Yukon-Kuskokwim HEALTH CORPORATION

Cardiac Arrest in Villages

Points to Consider in Village Codes

- ☐ Call for help (other health aides, OAs, VPO, retired health aides, etc.).
- ☐ Do not move/transfer a patient receiving CPR unless the scene is unsafe.
- ☐ Start a timeline of events.
- ☐ Confirm details of BLS being performed:
  - ☐ Confirm AED is turned on with pads on patient.
  - ☐ Confirm chest rise with bagging
  - ☐ Confirm that oxygen is connected to BVM and set at 15 L.
  - ☐ Rotate compressors every 2 minutes.
  - ☐ Check on quality of chest compressions IF POSSIBLE.
  - ☐ Confirm correct ratio.
- ☐ Check glucose. Consider empirically giving buccal glucose.
- ☐ Consider naloxone (Narcan®).
- ☐ Ask if Zoom or Tiger Connect Video Call is a possibility.
- ☐ If history of trauma:
  - ☐ Try to stop active bleeding.
  - ☐ Consider needle decompression if appropriate.
- ☐ If ROSC is achieved, activate medevac.

Ceasing Efforts

• It is reasonable to cease resuscitative efforts if evidence of rigor mortis, when the AED has stated "no shock advised" for 20 minutes, or in **hypothermia** if patient has been rewarmed to >89°F but no ROSC.
• At that time, the code leader should check in with the team and discuss stopping CPR. This should be a team decision.
• Whenever possible, the doctor on the phone should communicate as much as possible with the family to ensure they know the village team did everything possible.

The **debrief form** must be completed by the team leader (either RMT provider or village provider if present) for all village codes.

This resource is designed for the general use of most patients
but may need to be adapted to meet the special needs of a specific patient
as determined by the medical practitioner.
Approved by Clinical Guideline Committee 9/29/25.
Click **here** to see the supplemental materials for this resource.
If comments about this guideline, please contact Clinical_Guidelines@ykhc.org.

Notification of CPR in Progress in a Village

1. Health aide or village-based provider calls ED (x6395) and states "CPR in progress in <location>."
2. ED tech sends priority message through Tiger Connect to Kusko/Yukon Wards Doctor.
3. If wards doctor is unavailable, ED doctor takes the call.
4. If both wards doctor(s) and ED doctor are unavailable, ED tech sends message to Peds Wards on Duty, and pediatrician will take the call until another doctor is available.

Goal is to have a doctor on the phone with the village in less than two minutes.

The Goal is BLS.

• Whether the patient is in a village clinic or an SRC, whether there is a provider present or not, the expectation is that BLS be followed. (This includes naloxone, if appropriate.)
• Given the delay to definitive care, measures beyond BLS are rarely realistic or helpful.
• In cardiac arrest, only two interventions can alter the outcome:
  - Early, high-quality chest compressions.
  - Early defibrillation (shock).
• All other measures should be secondary to ensuring that these two interventions are optimized.
• For every minute that defibrillation (shock) is delayed, survival rate decreases by 10%.
  - Of note, shockable rhythms are rare.
  - Early placement of the AED is vital to detecting shockable rhythms and optimizing CPR.

Epinephrine in Village Clinics

• The consensus opinion at YKHC is that **IM epinephrine should not be given to patients with cardiac arrest in villages in which there will be a delay to full ACLS.**
• The only CHAM indications for epinephrine are intramuscular doses for severe allergic reaction and severe asthma/shortness of breath.
• The only formulation of epinephrine stocked in village clinics is 1 mg/mL (1:1000).
• Health aides are not trained to give IV medications.
• Limitations:
  - Very little epinephrine is available in each clinic (4-10 ampules depending on village size).
  - How long it will take a health aide to prepare the dose with no experience or local resources explaining how to do this.
  - How many health aides are present.
  - The chance of success vs the risk of worsening a situation by diverting attention away from CPR and AED.
• A recent **literature review** did not show convincing evidence that IM epinephrine can change outcomes in our setting.
• If a provider is present and willing to give IV epinephrine in a village, the dose must be calculated using the available concentration (1 mg/mL).
• "Dirty Epi Drips" and "Push-Dose Epi" should not be given by health aides.

Medications in SRCs

• The top priorities are BLS with early AED application and high-quality CPR. If there are not enough personnel present, ACLS interventions should be deferred in favor of BLS.
• If enough personnel are present and IV access can be established, ACLS medications (including epinephrine) may be given in SRCs.

Airway Support in SRCs

• The maximum level of airway support available in SRCs is an LMA.
• Endotracheal intubation is not performed in SRCs because there are not ventilators, sedation, IV pumps, or back-up support available.