

# 2023 North Dakota Cardiac and Stroke Conference

October 25-26, 2023

## Cardiac and Stroke Systems of Care Updates

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# Cardiac System of Care

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# Acute Cardiac Ready (ACRH) Hospital Designation

It's as easy as 1, 2, 3...

1. Enroll and contribute to the state cardiac registry, GWTG- CAD
2. Meet established ACRH designation criteria
3. Apply to be designated as a STEMI referring center by the state

## CERTIFICATE *of* ACHIEVEMENT

THE NORTH DAKOTA DEPARTMENT OF HEALTH ACKNOWLEDGES THAT

HAS SUCCESSFULLY COMPLETED THE DESIGNATION CRITERIA FOR BECOMING AN

**ACUTE CARDIAC READY HOSPITAL**

DATE OF SITE REVIEW:  
DATE OF EXPIRATION:



*Nizar Wehbi, MD, MPH, MBA*  
North Dakota State Health Officer

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# ACRH Hospital Designation Benefits

- Designated by the state as a STEMI referring center
- Get recognized for your exceptional STEMI care
- Involvement in education and outreach
- Guidance on best practice STEMI treatment
- Contribute to the collection of statewide STEMI data
- Participate in statewide performance improvement



# Statewide Cardiac Registry FAQ

- What registry was chosen?
- What is the purpose?
- Is participation mandatory?
- How do I share data if I use a different registry?
- How is the registry paid for?





# Stroke System of Care

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# North Dakota Acute Stroke Treatment Guidelines

- Updated to include the option of giving Tenecteplase in stroke
- The Stroke Task Force recommends utilization of one thrombolytic for stroke treatment
- If you are making the transition to Tenecteplase, please utilize the Tenecteplase Transition Resource



## ND ACUTE STROKE TREATMENT GUIDELINE

Date: \_\_\_\_\_ Time: \_\_\_\_\_  
ED ARRIVAL TIME

Date: \_\_\_\_\_ Time: \_\_\_\_\_  
TIME LAST KNOWN WELL

**0-15 minutes**

- Activate Stroke Response Team
- Prepare for Stat CT
- Consider activating transport

**15-45 minutes**

- CT Scan head w/o contrast (Door to CT scan goal <25 minutes)
- Request stat read of CT scan
- Stroke Panel: CBC, Platelets, PT-INR, PTT, BMP, Troponin
- Serum pregnancy test for females of childbearing age
- 12L ECG if time allows
- Weight \_\_\_\_\_ kg

**Assess the following**

- BP \_\_\_\_\_ mm/hg
- Pulse \_\_\_\_\_ bpm
- O2 Saturation \_\_\_\_\_ %
- Bedside Glucose \_\_\_\_\_ mg/dL (Do not repeat if completed by EMS. Treat if <60)
- VS q 15 min with neuro checks
- Continuous cardiac monitoring
- NIHSS on arrival \_\_\_\_\_

**02 to keep SATS > 94%** (do not administer O2 if patient non-hypoxic)

- Keep NPO (including meds and ice chips)
- Establish 1-2 large bore IVs
- Normal Saline 0.9% TKO
- Consider activating telehealth

**\*Do not delay CT scan for any of the preceding**

**CT Scan Results** (Door to CT scan results goal <45 minutes)

- No acute findings
- New Ischemic Stroke
- Hemorrhage
- Other \_\_\_\_\_

Consult with accepting neurologist once CT scan results obtained. Send images if able.

Arrange transport plans if not already

**IV Thrombolytic Eligible Ischemic Stroke Patient**

**Choose one of the following:**

**IV Alteplase Administration (Class 1 Level A\*)**

- IV Alteplase 0.9 mg/kg (max dose 90 mg)
- Total IV Alteplase. Total Dose \_\_\_\_\_ mg
- 10% total IV Alteplase dose as bolus over one minute. Bolus Dose \_\_\_\_\_ mg. Time of bolus \_\_\_\_\_
- Remainder of IV Alteplase over 60 minutes. Rate of infusion \_\_\_\_\_ ml/hr
- Flush IV line with 3-10 ml Normal Saline 0.9% at same rate as IV Alteplase infusion

**IV Tenecteplase Administration (Class 2b Level B-R\*)**

- IV Tenecteplase 0.25 mg/kg (max dose 25 mg. Total IV Tenecteplase. Total Dose \_\_\_\_\_ mg
- IV Tenecteplase bolus over 5 seconds
- Flush IV line with 3-10 ml Normal Saline 0.9% before and after Tenecteplase bolus (not compatible with Dextrose)

