i. Outline:

**CODE BLUE**

(Cardiac Arrest – Adult)

If You Discover An Adult Cardiac Arrest

---

**Call 4444**
State area and/or room number clearly
Refer to Page 3

**CPR**
Obtain Arrest Cart

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**Switchboard**
Announce Code Blue & location 3 times

**Notify Cardiac Arrest Team**
Refer to Page 5

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**Response**
The Cardiac Arrest team will attend the scene and assume command
Refer to Page 7
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1.0 General Overview

1.1. Code to Be Used In Case of an Adult Cardiac Arrest
Anytime an adult is suffering from a cardiac arrest Code Blue will be activated. A cardiac arrest is defined as when a person is not breathing, or when a pulse cannot be felt.

Cardiopulmonary resuscitation measures are instituted by trained staff unless otherwise indicated. (i.e. consider Do Not Resuscitate – DNR)

1.2. Authority to Declare a Code Blue
Anyone that is aware of an adult experiencing a cardiac arrest is authorized to activate a Code Blue.

1.3. Cardiac Arrest Team
Composition of Adult Cardiac Arrest Team
- First Responder (defined as a regulated health professional)
- RACE team Attending physician (M-F 0900 – 1700 hours) – oversight and quality control
- ICU Resident – Team Leader
- Anaesthesiology Resident – emergent & advanced airway management, post-resuscitation care
- Designated CSU Registered Nurse – Defibrillator, medications
- Designated RACE team nurse – IV access, CPR, documentation
- Designated Respiratory Therapist – Basic airway management

1.4. Two Simultaneous Cardiac Arrests
If a second cardiac arrest occurs while the cardiac arrest team is actively engaged in a resuscitative effort, the resident in charge of the first cardiac arrest will designate members of the team to leave and attend the second arrest. One of these persons will become the Team Leader of the second arrest. In most cases, this should be the anaesthesiology resident

1.5. Cardiac Arrest Resuscitation Cart Equipment
Resuscitation carts have been strategically placed based on the frequency of cardiac arrests in an area and physical barriers that slow response with a cart. The equipment on the cart is standardized to facilitate easy use. When a cardiac arrest occurs in an area that does not have an arrest cart, responsibility for delivery has been designated to another area.

1.6. Automated External Defibrillator (AED) Use
AED’s are brought by the RACE nurse to all cardiac arrests in non-patient care areas, to shorten the time from collapse to delivery of the first shock. They may be used in any circumstance where there is equipment failure or delay. There will be an annual update and recertification for all RACE nurses in the use of AED’s.

Source: Kingston General Hospital Administrative Policy (11-080)
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2.0 Response & Recovery – All Staff

Response

2.1. Procedure if You Are Aware of an Adult Cardiac Arrest
   The expectations can be remembered by recalling the ‘three C’s’:
   □ Call 4444 and report a Cardiac Arrest. Provide switchboard the following:
     □ Your name and position
     □ Location
     □ CPR if qualified
     □ Obtain Cardiac Arrest Cart – if other staff are available direct them to bring the cardiac arrest cart

2.2. Procedure if You Hear a Code Blue Announced Overhead
   □ If you are in the area of the medical emergency and not providing medical treatment, assist in isolating the area, and directing the Cardiac Arrest team to the emergency
   □ The patient’s care team are expected to assist the cardiac arrest team and to provide important information
   □ If you are not in the area and are not part of the Cardiac Arrest team continue with your normal duties and avoid going to the affected area until the situation is resolved

Recovery

2.3. When the crisis has concluded:
   □ Resume normal duties
   □ Participate if an incident debriefing session is being held, following the incident
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3.0 Response & Recovery – Switchboard

Response

3.1. Upon Notification of an Adult Cardiac Arrest
- Activate the Cardiac Arrest Team via the Pagenet portal and provide the Code Blue and location message x 2
- Announce overhead three times “CODE BLUE (location)”
- Notify:
  - RACE Physician 9am – 5pm ONLY
  - OR Manager telephone (Ext. 7071) to be notified of any Code Blue or Code 99 for Anesthesiology; M-F during business hours
  - Page Manager / Supervisor covering the floor enter 4444 for numeric pagers
  - Call floor / ext. listed for defibrillator if necessary (See Table provided to switchboard)
  - ** MON - FRI 7pm - 7am & Weekends and Stat Holidays notify the Administrative Coordinator on call via the Pagenet portal FOR ALL AREAS
- Dispatch porter to ALL AREAS via the online application and document job #

