critical Intervention	
Parents Refused	
Transferred	
Expired	

[www.health.mo.gov](http://www.health.mo.gov)  
 Healthy Missourians for life.  
 The Missouri Department of Health and Senior Services will be the leader in promoting, protecting and partnering for health.

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER. Services provided on a nondiscriminatory basis.

- Number of Newborns Screened
- Number with a Negative Screen (Pass)
- Number with a Positive Screen (Fail)
- Number Not Screened
  - Prenatal CCHD diagnosis
  - Condition Unstable
  - Parents Refused
  - Transferred
  - Expired

# 19 CSR 40-12.010

- Final rules for CCHD screening have been filed with the Secretary of State.
- Will become effective **November 30, 2017**.
- Rules establish screening guidelines and provide direction for the reporting of screening results.
- Requires screening to be done by pulse ox in accordance with AAP and AHA guidelines.
- Requires all screening results and refusals to be reported utilizing either the Missouri Electronic Vital Records (MoEVR) system or paper form.
- Screening results must be reported within 30 calendar days of completion of CCHD screening.

# Screening Guidelines

- Recommended guidelines endorsed by the AAP and AHA.
  - Kemper, A., et al. (2011). Strategies for implementing screening for critical congenital heart disease. *Pediatrics*, vol 128 no. 5, pp e1259-e1267.
    - Article can be found at [www.health.mo.gov/cchd](http://www.health.mo.gov/cchd)

# Screening Guidelines

## Measurement #1

Pulse Ox on Right Hand (RH) and One Foot After 24 hours of Age

### FAIL

Pulse ox of 89% or less in either the RH or foot.

**Action: Do Not Repeat Screening, Refer for Immediate Assessment.**

### RETEST

Pulse ox of 90-94% in both the RH and foot OR a difference of 4% or more between the RH and foot. **Action: Repeat pulse ox in 1 hour.**

### PASS

Pulse ox of 95% or more in the RH or foot AND difference of 3% or less between the two. **Action: Do Not Repeat Screening, Provide Normal Newborn Care.**



# Screening Guidelines

## Measurement #2

Pulse Ox on Right Hand (RH) and One Foot 1 Hour After Measurement #1

### FAIL

Pulse ox of 89% or less in either the RH or foot.

**Action: Do Not Repeat Screening, Refer for Immediate Assessment.**

### RETEST

Pulse ox of 90-94% in both the RH and foot OR a difference of 4% or more between the RH and foot. **Action: Repeat pulse ox in 1 hour.**

### PASS

Pulse ox of 95% or more in the RH or foot AND difference of 3% or less between the two. **Action: Do Not Repeat Screening, Provide Normal Newborn Care.**

# Screening Guidelines

## Measurement #3

Pulse Ox on Right Hand (RH) and One Foot 1 Hour After Measurement #2

### FAIL

Pulse ox of 89% or less in either the RH or foot.

**Action: Do Not Repeat Screening, Refer for Immediate Assessment.**

### RETEST

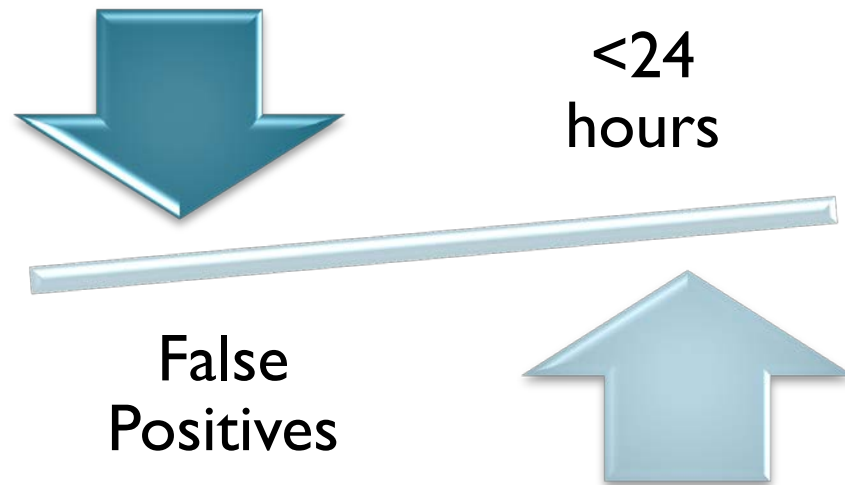
Pulse ox of 90-94% in both the RH and foot OR a difference of 4% or more between the RH and foot. **Action: Do Not Repeat, Refer for Clinical Assessment.**