**IV Thrombolytic Eligible Ischemic Stroke Patient**

- VS and neuro checks q 15 min during infusion, then q 15 min x 2 hr, q 30 min x 6 hr, then hourly until 24 hours after treatment
- If BP > 180/105, refer to BP Management section below
- Repeat head CT if neuro status declines
- If symptom onset <24 hours, screen for large vessel occlusion (see below)
- No anticoagulant/antiplatelet for 24 hours
- NIHSS post infusion \_\_\_\_\_

**Non-IV Thrombolytic Eligible Ischemic Stroke Patient**

- Aspirin 300 mg PR
- If BP > 220/120, consult with accepting neurologist regarding possible BP management
- If symptom onset <24 hours, screen for one or more of the following criteria indicating a possible large vessel occlusion (LVO):
  - NIHSS > 6 Score \_\_\_\_\_
  - FAST ED > 4 Score \_\_\_\_\_
  - Signs of cortical stroke: confusion, aphasia, neglect, visual field changes, head or gaze deviation
- If symptom onset is >24 hours consult neurologist regarding possible treatment options

**Hemorrhagic Stroke Patient**

- If SBP between 150-220 administer medications as listed in BP management section below to achieve BP < 140/90.
- If SBP > 220 mmHg, consult neurologist regarding BP management
- If patient is on oral anticoagulant, follow local ED protocol regarding use of reversal agents
- Elevate HOB 30 degrees
- Discuss possible anti-seizure and ICP lowering measures with consulting neurologist

**BP**

If ischemic stroke patient is ruled ineligible for IV thrombolytic due to BP > 185/110, lower to acceptable range (SBP 140-180) with agents below.

For hemorrhagic stroke, lower SBP to <140 with agents below.

- Labetalol 10-20 mg IV over 1-2 minutes, may repeat x1
- OR
- Nicardipine infusion: 5 mg/hr, titrate up by 2.5 mg/hr at 5-15 min intervals, max dose 15 mg/hr
- OR
- Consider other agents (hydralazine, enalapril, clevidipine) when appropriate. AVOID NITRATES.

If BP > 180/105 during and within 24 hours after treatment with IV thrombolytic, administer the following:

- Labetalol 10 mg IV followed by continuous IV infusion 2-8 mg/min
- OR
- Nicardipine 5 mg/hr IV, titrate up to desired effect by 2.5 mg/hr q 5-15 min, max 15 mg/hr

**Disposition**

- Transfer patient to Primary Stroke Center or thrombectomy certified center: Primary Plus Stroke Center, Thrombectomy Capable Stroke Center or Comprehensive Stroke Center as soon as EMS team is available
- If patient meets hemorrhagic or LVO criteria, consult neurologist regarding most appropriate transfer destination.

Report the following to accepting hospital staff: H&P, Last Known Well, Medications, Lab results, Vital Signs

NIHSS at Discharge \_\_\_\_\_

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

Cell Number: \_\_\_\_\_

Revised 10-20-2022  
\*Guidelines for the Early Management of Patients With Acute Ischemic Stroke: 2019 Update to the 2016 Guidelines for the Early Management of Acute Ischemic Stroke: 2019 Update to the 2016 Guidelines for the Early Management of Acute Ischemic Stroke: A guideline for healthcare professionals from the American Heart Association/American Stroke Association.

# Tenecteplase Transition Resource

## Tenecteplase Kit for Acute Ischemic Stroke



### Kit Contents:

- 1 – Tenecteplase 50 mg vial
- 1 – Preservative Free Sterile Water 10 mL vial
- 2 – Alcohol swabs
- 1 – 10 mL syringe for dilution
- 2 – Needleless Med Prep Cannula
- 1 – 5 mL syringe for administration
- 1 – Tenecteplase Stroke Dilution, Dosing & Admin Card
- 1 – Label for Tenecteplase Stroke syringe bolus

### Tenecteplase Dilution, Dosing & Admin Information

## Acute Ischemic Stroke



#### Instructions:

1. 50 mg vial with 10 mL preservative free sterile water to = 5 mg/mL  
GENTLY - DO NOT SHAKE.

