Name of Policy:	**Guidelines for emergency situations when recording polysomnograms**
Policy Number:	3364-171-01-05
Department:	Sleep Disorders
Approving Officer:	Senior Hospital Administrator
Responsible Agent:	Director, Sleep Disorders
Scope:	The University of Toledo Medical Center Pulmonary Services Department

THE UNIVERSITY OF TOLEDO MEDICAL CENTER

Effective Date: 03/17/2023

Initial Effective Date: 03/17/2023

X New policy proposal	_____ Minor/technical revision of existing policy
_____ Major revision of existing policy	_____ Reaffirmation of existing policy

(A) Policy Statement

All qualified and trained Polysomnographic Technologists are responsible for recognizing emergent situations and initiating emergency medical care.

All personnel who interact with patients must be familiar with the emergency procedures and the location of emergency equipment (e.g., barrier mask for resuscitation, AED). All sleep personnel responsible for patient care will maintain a current certificate in basic life support, including cognitive and manikin skills training. All sleep personnel responsible for patient care will be able to identify conditions that trigger an emergency response. These emergency procedures will be followed in all medical emergencies. Sleep staff will err on the side of caution if in doubt, taking into account the medical and cardiopulmonary history of the patient.

(B) Purpose of Policy

Patients being monitored in the sleep facility, particularly those with obstructive sleep apnea or pulmonary disease, are at risk for catastrophic cardiopulmonary events. The technologist must identify these events and take an appropriate course of action. The emergency medical procedures describe the appropriate action for a number of potentially lethal cardiopulmonary events. These procedures also address preferred actions for other emergency situations during which the safety of the patient and/or technologist may be at risk.

(C) Procedure

Types of emergencies

Cardiopulmonary
Neurological (seizure and strokes)
Psychiatric (suicidal ideation)
Environmental

General emergency procedure

If a change in a patient's cardiac (unstable cardiac rhythm), neurologic, clinical status, or safety is in question, call a Rapid Response Team (RRT) at 383-2222 or Code Blue at 77, state the location, and if needed, initiate Cardiopulmonary Resuscitation (CPR) per American Heart Association guidelines, until the team arrives. Give a detailed Situation, Background, Assessment, Recommendation (SBAR) handoff to the oncoming RRT or code team. Contact the Medical Director, who can be paged by calling (555) 555-0001, to give an update on the patient's condition.

1. In the event one technologist is working at the time of the **Emergent** situation:

a. Call the appropriate code (as listed under **Environmental Emergencies** below)
b. Take physical care of the patient and give a SBAR report
c. Contact the Medical Director and other pertinent facility personnel.
d. Once the patient has been removed from the sleep facility or emergent situation has been resolved, complete occurrence report documenting the event, procedures followed, actions taken, outcome and recommendations for improvement, if warranted using the Safety net application located on the desktop.

2. In the event two technologists are working at the time of the **Emergent** situation, each technologist will have a specific, assigned responsibility for their roles as Tech 1 and Tech 2
    a. Tech 1 is defined as the person recording the patient's study in which the emergency is occurring Duties include:
        i. Taking physical care of the patient and giving a SBAR report
    b. Tech 2 is defined as the second responder, assistant to Tech 1. Duties include:
        i. Calling the appropriate code (as listed under **Environmental Emergencies** below)
        ii. Continue recording and monitoring all patients
        iii. Be available for any additional assistance that may be needed.
3. In the event two technologists are working at the time of the **non-Emergent** situation
    a. Tech 1
        i. Stay with the patient and make additional assessments regarding any suicidal ideas, thoughts, etc.
    b. Tech 2
        i. Page the House Supervisor for additional assistance.

Cardiopulmonary emergency

4. Enter patient room and try to arouse the patient if you see any of the following (Adult and child):
    a. Asystole greater than 10 seconds (check backup lead first)
    b. Ventricular tachycardia greater than 10 seconds
    c. Ventricular fibrillation
    d. Apnea greater than two minutes
    e. A new onset of:
        i. Greater than six PVCs per minute for two minutes or more
        ii. More than two runs of six or more PVCs
        iii. Persistent bigeminy or trigeminy
        iv. Atrial flutter or fibrillation
        v. Clinically symptomatic tachycardia (more than 120 beats per minute (BPM)) or bradycardia (less than 40 BPM). If asymptomatic, notify the Medical Director or physician on-call. If symptomatic, call the RRT.
        vi. Any arrhythmia, EEG phenomenon, respiratory event or patient-reported symptom that in the opinion of the sleep technologist may lead to an emergency situation
5. If patient does not arouse, begin CPR and activate the Code Blue.
6. Continue CPR following the general emergency procedures until ER personnel arrives.
7. Notify the Medical Director or physician on-call.
8. If the Electrocardiogram (ECG) channel appears to have no ECG activity on recording: Adult and Child.
    a. Check back-up ECG. (Observe ECG rhythm in another channel for ECG activity). Change the derivation if the back-up channel is showing a rhythm. If there is no rhythm in the back-up channel, then:
    b. Determine if the patient is unresponsive, if so, call a Code Blue. **DO NOT STOP RECORDING.**
    c. **Begin CPR, maintain the airway and circulation until the Code Blue team arrives.**

d. Continue to record the on the polygraph during CPR until defibrillation. **DISCONNECT THE HEADBOX FROM THE AMPLIFIER IMMEDIATELY PRIOR TO DEFIBRILATION.**
e. When the patient's condition permits, document actions and observations as precise as possible.