### PASS

Pulse ox of 95% or more in the RH or foot AND difference of 3% or less between the two. **Action: Do Not Repeat Screening, Provide Normal Newborn Care.**

# Age at Screening

- CCHD screening should be performed at 24 to 48 hours of age.
  - False positives are significantly higher when screening is done prior to 24 hours of age.



# Screening Sites

- Screening should be performed on the right hand (pre-ductal) AND either foot (post-ductal)



RH application site



Foot application site

# MoEVR

The Missouri Electronic Vital Records (MoEVR) system is an online data entry system used to support the registration of Missouri vital events for the DHSS and other users such as birthing facilities, attending physicians, funeral directors, and medical examiners.



MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
BUREAU OF VITAL RECORDS  
**VITAL RECORDS USER ACCESS REQUEST**

P.O. BOX 570  
JEFFERSON CITY, MO 65102-0570  
TELEPHONE (573) 526-0348  
FAX (573) 526-3846

Send completed form to Bureau of Vital Records at the address above. (Attach separate sheet if necessary). PLEASE PRINT.

<b>IDENTIFYING INFORMATION</b>			
NAME (LAST, FIRST, MI)		ACTION REQUESTED	
OFFICE ADDRESS (STREET, CITY, ZIP)		<input type="checkbox"/> ADD USER <input type="checkbox"/> ADD ACCESS <input type="checkbox"/> DELETE USER <input type="checkbox"/> DELETE ACCESS <input type="checkbox"/> TRANSFER <input type="checkbox"/> NAME CHANGE	
SOCIAL SECURITY NUMBER (LAST 4 DIGITS ONLY)	COUNTY (FOR MEDICAL EXAMINER/CORONER ONLY)	PREFERRED METHOD OF CONTACT	
E-MAIL ADDRESS		<input type="checkbox"/> E-MAIL <input type="checkbox"/> FAX <input type="checkbox"/> TELEPHONE <input type="checkbox"/> QUEUE	
OFFICE TELEPHONE	OFFICE FAX	FORMER NAME	
<b>SELECT ROLE(S) THAT APPLY:</b>			
<b>DATA ENTRY:</b> This role will allow data entry of birth records, death records and/or fetal death records. The role allows access to pending queues and may allow submission of birth records, death records and/or fetal death records to the Missouri Department of Health and Senior Services, Bureau of Vital Records.			
<b>BIRTH</b>		<b>DEATH</b>	
<input type="checkbox"/> Data Entry Clerk-Facility <input type="checkbox"/> Data Entry Clerk-Hearing Screening <input type="checkbox"/> Data Entry Clerk-CCHD		<input type="checkbox"/> Funeral Director <input type="checkbox"/> Data Entry Clerk-Funeral Home <input type="checkbox"/> Data Entry Clerk-Medical Examiner/Coroner <input type="checkbox"/> Data Entry Clerk-Physician <input type="checkbox"/> Data Entry Clerk-Physician Assistant <input type="checkbox"/> Data Entry Clerk-Assistant Physician <input type="checkbox"/> Data Entry Clerk-Advanced Practice Registered Nurse	
<b>FETAL DEATH</b>			
<input type="checkbox"/> Person Entering Report			
<b>CERTIFIER/DE-CERTIFIER:</b> This role will allow certification or de-certification of birth records, death records and/or fetal death records. The role allows access to pending certification queues and may allow submission of birth records, death records and/or fetal death records to the Missouri Department of Health and Senior Services, Bureau of Vital Records.			
<b>BIRTH</b>		<b>DEATH</b>	
<input type="checkbox"/> Facility Certifier/Midwife <input type="checkbox"/> Physician (MD/DO)		<input type="checkbox"/> Physician Assistant <input type="checkbox"/> Assistant Physician <input type="checkbox"/> Advanced Practice Registered Nurse	
<b>DEATH</b>		<b>EMBALMER</b>	
<input type="checkbox"/> Physician (MD/DO) <input type="checkbox"/> Medical Examiner/Coroner		<input type="checkbox"/> Embalmer	