2. mg dose calculation with dose on MAR  
3. Dose: 0.25 mg/kg (actual body weight)  
num Dose = 25 mg

4. Example Dose Calculation: 70 kg patient:  $70 \text{ kg} \times 0.25 \text{ mg/kg} = 17.5 \text{ mg}$ ,  $\frac{17.5 \text{ mg}}{5 \text{ mg/mL}} = 3.5 \text{ mL}$

5. Calculation: \_\_\_\_ kg patient: \_\_\_\_ kg x 0.25 mg/kg = \_\_\_\_ mg (max dose 25 mg)

6. Volume to draw up in 5 mL syringe:  $\frac{\text{mg}}{5 \text{ mg/mL}} = \text{mL}$

#### Check Chart for Double Check

Patient Weight (kg)	DOSE RANGE Tenecteplase dose (mg) in this weight range	VOLUME RANGE Volume Tenecteplase to be administered (mL)
60 kg or less	15 mg or less	3 mL or less
61 kg to 70 kg	15.5 - 17.5 mg	3.1 - 3.5 mL
71 kg to 80 kg	18 - 20 mg	3.6 - 4 mL
81 kg to 90 kg	20.5 - 22.5 mg	4.1 - 4.5 mL
91 kg or greater	23 - 25 mg	4.6 - 5 mL

#### Administration:

- DOSE IS NEVER the FULL Vial - Do **NOT** administer entire contents of vial
- Flush line with 10 mL 0.9% Sodium Chloride before & after administration
- Administer IV Push over 5 seconds

### Transition to Tenecteplase Checklist

- Involve all stakeholders. This should include pharmacy, providers, stroke program leadership, and administration
- Determine if this is a feasible change for your facility--the decision to switch is determined by your facility and providers\*
- Consider following the State recommendations on dosing of Tenecteplase in stroke
- Develop a Tenecteplase order set
- Update all current stroke protocols and resources
- Develop education/competency check off for nursing, pharmacy, and providers
- Develop process to safely differentiate stroke and MI Tenecteplase dosing
- Set a timeline (Do not be afraid to extend timeline to ensure safe transition)
- Develop education for patients

### Transition Tips

- ✓ Consider making a full transition to Tenecteplase rather than alternating between Tenecteplase and Alteplase
- ✓ Medication safety is the priority--utilize Tenecteplase rather than tPA or TNKase to avoid confusion with tPA or TXA
- ✓ Do not underestimate the number of places Alteplase verbiage can be found
- ✓ Share updated acute stroke order set with telemedicine services
- ✓ Update dot phrases and downtime forms with new order sets and protocols
- ✓ Be mindful that Tenecteplase cannot be exchanged if premixed and not administered

\*The transition to Tenecteplase is a facility specific choice. The North Dakota Stroke Task Force does not endorse the use of one thrombolytic over the other.

1/2023

### STROKE LITERATURE

- [Guidelines for the Early Management of Patients with Acute Ischemic Stroke: 2019 Update to the 2018 Guidelines for the Early Management of Acute Ischemic Stroke](#)
- [Tenecteplase Thrombolysis for Acute Ischemic Stroke](#)

DOSSING	INCLUSION/EXCLUSION CRITERIA
<p><b>Tenecteplase</b> dose for STROKE is 0.25mg/kg (actual body weight) with a <b>MAXIMUM DOSE of 25 mg</b></p> <ul style="list-style-type: none"> <li>• IV push over five seconds</li> <li>• Not compatible with any dextrose containing solutions</li> <li>• Flush IV with Normal Saline before and after Tenecteplase administration</li> <li>• You will never administer a full vial to treat stroke</li> <li>• The stroke dosage is NOT listed on the box</li> </ul>	<p><a href="#">Please refer to the ND Inclusion and Exclusion Criteria for IV Thrombolytic Treatment of Ischemic Stroke</a></p>
COMPLICATIONS	<ul style="list-style-type: none"> <li>• Oral Angioedema</li> <li>• Hemorrhagic Transformation</li> <li>• Systemic Bleeding</li> </ul>
REVERSAL	<p>If the patient experiences hemorrhage post-Tenecteplase administration, follow the Neurocritical Care Society and the Society of Critical Care Medicine Guidelines for reversal of thrombolytics:</p> <ul style="list-style-type: none"> <li>• Cryoprecipitate 10 units IV</li> </ul> <p>If Cryoprecipitate is contraindicated or unavailable, administer:</p> <ul style="list-style-type: none"> <li>• Tranexamic acid 10 to 15 mg/kg IV push over 20 minutes</li> <li style="text-align: center;">OR</li> <li>• Aminocaproic acid 4 to 5 mg IV</li> </ul>
MONITORING	<ul style="list-style-type: none"> <li>-Vital signs and neuro checks every 15 minutes x 2 hours, every 30 minutes x 6 hours, then hourly until 24 hours after treatment</li> <li>-If blood pressure is greater than 180/105, notify provider</li> <li>-Repeat head CT if neuro status declines</li> <li>-NIHSS – Post administration and with any neuro changes</li> <li>-No anticoagulant/antiplatelet for 24 hours</li> <li>-Monitor for complications</li> </ul>