Recovery

3.2. Upon Notification That the Crisis Has Concluded
- Call floor in 1 hour for patients name and document on code sheets
- Participate if an incident debriefing session is being held, following the incident
- This page left blank intentionally -
4.0 Response & Recovery – Cardiac Arrest Team

Response

4.3. Upon Receiving the Code Blue Notification
The Cardiac Arrest Team will attend the scene of the Code Blue and assume command. The possible roles of the team members are meant only as a starting point – team members will be cross-trained and will step-in for each other and assist where needed.

First Responder
☐ Call Code Blue
☐ Initiate CPR
☐ Direct someone to bring the nearest cardiac arrest cart to the patient’s bedside

The Patient’s Care team
☐ Attending service members take role in diagnostic team. They will offer suggestions to the resuscitation team around the root causes of the cardiac arrest.

Team Leader
☐ The resident on call for Critical Care (ICU) will assume the team leader role. The team leader’s duties will include but not be limited to:
  ☐ Assigning responsibilities involved in cardiopulmonary resuscitation
  ☐ Guiding the team through the appropriate algorithms and initial diagnostic efforts
  ☐ Ensuring scene and crowd control
  ☐ Making decisions regarding transfer of the patient to an appropriate intensive care facility and decisions regarding cessation of resuscitative efforts, after appropriate consultation with the service responsible for the patient’s care
  ☐ Review and sign the cardiopulmonary resuscitation flow sheet
  ☐ The team leader is responsible to the RACE team attending physician
  ☐ Complete a detailed after-action note in the chart based on the code documentation of the RACE nurse

CSU Registered Nurse
☐ The designated CSU registered nurse will respond to all cardiac arrests
☐ Responsibilities may include but will not be limited to:
  ☐ application and operation of the defibrillator / transcutaneous pacemaker and troubleshoot when there are difficulties
  ☐ Delivery of energy by AED or defibrillator as outlined in the relevant medical directive / delegation
  ☐ Provision of medications from the cart
  ☐ Securing IV access if required. If IV is already present, confirm patency
**Respiratory Therapist**
- A designated respiratory therapist will respond to all cardiac arrests
- The respiratory therapist’s responsibilities may include but will not be limited to:
  - Provision of basic airway management including BVM ventilation, high flow oxygen and succioning of the airway
  - Providing assistance to anesthesia in cases of advanced airway management

**RACE Registered Nurse**
- The RACE nurse will attend all cardiac arrests
- Responsibilities will include, but not be limited to:
  - Securing IV access if required. If IV is already present, confirm patency
  - Administration of medications
  - Documentation of the actions of the team during the arrest

**Anesthesia Resident**
- The anesthesia resident will attend all cardiac arrests
- Responsibilities may include but will not be limited to:
  - In cases of primary respiratory arrest, provision of a definitive airway, at a point deemed appropriate by the team leader
  - Providing consultation and advice to the team leader during the cardiac arrest (anesthesia resident will often have more experience than the team leader)
  - If the patient is successfully resuscitated, providing assistance in post-resuscitative care that may include intubation for primary cardiac arrests, fluid resuscitation, vasopressor and inotropic support, and medical stabilization for transfer

**RACE Team Attending Physician**
- Will be present for all Code Blue’s Monday – Friday between 9am and 5pm in a supervisory role
- Will be immediately available by phone for codes at other times
- Review all Code Blues for quality assurance and communicate any problems to the RACE team medical director

**Diagnostic Team**
- The anesthesia resident, RACE team physician, and members of the patient’s attending service make up the diagnostic team. Their role is to:
  - Consider causes of the arrest and possible treatments while ensuring that they do not interfere with the team’s communication
  - Interact with the patient’s family as required
Recovery

4.4. **Upon conclusion of the cardiac arrest:**

- Any member of the adult Cardiac Arrest Team, who has noted problems or concerns with the arrest proceedings should document in the space provided on the cardiopulmonary resuscitation flow sheet and bring to the attention of the RACE team attending physician.

- Any failure of mechanical or electrical equipment noted during the arrest shall generate a ‘Safe Reporting’ report by the team leader.