<b>LICENSED FUNERAL DIRECTOR LICENSE NUMBER</b>		Facility: List name and complete address of each facility associated for this user. Funeral homes: Include funeral establishment license number for each facility. Data Entry Clerk or Person authorized to enter medical information: List name and license number for each physician/medical certifier associated with this user. Attach additional page(s) if necessary.	
<b>LICENSED CERTIFIER</b> <input type="checkbox"/> MD <input type="checkbox"/> Physician Assistant <input type="checkbox"/> Assistant Physician <input type="checkbox"/> DO <input type="checkbox"/> Advanced Practice Registered Nurse		1)	
<b>LICENSE NUMBER</b> <b>NPI</b>		2)	
<b>LICENSED EMBALMER</b> These roles are for the purpose of complying with embalming requirements.		3)	
<input type="checkbox"/> Licensed Embalmer	<b>LICENSE NUMBER</b>	4)	
<input type="checkbox"/> Student Embalmer	<b>LICENSE NUMBER</b>	5)	
Failure to comply with embalming requirements constitutes grounds for revocation of license.		6)	
<b>COMMENT</b>			
<b>SECURITY STATEMENT/APPROVALS</b>			
I, the undersigned, an employee of the facility listed above and user of the Missouri Department of Health and Senior Services, Vital Records MoEVR Web system, understand that approval and assignment of the requested ID or approval of the requested change enables me to access the resources which, by law, must be utilized only in the performance of my assigned duties. Therefore, I agree to make no inquiries or updates which are not required in the performance of my official duties. I understand that state and federal statutes require confidentiality of information and provide penalties for unauthorized access, use and/or disclosure of information. Violations or disclosures on my part may result in disciplinary action that could be one or all of the following: (1) suspension or dismissal from the system or (2) civil court action. I agree to keep confidential all information made available to me in the performance of my official duties. In addition, I agree not to divulge or share my password with anyone.			
<b>USER SIGNATURE</b>	<b>DATE</b>	<b>SUPERVISOR/SUPERVISING PHYSICIAN SIGNATURE</b>	<b>DATE</b>
<b>DEPARTMENT USE ONLY</b>			
<b>DIVISION/PROGRAM SIGNATURE</b>	<b>DATE</b>	<b>DIVISION/PROGRAM SIGNATURE</b>	<b>DATE</b>

- To access the MoEVR website, the application form, **Vital Records User Access Request**, must be completed by the applicant and approved by the Bureau of Vital Records.
- To obtain this form, you will need to contact the Bureau of Vital Records either by
  - phone at 573-526-0348 or
  - email at [moevrsupport@health.mo.gov](mailto:moevrsupport@health.mo.gov).
- Vital Records will not process requests for access to CCHD data entry until November 30th.

# Logging into MoEVR

- The web address to log into MoEVR is:  
<https://moevr.dhss.mo.gov/moevr/gui/login/welcomeMO.jsp>.

**PHONE . FAX**  
P (573) 751-7149  
F (573) 526-3846

**PHYSICAL . ADDRESS**  
930 Wildwood Drive  
Jefferson City, Missouri 65109

**MAILING . ADDRESS**  
Missouri Department of  
Health and Senior Services  
Bureau of Vital Records  
P.O. Box 570  
Jefferson City, MO 65102



## MISSOURI ELECTRONIC VITAL RECORDS

The purpose of the Missouri Electronic Vital Records (MoEVR) system is to support the registration of Missouri vital events for the Missouri Department of Health and Senior Services and other users such as funeral directors, attending physicians, medical examiners and birthing facilities. This system may be used only for the purpose for which it is provided. Any attempt to file fraudulent certificates of live birth, death or reports of fetal death is punishable in accordance with Missouri statutes.