# 2024 Acute Stroke Ready Hospital Designation Criteria

Essential updates include:

- Comprehensive stroke log
- Protocol for reversal and treatment of post-lytic complications
- Provider documentation requirements

## Acute Stroke Ready Hospital Designation Criteria

### ESSENTIAL

#### STROKE PROGRAM/SYSTEM

- EMS communication (formalized feedback provided to EMS)
- Comprehensive Stroke Log

#### HOSPITAL PERSONNEL

- Acute Stroke Team coverage 24/7
- Acute Stroke Team lead on call or Telehealth<sup>1</sup> provider to bedside in 15 minutes
- Designated Medical Director with experience in stroke care
- Stroke Coordinator of stroke program

#### STROKE PROTOCOL/GUIDELINES

- Stroke activation protocol
- Consult with a Primary or Comprehensive Stroke Center via phone, Telestroke, Telehealth, or in-house neurology services
- Treatment guidelines and standardized order sets for acute diagnosis, stabilization, monitoring, and treatment of patients for TIA, ischemic, and hemorrhagic strokes
  - Including a reversal protocol and treatment of post-lytic complications (e.g., orolingual angioedema)
- Consistent use of treatment guidelines and standardized order sets
- Treatment guidelines and order sets reviewed and revised annually
- All patients exhibiting stroke symptoms have NPO order OR pass evidence-based dysphagia screen prior to receiving any oral intake of medication, fluids, or food
- When treating acute ischemic stroke with IV thrombolytic, provider must consistently document:
  - Inclusion/exclusion criteria reviewed
  - Risks/benefits/alternatives
  - Exclusions to IV thrombolytic if patient is within the IV thrombolytic window
  - Reason for delay in stroke treatment (e.g., BP management, patient unstable), if applicable
  - Consideration of endovascular treatment

#### CONTINUING EDUCATION

- Acute Stroke Team (including ED and/or Rapid Response providers) have 2 hours of stroke education annually (not including recertification of NIHSS)

Acute Stroke Ready Hospital Designation Criteria – Version 8/2023

# 2024 Acute Stroke Ready Hospital Designation Criteria

Essential updates include:

- Written CT downtime protocol
- Utilization of clinical practice guidelines blood pressure management medications
- Comprehensive performance improvement program and up to date with data submission (within 90 days)

- All AST members performing National Institute of Health Stroke Scale (NIHSS) must be NIHSS certified
- Orientation of new staff (including travelers and locums) to include stroke code process and protocols

## LABORATORY

- Available 24/7
- Basic blood tests
- Coagulation studies

## DIAGNOSTIC IMAGING

- Diagnostic radiology staff available 24/7
- Brain imaging with non-contrast CT
- 12 lead ECG (not to delay stroke treatment)
- Written CT downtime protocol

## MEDICATIONS

- IV thrombolytic available 24/7 (Alteplase or Tenecteplase)<sup>3</sup>
- First-line antihypertensive medications available 24/7
- Utilize clinical practice guidelines blood pressure management medications including Labetalol, Hydralazine, Nicardipine

## PERFORMANCE IMPROVEMENT PROGRAM

- Participation in North Dakota State Stroke Registry
- Comprehensive quality improvement program that tracks quality metrics, identifies opportunities for improvement, provides formal feedback to staff, and develops action plans to improve practice
- Data submission into stroke registry current (90 days prior to the site visit)
- Performance Improvement Program
  - Must include, but is not limited to, tracking the following metrics:
    - Pre-notification by EMS
    - Documentation of LKW
    - Initial NIHSS reported
    - Door to CT initiation <25 min
    - Door to CT Interpretation <45 minutes
    - Dysphagia Screen
    - IV thrombolytic arrive in 2 treat in 3
    - IV thrombolytic arrive in 3.5 treat in 4.5
    - Door to Needle <60 min
    - Door to Transfer to another hospital time reported (median time)
- Review of hospital and pre-hospital stroke care

