Defense Health Agency

ADMINISTRATIVE INSTRUCTION

SUBJECT: Code Purple for Obstetric and Neonatal Emergencies

References: See Enclosure 1.

1. <u>PURPOSE</u>. This Defense Health Agency-Administrative Instruction (DHA-AI), based on the authority of References (a) and (b), and in accordance with the guidance of References (c) through (f), establishes the Defense Health Agency's (DHA) procedures to standardize the emergency code, Code Purple, for obstetric (OB) and neonatal emergencies. These emergencies could be maternal, neonatal or include both birth parent and neonate. Code Purple should be implemented as a response separate and apart from any other emergency codes, in all military Medical Treatment Facilities (MTF) with inpatient OB throughout the DHA.

2. <u>APPLICABILITY</u>. This DHA-AI applies to the DHA Enterprise (components and activities under the authority, direction, and control of the DHA) to include assigned, attached, allotted, or detailed personnel. This DHA-AI does not apply to MTFs without inpatient OB units.

3. <u>POLICY IMPLEMENTATION</u>. It is DHA's instruction, pursuant to References (a) through (f), to standardize the emergency code, Code Purple, for OB and neonatal emergencies throughout the DHA. Rapid coordinated response to OB and neonatal emergencies can decrease morbidity and mortality of all birth parents and/or their neonates.

4. <u>CANCELED DOCUMENT</u>. This DHA-AI cancels the following document, DHA-AI 6025.20, "Code Purple for Obstetric and Neonatal Emergencies," May 8, 2023.

5. <u>RESPONSIBILITIES</u>. Enclosure 2.

6. <u>PROCEDURES</u>. See Enclosure 3.

7. <u>PROPONENT AND WAIVERS</u>. The proponent of this publication is the Deputy Assistant Director (DAD), Medical Affairs (MA). When components and activities are unable to comply with this publication the activity may request a waiver that must include a justification, including an analysis of the risk associated with not granting the waiver. The activity director or senior leader will submit the waiver request through their supervisory chain to the DAD-MA to determine if the waiver may be granted by the Director, DHA or their designee.

8. <u>RELEASABILITY</u>. **Cleared for public release**. This DHA-AI is available on the Internet from the Health.mil site at: https://health.mil/Reference-Center/Policies and is also available to authorized users from the DHA SharePoint site at: https://info.health.mil/cos/admin/pubs/DHA%20Publications%20Signed/Forms/AllItems.aspx.

9. <u>EFFECTIVE DATE</u>. This DHA-AI:

   a. Is effective upon signature.

   b. Will expire 10 years from the date of signature if it has not been reissued or cancelled before this date in accordance with Reference (c).

10. <u>SUMMARY OF CHANGES</u>. Content added regarding processes and procedures for neonatal resuscitation, as well as minor modifications throughout to reflect current organizational structures.

CROSLAND.TEL
ITA.1017383040
Digitally signed by
CROSLAND.TELITA.1017383040
Date: 2024.06.18 12:28:06 -04'00'

TELITA CROSLAND
LTG, USA
Director

Enclosures
   1. References
   2. Responsibilities
   3. Procedures
Glossary

ENCLOSURE 1

REFERENCES

(a) DoD Directive 5136.01, "Assistant Secretary of Defense for Health Affairs (ASD(HA))," September 30, 2013, as amended
(b) DoD Directive 5136.13, "Defense Health Agency (DHA)," September 30, 2013, as amended
(c) DHA-Procedural Instruction 5025.01, "Publication System," April 1, 2022
(d) DHA-Procedural Instruction 6025.16, "Processes and Procedures for Implementation of Standardized Perinatal Training," September 2, 2021, as amended
(e) DHA-Administrative Instruction 6025.07, "Utilization of Anesthesia Service in the Military Medical Treatment Facilities," November 08, 2023
(f) "TeamSTEPPS: Team Strategies & Tools to Enhance Performance and Patient Safety," Agency for Healthcare Research and Quality, 2018.

ENCLOSURE 2

RESPONSIBILITIES

1. <u>DIRECTOR, DHA, OR DESIGNEE</u>. The Director, DHA, or designee must*:*

a. Assign responsibility for establishing processes to implement and monitor compliance with all requirements set forth in this DHA-AI to the DAD-MA.

b. Ensure DHA-AI implementation and compliance with this issuance.

c. Ensure the necessary resources are provided to implement all requirements set forth in this DHA-AI.