By accessing this system, I agree to use this system only for the purpose of registering a Certificate of Live Birth, Certificate of Death or Report of Fetal Death for events occurring in the State of Missouri.

I understand that failure to adhere to the above agreement will result in loss of access to the MoEVR system. Any unauthorized access, misuse and/or disclosure of information may result in disciplinary action including, but not limited to, suspension or loss of individual or facility access privileges, an action for civil damages, or criminal charges.

LOGIN



# Logging into MoEVR

1



**WARNING:**  
MISSOURI ANALYST SITE

Notice: You are about to gain access to the Missouri Department of Health and Senior Services, Bureau of Vital Records, MoEVR system. By proceeding, you are agreeing to maintain the confidentiality of all information as required by applicable state and federal laws. Any unauthorized access, misuse and/or disclosure of information may result in disciplinary action including, but not limited to, suspension or loss of individual or facility access privileges, an action for civil damages, or criminal charges.

Username:  [Forgot Username?](#)

2



**WARNING:**  
MISSOURI ANALYST SITE

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What is the name of your favorite childhood friend?

Answer:  [Forgot Answer?](#)

3



**WARNING:**  
MISSOURI ANALYST SITE

Notice: You are about to gain access to the Missouri Department of Health and Senior Services, Bureau of Vital Records, MoEVR system. By proceeding, you are agreeing to maintain the confidentiality of all information as required by applicable state and federal laws. Any unauthorized access, misuse and/or disclosure of information may result in disciplinary action including, but not limited to, suspension or loss of individual or facility access privileges, an action for civil damages, or criminal charges.

**Please Note**  
Identify your Image and Key. Press Cancel if they don't match.



flowers  
[Forgot Image or Key?](#)

4



**WARNING:**  
MISSOURI ANALYST SITE

Notice: You are about to gain access to the Missouri Department of Health and Senior Services, Bureau of Vital Records, MoEVR system. By proceeding, you are agreeing to maintain the confidentiality of all information as required by applicable state and federal laws. Any unauthorized access, misuse and/or disclosure of information may result in disciplinary action including, but not limited to, suspension or loss of individual or facility access privileges, an action for civil damages, or criminal charges.

Password:  [Forgot Password?](#)



# Where to go next...

Logged in as:  
ROBYN CARRENDER  
at WOMENS AND CHILDRENS HOSPITAL - 10512  
Unit: WOMENS AND CHILDRENS HOSPITAL - 10512



**Main**  
Birth | System

No open tasks

Task Description

Date Created

Refresh

Logged in as:  
ROBYN CARRENDER  
at WOMENS AND CHILDRENS HOSPITAL - 10512  
Unit: WOMENS AND CHILDRENS HOSPITAL - 10512



**Main -- Birth**  
Hearing Screening

No open tasks

Task Description

Date Created

Refresh

Logged in as:  
ROBYN CARRENDER  
at WOMENS AND CHILDRENS HOSPITAL - 10512  
Unit: WOMENS AND CHILDRENS HOSPITAL - 10512



**Main -- Birth -- Hearing Screening**  
Update

No open tasks

Task Description

Date Created

Refresh

# Searching for Records

Main -- Birth -- Hearing Screening -- Update

**Registrant**

**Child's Name**

First:

Middle:

Last:

Soundex on last name:

**Child's Gender**

Sex:

**Date of Birth**

Date of birth (mm/dd/yyyy):

From:

To:

**Mother's name**

First:

Last:

Maiden name:

**Father's name**

First:

Last:

- The information provided in this form will be used to search birth records from your facility only.
- Birth certificate data must be entered into the MoEVR system prior to this time in order for the baby's information to be located.