Acute Stroke Ready Hospital Designation Criteria – Version 8/2023

# 2024 Acute Stroke Ready Hospital Designation Criteria

Recommended updates include:

- Utilization of telehealth services to assist with management of stroke code
- BEFAST education provided to all staff
- Community outreach on stroke recognition and activation of the emergency response system
- Subacute stroke care resource awareness



# Performance Improvement

The Stroke System of Care collects statewide data on determined quality measures. We then analyze the data, identify areas of improvement, and develop a plan to improve outcomes.

- BEFAST/FAST-ED Algorithm
- Dysphagia Screen Infographic
- Public Facing BEFAST Poster (coming soon)

## STROKE SCREENING TOOLS:

### BEFAST (Stroke screening tool)

START HERE	Is the patient having a stroke?	Check if yes
<b>B</b> Balance • Perform bilateral index finger-to-nose test and bilateral heel-to-shin test. • Does the patient have sudden loss of balance or coordination, trouble walking or dizziness?		
<b>E</b> Eyes • Assess 4 quadrants of visual field by having patient locate your index finger. • Does the patient have trouble seeing out of one or both eyes or sudden double vision?		
<b>F</b> Face • Ask the patient to smile or show their teeth. • Does the patient's face look uneven, have sudden drooping or numbness on one side?		
<b>A</b> Arms • Ask the patient to raise and extend both arms with their palms up. • Does one arm drift downward? • Does the patient have sudden numbness or weakness of the arm on one side of the body?		
<b>S</b> Speech • Ask the patient to say, "You can't teach an old dog new tricks." • Does the patient have slurred speech, trouble speaking, understanding or seem confused?		
<b>T</b> Time • What time did the symptoms start? _____ • What time was the patient last known well (last appear normal)? _____		
<b>Glucose level</b> = _____ (Treat BG <60)		

If the patient received one or more check marks (✓), the patient qualifies for a stroke alert.  
BEFORE you request a stroke alert, obtain a FAST-ED score to see if the patient is having symptoms indicative of a large-vessel occlusion.

Ask if the patient is on any anticoagulant medications, such as:

• Coumadin/Warfarin	• Xarelto/Rivaroxaban	Time anticoagulant last taken: _____
• Pradaxa/Dabigatran	• Savaysa/Edoxaban	
• Eliquis/Apixiban	• Heparin/Enoxaparin	
• Any other anticoagulants? (please list)		

**Remember:**

- Minimize scene time.
- Sudden severe headache with no known cause may be a sign of a hemorrhagic stroke.

### FAST-ED (Stroke severity tool)

ANY POSITIVE BE-FAST FINDINGS?	Score (Circle)
<b>F</b> Facial Palsy (ask the patient to show their teeth or smile) • Both sides of the face move equally or not at all • One side of the face droops or is clearly asymmetric	Score: 0 1
<b>A</b> Arm Weakness (with eyes closed, ask patient to hold arms out with their palms up and hold them there for 10 seconds) • Both arms remain up for 10 seconds or slowly move down equally • Patient can raise arms but one arm drifts down in < 10 seconds • One or both arms fall rapidly, can't be lifted, or no movement occurs at all	Score: 0 1 2
<b>S</b> Speech Changes Expressive Aphasia - ask the patient to name 3 common items: • Names 2 to 3 items correctly • Names 0 to 1 item correctly Receptive Aphasia - ask the patient to perform a simple command (Example: "show me two fingers") Do NOT demonstrate command. • Normal - patient can follow the simple command • Unable to follow the simple command	Score: 0 1 0 1
<b>T</b> Time • Symptom onset time (time symptoms started)? _____ • Last known well time (time last known normal)? _____	
<b>E</b> Eye Deviation - hold patient's chin steady. Have them use only their eyes to follow your finger from side to side. • No deviation; eyes move equally to both sides • Patient has difficulty when looking to one side (left or right) • Eyes are fixed to one side and do not move to the other side	Score: 0 0 1 2
<b>D</b> Denial/Neglect Denial - show the patient their affected arm and ask, "Do you feel weakness in this arm?" • Patient recognizes the weakness in their weak arm • Patient does NOT recognize the weakness in their weak arm Neglect - show the patient their affected arm and ask, "Whose arm is this?" • Patient recognizes their weak arm • Patient does NOT recognize their weak arm	Score: 0 1 0 1
<b>TOTAL FAST-ED SCORE</b>	