2. <u>DAD-MA</u>. The DAD-MA must:

a. Oversee implementation and compliance to standardize the emergency code, Code Purple, for OB and neonatal emergencies, separate and apart from any other emergency codes, as specified in this DHA-AI.

b. Monitor compliance with the guidance outlined in this DHA-AI through the DHA headquarters Women's Health Clinical Management Team (WHCMT).

c. Develop a process to update this DHA-AI as evidence, technology, and clinical knowledge evolve, or as recommended by the WHCMT.

d. Ensure the Directors, Defense Health Networks (DHNs) and their aligned MTFs with inpatient OB under their authority, direction, and control, are assigned responsibilities to monitor activation of the Code Purple response teams in the event of an OB and/or neonatal emergency.

e. Support the Directors, DHNs by identifying standard clinical, business, and administrative process changes or requirements, including any conflicts with current emergency code colors, and assigning resolution to the appropriate directorate within DHA headquarters. If conflicts are not able to be resolved at the directorate level, the issue will be escalated to the Director, DHA.

3. <u>DIRECTOR, STRATEGY, PLANS, AND ANALYTICS (J-5)</u>. The Director, Strategy, Plans, and Analytics (J-5) must develop standardized reports, dashboards, and/or visualizations of Code Purple metrics as defined by the Chief, WHCMT.

4. <u>CHIEF, WHCMT</u>. The Chief, WHCMT must collaborate with the MTF Directors, DHNs, and Chair, Women and Infant Clinical Community (WICC), to implement, monitor, and adhere to requirements specified in this DHA-AI, with focus on clinical business process requirements and reported outcomes.

5. <u>CHAIR, WICC</u>. The Chair, WICC must advise WHCMT on strategy for supporting compliance monitoring as specified in this DHA-AI, with focus on clinical process and outcome requirements.

6. <u>DIRECTORS, DHNs</u>. Directors, DHNs must*:*

    a. Ensure aligned MTFs with inpatient OB under their authority, direction, and control develop guidance and procedures that follow this DHA-AI and that any modifications necessary due to capabilities of their facility(ies) are made with these procedures in mind.

    b. Ensure all directors, administrative staff, and applicable healthcare personnel for MTFs with inpatient obstetrics are aware of and follow the guidance in this DHA-AI.

    c. Report to DAD-MA, via the WHCMT, on compliance with the frequency and utilization of Code Purple, as outlined in Enclosure 3, paragraph 7.

    d. Ensure dissemination of this DHA-AI to all MTF Directors.

7. <u>DIRECTORS, MTF</u>. The Directors, MTF must*:*

    a. Implement an MTF-level standard operating procedure (SOP) for this DHA-AI to disseminate to all providers and healthcare personnel at MTFs with inpatient OB, using the guidance outlined in Enclosure 3. The SOP will include, at a minimum, requirements to assign roles, responsibilities, and communication channels for successful Code Purple implementation and response.

    b. Collaborate with the Directors, DHNs (as applicable) to develop education and assign healthcare personnel to execute this DHA-AI based upon MTF capabilities.

    c. Monitor compliance, perform continuous process improvement, and/or recommend additional clinical business process requirements based on clinical practices at applicable MTFs, and implement actions to ensure Code Purple activation.

    d. Disseminate updates and ensure compliance to new standards, guidelines, or requirements in a timely manner as they become available to the applicable MTFs.

ENCLOSURE 3

PROCEDURES

1. <u>OVERVIEW</u>. A Code Purple can be called 24 hours a day, 7 days a week, to activate an emergency response for additional personnel to support a potential OB and/or neonatal emergency in MTFs with inpatient OB. OB and neonatal emergencies are health problems that are life-threatening for birth parent and/or their neonates. OB emergencies may arise at any time during pregnancy, labor, birth, and postpartum. Neonatal emergencies may arise during birth and the newborn period. A team of providers and caregivers are summoned to the bedside to immediately assess and treat the patient with the goal of preventing maternal and neonatal morbidity and mortality. Code Purple is valid in multiple care settings within MTFs with inpatient OB. Most often, Code Purple will be used in Labor and Delivery units, labor/delivery/recovery units, OB units, recovery units with birth parents and neonates, postpartum or mother baby units, and emergency departments.

    a. Code Purple activation should result in a targeted response for OB and/or neonatal emergencies (e.g., maternal events such as, but not limited to, OB hemorrhage, emergency Cesarean delivery, eclamptic seizure; neonatal events such as, but not limited to, unresponsive, apnea, bradycardia, cyanosis) to receive additional personnel for assistance with and treatment of emergency medical conditions. It is appropriate to activate Code Purple in any antepartum, intrapartum, or postpartum scenario where additional support is desired.

    b. Neonatal resuscitation capability must be available in the event of a Code Purple activation for a maternal emergency to assume care of the neonate, or in the event of a neonatal emergency, to provide assessment/resuscitation of the neonate during the birth admission.