# Searching for Records

Logged in as: ROBYN CARRENDER  
at WOMENS AND CHILDRENS HOSPITAL - 10512  
Unit: WOMENS AND CHILDRENS HOSPITAL - 10512

Version: RLS-3-21-SRV2  
06/19/2014 11:48 AM  
Logout | Help | Accent Characters

Main -- Birth -- Hearing Screening -- Update

Records List ( 1 Records found )

Last Name	First Name	Birth Date	Sex	Mother's maiden name	
TEST	ADAM	09/08/2011	M	TEST	<a href="#">Details</a>



- A list of records will be shown. The child's first and last name, date of birth, sex, and mother's maiden name will appear on the screen.
- If your search criteria were broad, you may have a longer list of names to choose from.
- Click on "Details"

# Searching for Records

Main -- Birth -- Hearing Screening -- **Update**

## Record Details

1 **Baby and Mother** | 2 Hearing Screening | 3 CCHD Reporting

<b>Medical Record Numbers</b> Mother's medical record number: Newborn's medical record number: <b>1258</b>	<b>Sex</b> Sex: <b>M</b>
<b>Baby's Name</b> First: <b>POOH</b> Middle: Last: <b>BEAR</b> Suffix:	<b>Mother's Current Legal Name</b> First: <b>MAMA</b> Middle: Last: <b>BEAR</b> Suffix:
<b>Date of Birth</b> Date of birth: <b>11/05/2013</b> Date of birth numeric field: <b>20131105</b>	<b>Mother's Name Prior to First Marriage</b> First: <b>MAMA</b> Middle: Last: <b>BEAR</b> Suffix:
<b>Time of Birth</b> Time of birth: <b>08:00</b> Time indicator: <b>A</b>	<b>Birth/Transfer Facility</b> Birth Facility name: <b>WOMENS AND CHILDRENS HOSPITAL</b> Newborn transferred within 24 hours of delivery?: <b>N</b> Transferred to name:



- This screen gives you the opportunity to review the record to ensure it is the correct baby.
- After verifying that you have the correct record, click “Continue.”

# Documenting Screening Results

Main -- Birth -- Hearing Screening -- Update Help

**1 Baby and Mother** | 2 Hearing Screening | 3 CCHD Reporting ←

<b>Medical Record Numbers</b> Mother's medical record number: Newborn's medical record number: 1258	<b>Sex</b> Sex: M
<b>Baby's Name</b> First: POOH Middle: Last: BEAR Suffix:	<b>Mother's Current Legal Name</b> First: MAMA Middle: Last: BEAR Suffix:
<b>Date of Birth</b> Date of birth: 11/05/2013	<b>Mother's Name Prior to First Marriage</b> First: MAMA Middle: Last: BEAR Suffix:
<b>Time of Birth</b> Time of birth: 08:00 Time indicator: A <small>(A=AM; P=PM; M=military; N=noon; D=midnight; U=unknown)</small>	<b>Birth/Transfer Facility</b> Birth Facility name: WOMENS AND CHILDRENS HOSPITAL Newborn transferred within 24 hours of delivery? N Transferred to name: Facility ID (infant transferred to):

←

- “Cover page” for the data entry screens.
- You can navigate the data entry screens one of two ways:
  - Tabs at top of page
  - Buttons at bottom of page
- Click “Next.” Do not click the finish button until you have entered in all screening data.

# Documenting Screening Results

Main -- Birth -- Hearing Screening -- Update

1 Baby and Mother | 2 Hearing Screening | 3 CCHD Reporting

**Hearing Screening**

Was a hearing screening test performed? No

**Hearing Results and Methods**

Left ear results: Select Left ear method: Select  
Right ear results: Select Right ear method: Select

**Screening Date**

Date of screening (MMDDYYYY):

**Not Screened**

Reason not screened: Deceased  
Specify other reason:

**Screening Before Discharge**

Did screening occur prior to discharge? Select

**Bloodspot/Hearing Lab Form Number**

Bloodspot/Hearing form number: H999999999  
Re-enter bloodspot/hearing form number:

