MSHVFAS - BLS Utilization of ALS

1. Policy Statement:

- **Purpose:** The Millburn-Short Hills Volunteer First Aid Squad has reviewed the current practices for patients that are dispatched as ALS calls and after appropriate assessment, ALS is cancelled. The goal of this document is to improve patient care and outcomes by identifying those patients at higher risk for deterioration and require further advanced prehospital care and/or monitoring.

- **Policy:**

  - Since, no protocol or guideline can anticipate every possible patient condition, clinical judgment is critical in the use of these guidelines.

  - If BLS staff makes patient contact, the patient will receive a full assessment. This requires a patient assessment by BLS. Patient contact is defined by NJAC 8:40.

  - For those patients who meet the criteria listed below, the expectation is that BLS crews will request ALS units or not cancel responding ALS units unless the BLS unit is closer to Emergency Department than to the responding ALS unit or meeting the ALS unit would require the BLS unit to drive away from the Emergency Department.

  - If after appropriate evaluation by the BLS crew, and application of the following guidelines, the patient is deemed to not require advanced prehospital care, the team must document the findings and rationale as to why the patient is safe to be transported without ALS in the electronic patient care report.

  - If there is any concern regarding the appropriateness of a patient disposition, the clinical team should err on the side of caution and ALS should be requested or not be cancelled.

  - All BLS cancellations of ALS will be reviewed through the QA process to determine if there are concerns for patient care or safety.

- **Procedure:**

1. **Cardiac / Chest Pain**

    a. Consistent or episodic chest or epigastric pain, pressure, tightness, burning, or discomfort ≥ age 35 or any age with cardiac risk factors including but not limited to: diabetes, hypertension, high cholesterol, obesity, smoking history, family history of early cardiac disease/death, and/or history of illicit drug use

        - Note that if patients do not meet all the criteria above but there exists suspicion for possible cardiac etiology for the chest pain, still act in the best interest of the patient, request and / or keep ALS responding unless they are cancelled due to proximity or ALS availability.

2. **Respiratory**

    a. Respiratory distress (anything but normal, non-labored effort *regardless of rate*)

    b. Orthopnea (trouble breathing while lying flat)

    c. Dyspnea on exertion

    d. Abnormal lung sounds

3. **Neuro**

    a. New Onset Seizure irrelevant of suspected etiology

    b. Multiple or ongoing seizures

    c. Seizures during pregnancy

    d. Unilateral weakness, arm drift, speech abnormality, facial droop within 24 hours

    e. Visual disturbances (sudden loss of vision in one or both, blurred vision, etc.)

    f. Ataxia or loss of coordination

    g. Acute alteration in mental status

4. **Syncope**

    a. Syncope, near-syncope, or any loss of consciousness within 24 hours excluding patients less than 35 years old without a cardiac history, if the history is unknown err on the side of the patient and assume there is one.

5. **Pediatrics**

    a. Any caregiver-described signs of a possible Apparent Life-Threatening Event (ALTE) in children <1 year of age including: a period of apnea, skin color change, change in muscle tone, choking or gagging:

        1. Infant apnea is defined by the American Academy of Pediatrics as "an unexplained episode of cessation of breathing for 20 seconds or longer, or a shorter respiratory pause associated with bradycardia, cyanosis, pallor, and/or marked hypotonia."

    b. Fever in any neonate (<28 days of age) regardless of suspected cause

6. **Hypoglycemia**

    a. Any patient that experienced a hypoglycemic episode and is being transported to the hospital should be assessed by ALS.

7. **ETOH**

    a. As alcohol has the potential to change patient perception, extreme caution is needed in the assessment of patients with any concerns of alcohol use/intoxication. Furthermore, marked decrease in mental status/GCS in a patient needs to be managed like any other patient with an altered mental status. A full assessment of an ETOH patient will be expected. The following patients should be considered for ALS treatment:

        1. Combative/agitated and needing sedation
        2. Trauma that meets the criteria for trauma center transport in the presence of ETOH intoxication
        3. Airway compromise due to altered mental status
        4. Hypoglycemia

8. **Anxiety**

    a. Using a working diagnosis of **Anxiety** in any patient, without previous clinical diagnosis or treatment, should be used with extreme caution as the likelihood of new onset without previous diagnosis is low. Additionally, the

potential for the patient being anxious or demonstrating signs and symptoms that can be interpreted as anxiety from an alternate underlying condition, including those that may be life-threatening, is significant.

b. Prior to concluding that the patient's presentation is due to anxiety, consider the possible underlying conditions i.e., underlying cardiac/pulmonary condition, infection/sepsis, hypoglycemia, condition causing metabolic acidosis, etc.