**When to call a STROKE ALERT:**

- If any symptoms from BE-FAST - call a stroke alert and perform stroke severity tool (FAST-ED).
- If FAST-ED score of 1 - 3 - call a stroke alert and transport to the nearest certified stroke center.
- If FAST-ED score > 4 and within 24 hours - call stroke alert and discuss with stroke-ready hospital. Patient should be taken to nearest thrombolysis capable stroke center if located within 30 minutes. If transport is greater than 30 minutes, transport to the nearest certified stroke center.
- If last known well > 24 hours - discuss with receiving facility and transport to the nearest certified stroke center.

Stroke Alert Activation Time: \_\_\_\_\_

**IMPORTANT PATIENT DEMOGRAPHICS**

Patient Name: \_\_\_\_\_ Patient DOB: \_\_\_\_\_

Emergency Contact Name: \_\_\_\_\_ Emergency Contact Phone: \_\_\_\_\_

Medical History: \_\_\_\_\_

Allergies: \_\_\_\_\_

Medications: \_\_\_\_\_

Is this patient \_\_\_\_\_ Incident Date: \_\_\_\_\_ Time: \_\_\_\_\_

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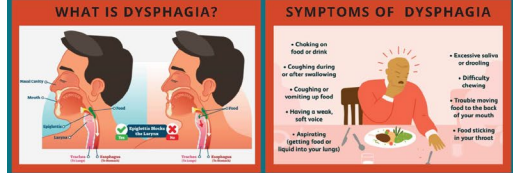
**COMING SOON**

# BE FAST

## How to Spot a Stroke

## YALE SWALLOW SCREEN

AN EVIDENCE BASED DYSPHAGIA SCREEN



**GUIDELINE RECOMMENDATIONS**

DYSPHAGIA SCREENING BEFORE THE PATIENT BEGINS EATING, DRINKING, OR RECEIVING ORAL MEDICATIONS IS EFFECTIVE TO IDENTIFY PATIENTS AT INCREASED RISK FOR ASPIRATION. (LEVEL OF EVIDENCE: C-LD) (CITATION 1, P. E382)

A FORMAL SCREENING PROCEDURE FOR DYSPHAGIA SHOULD BE PERFORMED IN ALL PATIENTS BEFORE THE INITIATION OF ORAL INTAKE TO REDUCE THE RISK OF PNEUMONIA (LEVEL OF EVIDENCE B). (CITATION 2, P. 2042)

4.7. Dysphagia	GOR	LOE
1. Dysphagia screening before the patient begins eating, drinking, or receiving oral medications is effective to identify patients at increased risk for aspiration.	I	C-LD

**RATIONALE**

DYSPHAGIA, A COMMON (37%-78%) COMPLICATION OF ACUTE STROKE, IS A RISK FACTOR FOR ASPIRATION PNEUMONIA AND IS ASSOCIATED WITH HIGHER MORTALITY AND WORSE PATIENT OUTCOMES. DYSPHAGIA AND ASPIRATION ARE MAJOR RISK FACTORS FOR THE DEVELOPMENT OF PNEUMONIA. (CITATION 2, P. E382)

**YALE SWALLOW PROTOCOL (YSP)**

**EXCLUSION CRITERIA: RISK IS TOO HIGH-DEFER ADMINISTRATION**  
Do Not Continue if yes to any of the following:

- Unable to remain alert
- Baseline modified diet/thickened liquid
- Tube feeding in place
- Head of bed restrictions < 30 degrees
- Tracheostomy tube
- NPO by physician order

**STEP 1: BRIEF COGNITIVE SCREEN:** Failure may be associated with an increased risk of aspiration and may warrant SLP consult, but does not prevent YSP

- What is your name?
- Where are you?
- What year is it?

**STEP 2: ORAL MECHANICAL EXAM:** Weakness and/or asymmetry may warrant modified solid textures and indicates need for SLP consult.

- Tongue Range of Motion: Stick out your tongue, move it side to side
- Facial Symmetry: Smiles/Puckers
- Lip Closure: Puff up your cheeks with air and hold

**STEP 3: 3 (three) OZ WATER SWALLOW CHALLENGE:** Stopping while drinking, coughing, or throat clearing indicates a failure and elevated risk.