**Discharge Disposition**

Discharge disposition: Select

**Screener**

Screener: Select

**Hearing Risk Factors (check all that apply)**

- No risk factors
- Caregiver concern regarding hearing status
- Family history of permanent childhood hearing loss
- ECMO
- In-utero infection (e.g. CMV, herpes, rubella, syphilis and toxoplasmosis)
- Syndrome/physical finding associated with hearing loss
- Neurodegenerative disorder
- Culture positive postnatal infection associated with hearing loss (e.g. meningitis)
- Chemotherapy
- NICU stay more than 6 days
- Head trauma (e.g. basal skull/temporal bone fracture)
- Ventilation support
- Hyperbilirubinemia with transfusion
- Ototoxic medications (e.g. gentimycin, tobramycin)
- Loop diuretics (e.g. furosemide)
- Craniofacial anomalies

Other, specify:

**Newborn's Primary Care Physician/Clinic**

Name:

**Hearing Screening Comments**

Previous Next Finish Cancel


- This is the hearing screening data entry screen.
- If you do not have access to hearing screening data entry, you will not be able to manipulate the fields in this screen.
- Click on “Next.”

# Documenting Screening Results

Main -- Birth -- Hearing Screening -- Update

1 Baby and Mother | 2 Hearing Screening | 3 CCHD Reporting

**Critical Congenital Heart Disease (CCHD)**

CCHD Screen completed?  

**First CCHD Screening Result**

Date of Screen (MMDDYYYY)   
Time of Screen   
Time Indicator   
SpO2 Right Hand %   
SpO2 Foot %   
Screening Outcome   
Not Screened due to:   
Other, specify

**Second CCHD Screening Result**

Was second CCHD screen completed?   
Date of Screen (MMDDYYYY)   
Time of Screen   
Time Indicator   
SpO2 Right Hand %   
SpO2 Foot %   
Screening Outcome   
Not Screened due to:   
Other, specify

**Third CCHD Screening Result**

Was third CCHD screening completed?   
Date of Screen (MMDDYYYY)   
Time of Screen   
Time Indicator   
SpO2 Right Hand %   
SpO2 Foot %   
Screening Outcome   
Not Screened due to:   
Other, specify

**Final Disposition**

Echocardiogram completed?   
Status?   
Other, specify

**CCHD Comments**

- You must first document if screening was completed.
- Boxes that are yellow cannot be manipulated.
- Based on your documentation, certain fields will turn white to allow for further data entry.

# Documenting Screening Results

Main -- Birth -- Hearing Screening -- Update

1 Baby and Mother | 2 Hearing Screening | 3 CCHD Reporting

### Critical Congenital Heart Disease (CCHD)

CCHD Screen completed? Yes

#### First CCHD Screening Result

Date of Screen (MMDDYYYY) 10/01/2017  
Time of Screen 10:00  
Time Indicator Military  
SpO2 Right Hand % 97  
SpO2 Foot % 93  
Screening Outcome R = Repeat Screen in 1 hour  
Not Screened due to: Select  
Other, specify

#### Second CCHD Screening Result

Was second CCHD screen completed? Yes  
Date of Screen (MMDDYYYY) 10/01/2017  
Time of Screen 11:00  
Time Indicator Military  
SpO2 Right Hand % 98  
SpO2 Foot % 96  
Screening Outcome P = Pass  
Not Screened due to: Select  
Other, specify

#### Third CCHD Screening Result

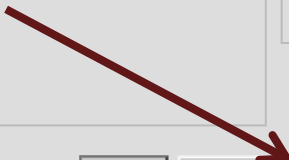
Was third CCHD screening completed? Select  
Date of Screen (MMDDYYYY)  
Time of Screen  
Time Indicator Select  
SpO2 Right Hand %  
SpO2 Foot %  
Screening Outcome Select  
Not Screened due to: Select  
Other, specify

#### Final Disposition

Echocardiogram completed? Select  
Status? W = Within Normal Limits  
Other, specify