        (1) For the purposes of the DHA-AI, neonatal resuscitation capability refers to the initial period of establishing pulmonary respiratory gas exchange and circulatory changes distinct to a newly delivered infant.

        (2) Outside the birth admission, Pediatric Advanced Life Support protocols should be utilized in accordance with MTF policy.

2. <u>PLANNING</u>. The ability to anticipate and detect impending compromise and medical conditions when they occur, initiate prompt response, and implement effective action is imperative to the continuum of safe care. MTF SOPs must contain guidance on the following:

    a. Standardized perinatal training in accordance with Reference (d), which supports the health care personnel's knowledge to act upon both OB and/or neonatal emergencies.

    b. Standardized, dedicated, and secured set(s) of neonatal resuscitation medication and supplies which can be quickly transported throughout the facility. Medications and supplies

must be clearly labeled and available for response in various locations including, but not limited to, delivery rooms, operating rooms used for cesarean sections, postpartum units where maternal infant care is available, neonatal intensive care units, and/or emergency departments. MTF SOPs must:

(1) Define the interval for review, inventory, and restocking of the neonatal resuscitation set(s) of medication and supplies.

(2) Define the exact medications and supplies for their facility, but consider inclusion of the following:

(a) References and resources, including:

1. Copies of written MTF procedures and checklists for neonatal resuscitation response and evaluation of the response,

2. Code recording sheet,

3. Calculators for resuscitative medications,

4. Depth table for endotracheal tube insertion,

5. Target oxygen saturation table, and

6. Debrief recording sheet (see also Appendix).

(b) Suction equipment, including:

1. Bulb syringe,

2. Mechanical suction and/or the tubing to connect to suction including multiple sizes of suction catheters, and

3. Tracheal aspirator.

(c) Positive-pressure ventilation equipment to monitor effectiveness of ventilation and perfusion, including:

1. Tubing to connect to oxygen source,

2. Face masks (newborn and premature sizes),

3. Pulse oximeters, and

4. Stethoscope with neonatal head.

(d) Intubation equipment, including:

<u>1</u>. Laryngoscope with extra bulbs and batteries: 0 and 1 (00 optional for premature births),

<u>2</u>. Endotracheal tubes measuring 2.5, 3.0, 3.5, and 4.0-millimeters (mm) internal diameter,

<u>3</u>. Stylet,

<u>4</u>. Measuring tape,

<u>5</u>. Tape of tube-securing device,

<u>6</u>. Carbon dioxide detector, and

<u>7</u>. Size 1 laryngeal mask or other supraglottic device and 5 milliliter (mL) syringe, 5 French or 6 French orogastric tube.

(e) Medications, including:

<u>1</u>. Epinephrine (0.1 milligram per mL), in either 3 mL or 10 mL ampules,

<u>2</u>. Normal saline, 100 mL or 250 mL (consider smaller sizes of bags to be included in kit if possible),

<u>3</u>. Normal saline flushes, and

<u>4</u>. 3-way stopcock or fluid transfer device.

(f) Umbilical vessel catheterization supplies, including:

<u>1</u>. Sterile gloves,

<u>2</u>. Antiseptic preparation solution,

<u>3</u>. Umbilical tape,

<u>4</u>. Small clamp (hemostat),

<u>5</u>. Scalpel, in either #10, #11, or #15 size,

<u>6</u>. Umbilical catheters, in either 3.5 French or 5 French,

<u>7</u>. Syringes (3-5 mL) and normal saline for flushes (may use prefilled syringes),

<u>8</u>. Clear adhesive dressing to secure umbilical venous catheter to abdomen, and

<u>9</u>. Needle or puncture device for needleless system.

(g) Fluid volume blood infusion products such as intravenous (IV) tubing, stopcocks, blood tubing, filters, Normal Saline.