- Sit patient upright at 90 degrees or as high as tolerated > 30 degrees
- Ask the patient to drink 3 oz. of water from a cup or straw with sequential swallows-slow and steady but without stopping

**PASS:** Collaboration with MD/SLP for appropriate oral diet order, e.g., soft foods

If order SLP clinic and/or Bk, YSP can be re-administered

**TIPS AND TRICKS**

- Perform before any oral intake-food, fluids, or medications.
- Perform even if symptoms resolved.
- YSP is a nursing protocol; do not nurse MD order.
- If clinical condition declines, consider rescreening.
- If patient fails or screen is contraindicated, please document in patient chart.
- If patient has failed and medications ordered, consider changing administration route.
- If medications given, document correct route on patient's MAR.

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# Cardiac Ready Community Program

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# Cardiac Ready Community Program

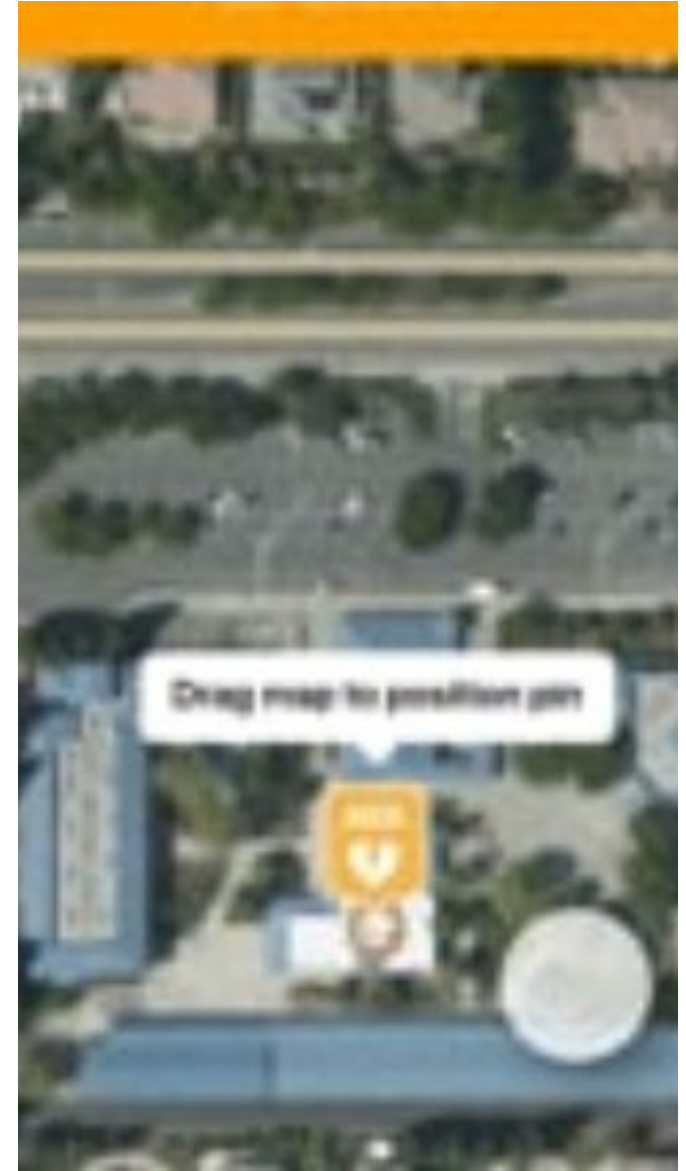
Designed to promote survival from a cardiac event, such as sudden cardiac arrest outside of the hospital setting (OHCA). The goal is to prepare community members to recognize, respond, and assist with cardiovascular emergencies. The CRC Community program promotes the American Heart Association Chain of Survival, which can improve the chances of survival and recovery for heart attack, stroke, or sudden cardiac arrest victims.

## Essentials of a Cardiac Ready Community Program

- Community Leadership
- Ongoing Community Awareness
- Community Blood Pressure Screening
- CPR & AED Training
- Public Access to AEDs

# PulsePoint AED Registry

- In the revised Cardiac Ready Community Guidelines, one designation criterion under the Public Access to AEDs section is to enter AEDs in your community into the free PulsePoint AED application.
- The application is free, easy to use, and enables you to build an AED registry for your community. Making it easier to find an AED when a cardiac emergency strikes.
- AEDs managed using the PulsePoint AED application are accessible to emergency dispatchers, including nearby citizens trained in CPR and off-duty professionals.