#### CCHD Comments

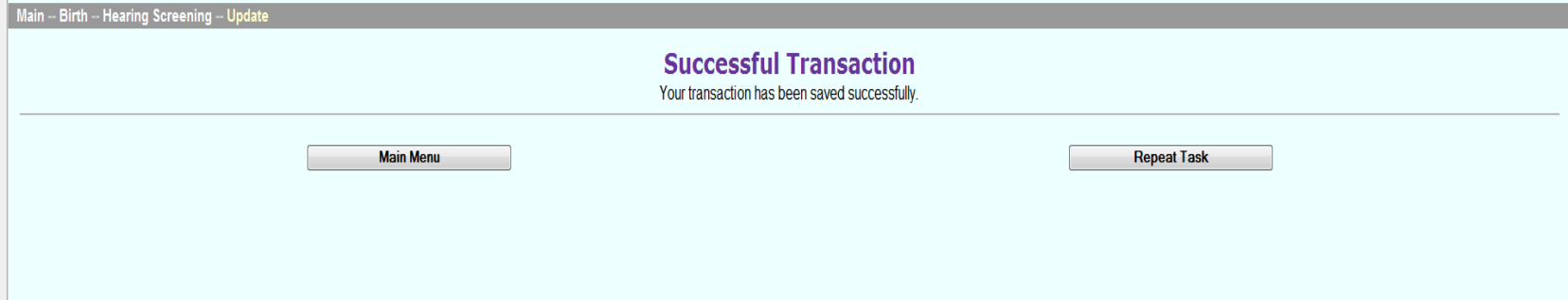
Previous Next **Finish** Cancel



- Please utilize the comments box to provide any clarifying information applicable to the baby's screening or disposition.
- Once all applicable data fields have been completed, click "Finish."
- Do not click Cancel. All data will be lost and you will have to start over.



# Documenting Screening Results



- “Repeat Task” – click to go back to the Registrant entry screen to search for another record
- “Main Menu” – this will take you back to the very beginning



MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
BUREAU OF GENETICS AND HEALTHY CHILDHOOD

**Critical Congenital Heart Disease (CCHD) Reporting Form**

**Instructions:** Please complete the information below and submit to the Department of Health and Senior Services by one of the following methods:  
Mail – Bureau of Genetics and Healthy Childhood, PO Box 570, Jefferson City, MO 65109 or Fax – 573-751-6185

DEMOGRAPHIC INFORMATION					
NEWBORN'S NAME (LAST, FIRST)		DATE OF BIRTH _/_/____	GENDER <input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	BIRTH ORDER (A-F OR S = SINGLE)	NEWBORN'S MEDICAL RECORD NUMBER
MOTHER'S NAME (LAST, FIRST)		NEWBORN'S BIRTH LOCATION <input type="checkbox"/> HOSPITAL <input type="checkbox"/> BIRTHING CENTER <input type="checkbox"/> HOME <input type="checkbox"/> AMBULATORY SURGICAL CENTER <input type="checkbox"/> OTHER _____		NAME OF HOSPITAL, BIRTHING CENTER, AMBULATORY SURGICAL CENTER, OR MIDWIFE	
MOTHER'S STREET ADDRESS/P.O. BOX			CITY	STATE	ZIP CODE
FIRST CCHD SCREENING RESULT		SECOND CCHD SCREENING RESULT		THIRD CCHD SCREENING RESULT	
First Screen Completed? <input type="checkbox"/> Yes <input type="checkbox"/> No		Second Screen Completed? <input type="checkbox"/> Yes <input type="checkbox"/> No		Third Screen Completed? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes	Date of First Screen _/_/____	If Yes	Date of Second Screen _/_/____	If Yes	Date of Third Screen _/_/____
	Time of First Screen __:__ A.M. P.M.		Time of Second Screen __:__ A.M. P.M.		Time of Third Screen __:__ A.M. P.M.
	SpO2 Right Hand _____%		SpO2 Right Hand _____%		SpO2 Right Hand _____%
	SpO2 Foot _____%		SpO2 Foot _____%		SpO2 Foot _____%
	First Screening Outcome: <input type="checkbox"/> Pass (screening complete) <input type="checkbox"/> Repeat Screen in 1 hour → <input type="checkbox"/> Fail (refer for immediate evaluation)		Second Screening Outcome: <input type="checkbox"/> Pass (screening complete) <input type="checkbox"/> Repeat Screen in 1 hour → <input type="checkbox"/> Fail (refer for immediate evaluation)		Third Screening Outcome: <input type="checkbox"/> Pass (screening complete) <input type="checkbox"/> Fail (refer for immediate evaluation)
If No	Not Screened due to: <input type="checkbox"/> CCHD diagnosed prenatally <input type="checkbox"/> CCHD diagnosed clinically at birth <input type="checkbox"/> CCHD ruled out by echocardiogram <input type="checkbox"/> Transferred prior to screening <input type="checkbox"/> Parents refused screening <input type="checkbox"/> Expired <input type="checkbox"/> Other _____	If No	Not Screened due to: <input type="checkbox"/> Low value on previous screen/Referred for evaluation <input type="checkbox"/> Passed previous screen <input type="checkbox"/> CCHD ruled out by echocardiogram <input type="checkbox"/> Transferred prior to screening <input type="checkbox"/> Parents refused screening <input type="checkbox"/> Expired <input type="checkbox"/> Other _____	If No	Not Screened due to: <input type="checkbox"/> Low value on previous screen/Referred for evaluation <input type="checkbox"/> Passed previous screen <input type="checkbox"/> CCHD ruled out by echocardiogram <input type="checkbox"/> Transferred prior to screening <input type="checkbox"/> Parents refused screening <input type="checkbox"/> Expired <input type="checkbox"/> Other _____
FINAL DISPOSITION					
Echocardiogram completed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			Status: <input type="checkbox"/> Within Normal Limits <input type="checkbox"/> Pneumonia		
Newborn transferred to referral hospital? <input type="checkbox"/> No <input type="checkbox"/> Yes, newborn was transferred to _____			<input type="checkbox"/> Unknown <input type="checkbox"/> Other respiratory condition		
			<input type="checkbox"/> Delayed Transition <input type="checkbox"/> Sepsis		
			<input type="checkbox"/> Critical Congenital Heart Disease <input type="checkbox"/> Other _____		
			<input type="checkbox"/> Non-Critical Congenital Heart Disease		