Neurological (seizure)

9. When seizure activity is recorded:
    a. A single brief convulsive event or abnormal epileptic activity (waveform) does not constitute emergent situation, especially if this is normal for the patient.
    b. A repeat convulsive event should warrant emergent evaluation.
    c. Call the RRT immediately, if a patient has a seizure that lasts longer than 3 minutes.
    d. If possible, have the second technologist documenting and operating the video, otherwise the technologist should be in the patient's room maintaining patient safety.
    e. Documentation could be done post event if there is only one technologist.
10. Observe caution while the patient is demonstrating seizure activity.
    a. Protect patient from injury and the possibility of aspiration by placing the patient on their side. If the patient is undergoing titration study, remove the PAP mask from the patient.
    b. Protect equipment from possible damage.
    c. Protect yourself. **AVOID DIGITAL INJURY, DO NOT PLACE FINGERS OR OBJECTS IN THE PATIENT'S MOUTH.**
    d. Maintain airway and circulation if necessary. Monitor oxygen saturation levels, providing oxygen if necessary.
    e. Monitor and keep track of ECG, rate, and rhythm and continue study.
    f. Continue video and PSG recordings.
    g. Call the RRT
    h. Observe and record
        i. Time and length of seizure
        ii. Type of movements (unilateral or bilateral)
        iii. Eye movements
        iv. Consciousness
    i. Continue monitoring until the RRT arrives.
    j. Contact the facility director or on-call physician for further direction.
    k. Document all data (including EEG data) in the patient record.
    l. If the patient has a history of seizures, use caution with padded side rails, prior to initiating the study.
11. Parasomnia mobility: Adult and Child
    a. In the event a patient begins to ambulate while asleep (i.e. sleep walking or active night terrors), call security for assistance.
    b. Do not attempt to address the patient without help.
    c. Take precautionary measures to prevent injury to the patient and/or the technologist and damage to the equipment.
    d. Document all actions and observations.
    e. If the patient has a history of or a possibility of night terrors, then videotaping should be implemented.

Neurological (stroke)

12. Assess the patient for signs of a possible stroke:
    a. Facial droop (have patient shot teeth or smile)
    b. Arm drift (patient closes eyes and extends both arms straight out, with palms up for 10 seconds

c. Abnormal speech
d. Sudden numbness or weakness in face, arm or leg (especially one side of the body)
e. Sudden confusion
f. Sudden severe headache

13. Call the RRT immediately. Notify the RRT of possible stroke.
14. Assess the patient using a stroke screening tool and give oxygen as needed.
15. Protect patient and support ABC's (airway, breathing, and circulation).
16. Transport the patient as quickly as possible.
17. Assess neurological status while the patient is being transported. Provide patient status/paperwork to the transport team.

Psychiatric (suicidal ideation)

18. Assess the situation and determine if staff or patients are in immediate danger.
19. Call the RRT immediately.
20. Contact the Medical Director or on-call physician if patient has expressed threats of suicide or suicidal ideation.
21. Remain calm, listen attentively to the patient, and do not offer advice.
22. Keep the patient within view at all times.
23. Once ER personnel transport patient, provide copies of all PHI to go with the patient, if possible.
24. Document all information related to the situation in the patient medical record.

Environmental Emergencies

25. Code Red- Fire Rescue, Activate Alarm, Contain, Extinguish /Evacuate (RACE). Pull, Aim, Squeeze, Sweep, (PASS). Sleep Lab staff will follow Code Red-Fire Response Procedure No: LS-08-001
26. Code Blue- Medical Emergency Cardiac Arrest team responds to affected department.
27. Code Black- Bomb threat see Procedure No: EP-08-004
28. Code Brown-Missing patient see Procedure No: SM-08-004
29. Code Adam- Infant or child abduction see Procedure No: SM-08-002
30. Code Green-Internal evacuation see Procedure No: EP-08-005
31. Code Violet-Violent situation see Procedure No: EP-08-015
32. Code Copper-Communication involving Utility Failure see Procedure No: EP-08-014
33. Code White -Snow/Transportation Emergency see Procedure No: EP-08-008
34. Code Gray-Severe Weather/ Tornado see Procedure No: EP-08-002
35. Code Orange- Chemical, Biological, or Radiation Incident see Policy No: EP-08-003
36. Code Yellow-Mass Casualty Disaster see Procedure No: EP-08-001

    Tornado Watch- Conditions are favorable for a tornado
    Tornado Warning- Tornado(s) have been spotted in the area- Move patients to safety.
    All Clear Code _____- Emergency Code situation has been released and cleared. Return to normal duties.

Medical emergency during HSAT

37. Sleep technician instructing patient on application and use of device will instruct patient to contact 911 in the event of a medical emergency while using HSAT.

Approved by:		**Review/Revision Date:** 03/23
/s/ Michael Taylor Director, Pulmonary Services	3/20/2023 Date	
/s/ Andre Aguillon, M.D. Medical Director	3/19/2023 Date	
/s/ Russell Smith Senior Hospital Administrator	3/20/2023 Date	
Review/Revision Completed By: *Director, Sleep Disorders Center*		**Next Review Date: 03/26**
Policies Superseded by This Policy:		

It is the responsibility of the reader to verify with the responsible agent that this is the most current version of the policy.