9. Language/communication barriers

a. Caution should be given to patients for whom a full detailed assessment cannot be completed such as in the presence of a language barrier or communication issue.

1. Utilize interpretation services offered through dispatch.

10. Medications administered by BLS or others:

a. **Epinephrine for anaphylaxis:** Due to the potential that the half-life of epinephrine is shorter than the condition that necessitated its administration, those patients who received epinephrine prior to the arrival of an ALS unit should be treated by the ALS unit during transport to the hospital. Also, additional considerations need be given to those patients who received these medications, with unclear indication, that are prone to potential side effects such as cardiac conditions including dysrhythmias and ischemia. This includes administration to patients with no clear anaphylaxis prior to administration. The potential side effects of the misadministration of Epinephrine warrant an ALS treat/monitoring.

b. **Naloxone:** Due to the potential that the half -life of naloxone is shorter than the half- life of the agents that necessitated its administration, those patients who received naloxone prior to the arrival of an ALS unit should be treated by the ALS unit during transport to the hospital. Additionally, consider the effects of agents that may have adulterated the narcotics used by the patient.

c. **Nebulized bronchodilator/MDI:** Due to the potential that the underlying etiology of dyspnea will outlast the effects of the medication or have incomplete resolution of the condition, any patient who had a complaint of dyspnea prior to the use of nebulizer and/or MDI should be treated by the

ALS unit during transport to the hospital.

d. **Nitroglycerin:** If the reason the patient administered nitroglycerin was presumed by the patient to be cardiac, the patient should be treated by the ALS unit during transport to the hospital.

e. **Diastat:** Any patient who experienced a seizure and has Diastat administered should be treated by the ALS unit during transport to the hospital.

11. Vitals signs outside of normal limits (see attached table with normal vital signs):

a. The following is guidance regarding the expectation of patients who will be treated by the ALS unit during transport to the hospital who have vital signs outside of the listed ranges.

b. While vital signs alone should not be used as criteria for inclusion/exclusion, a release of patient with abnormal vital signs should be taken with caution. Clinicians are expected to consider the underlying etiology when evaluating vital signs:

c. A complete physical assessment and history on all patients including an EKG rhythm strip must be performed on all patients being triaged to BLS. This includes:

1. Two complete sets of vital signs at least 5 (five) minutes apart

2. Documentation of a room air SpO_2 or corresponding SpO_2 on supplemental oxygen if that is the patient's baseline condition. If the patient is on oxygen upon ALS arrival, and not on chronic O2, room air should be measured at least 3 minutes post removal of the supplemental oxygen.

    - If a low SPO2 was obtained by BLS or staff prior to applying O2, utilize that number instead of taking the patient off of the O2.

3. Assessment and documentation of a blood glucose level for all patients with suspected seizure or altered mental status.

4. Any omissions to this policy must be documented on the patient care report with the rationale.

Adult Vital Signs

	Guidelines		
	Minimum	Maximum	Additional Consideration
Level of consciousness / GCS=	15	-	• GCS<15 without dementia or chronic confusion history • Any change from baseline per family, caregiver, etc.
Respiratory rate	10	24	RR outside range listed Any lung sounds but normal • SpO2<94% on room air without known history of baseline
Pulse Rate	50	120	• Any accompanying feeling of palpitations or fluttering sensation • New onset of irregular heart rate
Systolic Blood Pressure	100	180	• Presence of Systolic Blood pressure above listed high when any symptom consistent with elevated intracranial pressure such as headache or nausea is present
Diastolic Blood Pressure	50	120	DBP outside range listed

Normal Pediatric Vital Signs

Age Groups	Respiratory Rate	Hear	Systolic BP
Newborn	30-50	120-160	>60