(h) Pneumothorax kit, including:

<u>1</u>. IV access: IV catheters (18 gauge and 20 gauge), IV extension set, 3-way stopcock, and 10 mL syringes;

<u>2</u>. IV extension set;

<u>3</u>. Sterile gloves; and

<u>4</u>. Personal protective equipment.

(3) Include neonatal resuscitation as part of their multidisciplinary drills (Reference (d)) to ensure responders are experienced in accessing and utilizing essential emergency equipment.

(4) Include a process for multidisciplinary team evaluation of the efficacy of the neonatal resuscitation medication and supplies (e.g., organization, documentation, team communication). The team should be comprised of clinicians with expertise in neonatal resuscitation, process improvement subject matter experts, and/or quality and education subject matter experts. Process improvement activities may leverage already existing process improvement committees or boards established at the MTF and should utilize standardized processes for evaluation (e.g., Simulation Training Assessment Tool; Plan, Do, Study, Act; A3).

3. <u>PROCEDURE</u>. In the case of an OB and/or neonatal emergency, any staff member assessing the clinical situation/deterioration of a birth parent or neonate can initiate the Code Purple protocol 24 hours a day, 7 days a week. There are clinical events that would indicate the concurrent use of Code Blue for a cardiopulmonary arrest and Code Purple for an OB and/or neonatal patient.

4. <u>ACTIVATION OF THE EMERGENCY RESPONSE CODE</u>. Activation of the emergency response for Code Purple will be consistent with MTF processes and must ensure capacity to monitor activation, response, and termination of Code Purple.

a. All OB and neonatal emergencies must be announced as "Code Purple" over the MTF emergency response system, consistent with facility policy, and must include the nature of the

event (e.g., either OB and/or neonatal) and exact location (e.g., building number, ward, room number). The type of event (emergency type) may be added after the call of "Code Purple" (e.g., "Code Purple hemorrhage" or "Code Purple cord prolapse").

b. MTF policy should define responders and drill simulations for responses. A Code Purple team response may require all members to respond to support every emergency and be prepared for expansion of the emergency.

c. All core and auxiliary members must be included on the notification list (tailored to the facility capabilities). Smaller facilities with limited staffing may need to consider some team members serving in multiple roles while activation of additional support is in progress. The following core responder roles are recommended to respond to Code Purple events.

(1) Designated team leader. The designated team leader oversees the response, directs care, requests additional support, and makes clinical decisions. One of the following must function as the designated team leader:

(a) OB Provider: OB/Gynecologist, Family Medicine/Practice Physician, Women's Health or Family Medicine Nurse Practitioner or Certified Nurse Midwife. If the team consists of a Family Medicine/Practice Physician or Certified Nurse Midwife, there must be a provider with surgical capabilities readily available (i.e., the specified person should be available 24 hours a day, 7 days a week, for consultation and assistance, and able to be physically present on-site within a time frame that incorporates maternal and fetal or neonatal risks and benefits with the provision of care).

(b) Neonatal Provider. This provider may be a Family Medicine/Practice Physician, Pediatrician, Neonatal Nurse Practitioner, or Neonatologist for neonatal events or Emergency Provider.

(c) Emergency Department Provider. In the absence of an OB/Gynecologist or Neonatal provider, responsibilities include responding to Code Purple as either OB or neonatal provider while the OB or pediatric provider is enroute.

(d) In the event the licensed independent provider is not present, a registered nurse may act in the role of the designated team leader.

(2) Anesthesia Provider. May be an Anesthesiologist or a Certified Registered Nurse Anesthetist.

(3) Primary Nursing Caregiver for the birth parent.

(4) Primary Nursing Caregiver for the neonate.

(5) Additional team members, as defined by MTF policy will include:

        (a) Certified personnel for Neonatal resuscitation (MTF will define).

        (b) Operating Room Team activation if there is an anticipated need for surgical delivery or Operating Room capacities.

        (c) Respiratory Therapist.

        (d) Additional trained staff.

   d. The following personnel are considered auxiliary responders vital to support the core responders for a Code Purple event. The following departments/roles may respond to every Code Purple or respond when requested, based upon MTF protocols.