# North Dakota Law Enforcement AED Project

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# The Helmsley Charitable Trust

- In 2020, a grant from the Helmsley Charitable Trust awarded the North Dakota Department of Health and Human Services \$4.3 million dollars to equip law enforcement first responders statewide with the next generation “connected” Automated External Defibrillators (AEDs).
- Over 1,600 devices have been distributed to local, state, tribal, and federal law enforcement agencies.

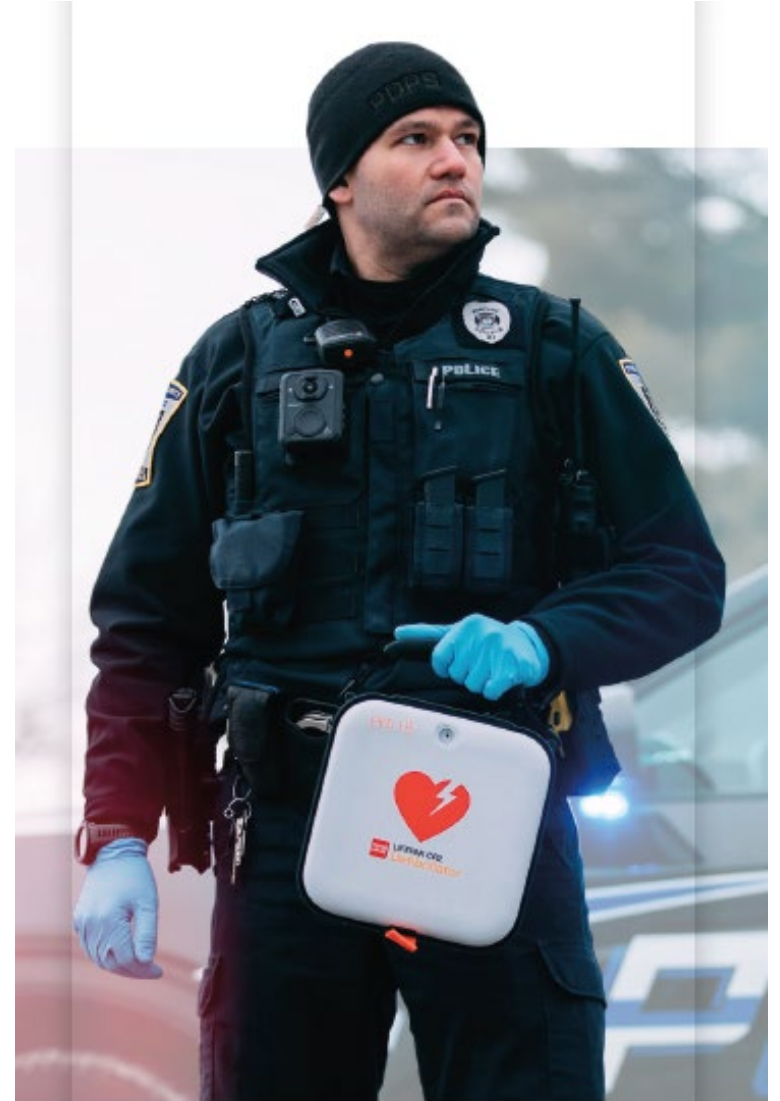


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# Hearts on Duty

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When a LIEFPAK CR2 AED funded by the Helmsley Charitable Trust is used to save a life during a sudden cardiac arrest, the Hearts on Duty Program gives an AED to the officer involved in the save to donate to a community organization of their choice on the survivor's behalf.



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# Hearts on Duty Recognizes Sergeant Joseph Minwegen

Sgt. Minwegen has been with the Divide County Sheriff's Office since March 20, 2019. Before starting with the Divide County Sheriff's Office, he worked a year with the Minnesota State Patrol as a patrol trooper. Due to his excellent leadership skills, Sgt. Minwegen has quickly moved through the Divide County Sheriff's Office ranks. He is a wonderful asset to Divide County as he is always willing to help its citizens and treats them with respect and dignity regardless of the call for service. The Divide County Sheriff's Office is proud to have Sgt. Minwegen as a member of its team.



# For questions, please contact:

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