- Complete CPR flow sheet, including the provision of required signatures, and resume normal duties.

- Participate in an after-code quality assurance process.
5.0 Response & Recovery – Protection Services

Response

5.1. Upon Receiving the Code Blue Notification
☐ If the emergency is on a patient care unit it is not necessary for Security to respond unless directly requested by the unit to assist
☐ If the emergency is not on a patient care unit, respond to area to provide assistance in isolating the area
☐ When the medical team is ready to transport the patient to Emergency, assist by ensuring they take the most direct route and the way is clear of obstruction

Recovery

5.2. Upon Notification That the Crisis Has Concluded
☐ Once the patient has been escorted to Emergency resume normal duties
☐ Participate if an incident debriefing session is being held, following the incident
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# Appendix A: Cardiopulmonary Resuscitation Flow Sheet

**CARDIOPULMONARY RESUSCITATION FLOW SHEET**

<table>
<thead>
<tr>
<th>Time</th>
<th>Code Blue/Pink called</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arrival of first cardiac arrest team member</td>
</tr>
<tr>
<td></td>
<td>Arrival of cardiac arrest team leader</td>
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<tr>
<td></td>
<td>Intubation by</td>
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</tbody>
</table>

**Progress Notes**
(e.g., rhythm, vitals, chest compressions, suctioning, IV fluids, infusions, pacing, bloodwork)

<table>
<thead>
<tr>
<th>Date</th>
<th>Time of arrest/found</th>
<th>Witnessed? □ Yes □ No</th>
</tr>
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<table>
<thead>
<tr>
<th>Location</th>
<th>Pulse present? □ Yes □ No</th>
<th>Initial rhythm</th>
</tr>
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</table>

**Other medications**
(name/dose/route)

**Abbreviations:**
IV = intravenous  
ET = endotracheal  
IO = intraosseous

**Outcome:**
Resuscitated □ Yes □ No  
Transferred? □ Yes □ No  
To ______________ at _______h Date ____________

**Presumed cause of arrest**
Team leader MD: ____________________________  
RCP: ____________________________  
Recorder: ____________________________

**Cardiopulmonary Resuscitation Flow**

Sheet  
SAP# 315/2004/02 TRIAL  
Page 1 of 1  
White – Chart, Yellow – Risk Management (KGH) or ER Nurse Manager (HDH)
# Cardiopulmonary Resuscitation Flow Sheet

**Date** ______ mm dd  
**Time of arrest/found** ______ h 
**Witnessed?**  □ Yes – By whom? ________  □ No 
**Location** ______  
**Pulse present?**  □ Yes  □ No  
**Initial rhythm** ______

**Time**  
- Code Blue/Pink called
- Arrival of first cardiac arrest team member
- Arrival of cardiac arrest team leader
- Intubation by

**Progress Notes**  
(e.g., rhythm, vitals, chest compressions, suctioning, IV fluids, infusions, pacing, bloodwork)

<table>
<thead>
<tr>
<th>Determination (Rhythm)</th>
<th>Est serum potassium</th>
<th>Amiodarone (mg/kg)</th>
<th>Atracurium (mg/kg)</th>
<th>Vasopressin (Units/kg)</th>
<th>Initial</th>
<th>Other medications (name/dose/route)</th>
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- Return of spontaneous circulation (rhythm with pulse) 
- Return of spontaneous respiration 
- Resuscitative efforts discontinued

**Outcome:**  
- Resuscitated  □ Yes  □ Transferred? to ________ at ______ h  
- Date ______ mm dd  
- □ No  □ Expired—Time of death ______ h  
- Date ______ mm dd  

**Presumed cause of arrest** ________  
**Team leader MD:** ________  
**RCP:** ________  
**Recorder:** ________  
**RN:** ________  
**Other:** ________

(please, initial and print names)

For the purpose of quality improvement, please comment on resuscitative process eg. resuscitation cart, paging, airway equipment, I.V.s, central lines, monitor/defib., external pacers etc. (can be filled out by Team Leader, RN, or RCP)

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**Reminder to fill out Unusual Occurrence Form when appropriate** (e.g., concerns with any aspect of the resuscitation process etc.)

**Note:** Problems with mechanical equipment are to be reported to Clinical Engineering immediately

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Appendix A: Cardiopulmonary Resuscitation Flow Sheet