      (1) Laboratory Technician Blood Bank

      (2) Radiology staff

      (3) Pharmacist

      (4) Senior Clinical or Nursing Supervisor

      (5) Additional unit trained staff

   e. The following additional personnel may be required/requested based on the clinical situation and may include:

      (1) Security

      (2) Pastoral Care

      (3) Social Work or Behavioral Health

      (4) Patient representative/advocate/Health Care Resolution specialist

      (5) Additional staff as designated

   f. The MTF's processes must also include processes for other areas of operation that affect the Code Purple response (e.g., elevator operation, patient transfer, security, leadership notification, appropriate location for family to gather during the process).

   g. MTF processes are to be documented in the SOP, which must delineate reporting procedures and the necessary materials and equipment designated staff must bring to the Code Purple (e.g., OB Emergency cart, emergency delivery packs, gurneys, and neonatal resuscitation supplies).

5. <u>CODE COMPLETE</u>. Once the Code Purple has been resolved, the respective designated team leader must communicate to the team that the Code Purple event has ended, consistent with facility policy.

6. <u>DEBRIEFS</u>. The debrief must be conducted immediately, or as close to the event as possible, to include all participating personnel. The TeamSTEPPS debrief checklist (Reference (f)) may be a used as an example. The Code Purple designated team leader will facilitate a discussion which includes, but is not limited to, timeliness of personnel, rapid and efficient response to the event, communication and collaboration of personnel during the Code Purple, clarity and responsibilities of the roles, barriers, Lessons Learned, and actions that were unsuccessful and successful. The debrief data must be collected, reported, and used as an opportunity for continuous process improvement, in accordance with the appropriate MTF committee. Debrief sheets will not be collected or submitted to DHA but should be utilized by the MTF leadership for process improvement. If opportunities for improvement or specific patient safety concerns arise, then a Patient Safety Report must be generated in the current version of Joint Patient Safety Report system. Personnel involved in the Code Purple should be offered peer support and pastoral support, particularly if an adverse outcome occurs.

7. <u>MEASURES OF SUCCESS</u>. Measures of success will be based on effective implementation of process and outcome measures that are important to inform and identify further process improvements. Data is to be collected and submitted by the MTF at a frequency determined by each DHN but should reflect quarterly data. Quarter 1: JAN-MAR, Quarter 2: APR-JUN, Quarter 3: JUL-SEP, Quarter 4: OCT-DEC. DHNs will review MTF data and report to DHA WHCMT semi-annually (30 March and 30 September) on compliance using standardized reporting tools provided by the DHA WHCMT. MTFs are responsible for evaluating their individual performance, patient outcomes, and process improvement methods, as determined by their rates of success.

   a. The MTF Director or their designee will provide the MTF report to the next higher authority at the DHN, as appropriate, in accordance with guidance provided by WHCMT.

   b. MTFs will use the following measures of success when developing denominators for their reports:

   (1) Use a single point in time to account for all Code Purple activations for reporting purposes. For the reporting periods, account for all Code Purple activations within 5 days after the last day of each quarter (e.g., Q1 calendar year data should be accounted for by April 5th).

   (2) Activation: Total Code Purple activation counts (numerator) divided by the number of deliveries (denominator) for the previous quarter of the calendar year.

   (3) Response: Document time from when Code Purple is activated (as defined by MTF

policy) to the time additional clinical support arrives to advance care and treatment for the patient. A minimum measure of success is defined by compliance of the arrival of additional clinical support personnel within 10 minutes of activation, for 80 percent of Code Purple events.

(4) Resolve: Debriefs are to be conducted and documented after each Code Purple event. A minimum measure of success is defined by compliance with debriefs conducted and documented after 80 percent of Code Purple events.

c. In the event an MTF is a negative outlier, defined as measure of success tracked at less than 80 percent for either Response and/or Resolve, the MTF Director or their designee must address the negative outlier with the following strategies:

(1) Identify one or more process improvement actions to ensure 80 percent or higher compliance for Response and/or Resolve metrics for future reports. Strategies may include, but are not limited to, review of Code Purple activation events to assess for manning limitations, competing clinical responsibilities, financial restriction or other issues impacting the ability to respond in a timely manner or complete debriefs.

(2) Provide a report on proposed actions for improvement to their respective Director, DHN.

GLOSSARY

PART I. ABBREVIATIONS AND ACRONYMS

AI	Administrative Instruction
DAD	Deputy Assistant Director
DHA	Defense Health Agency
DHN	Defense Health Network
IV	intravenous
MA	Medical Affairs
mL	milliliter
MTF	military Medical Treatment Facility
OB	obstetric/obstetrical
SOP	standard operating procedure
WHCMT	Women's Health Clinical Management Team
WICC	Women and Infant Clinical Community