## Critical Congenital Heart Disease Screening Table

Right Hand	Either Foot											
100	100	99	98	97	96	95	94	93	92	91	90	<90
99	100	99	98	97	96	95	94	93	92	91	90	<90
98	100	99	98	97	96	95	94	93	92	91	90	<90
97	100	99	98	97	96	95	94	93	92	91	90	<90
96	100	99	98	97	96	95	94	93	92	91	90	<90
95	100	99	98	97	96	95	94	93	92	91	90	<90
94	100	99	98	97	96	95	94	93	92	91	90	<90
93	100	99	98	97	96	95	94	93	92	91	90	<90
92	100	99	98	97	96	95	94	93	92	91	90	<90
91	100	99	98	97	96	95	94	93	92	91	90	<90
90	100	99	98	97	96	95	94	93	92	91	90	<90
<90	<90	<90	<90	<90	<90	<90	<90	<90	<90	<90	<90	<90

**Pass:** 95% or higher in the right hand and either foot AND a difference of 3% or less between the right hand and either foot.

**Repeat Screen:** 90-94% in the right hand and either foot or a difference of 4% or more between the right hand and either foot. Repeat screening in one hour. If third screen is still in the yellow, it is a fail and should be reported to the physician.

**Fail:** 89% or lower in the right hand or either foot (at any time) OR if the third screen is 90-94% in the right hand and either foot or a difference of 4% or more between the right hand and either foot. Failed screenings should always be reported to the physician.

# Next Steps

- Rules become effective November 30, 2017.
- After Rules are effective, additional information will be posted on the DHSS CCHD screening web page: [www.health.mo.gov/cchd](http://www.health.mo.gov/cchd).
  - Final Rules for 19 CSR 40-12.010
  - Link to MoEVR
  - MoEVR Reporting User Manual
  - Paper reporting form
- Hospitals will need to determine who will be responsible for data entry. After November 30<sup>th</sup>, those individuals will need to submit requests for MoEVR CCHD data entry access.
- After receiving approval, they can begin entering screening data into MoEVR.

# Contact Info

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