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# EMERGENCY MEDICAL SERVICES POLICIES and PROCEDURES

# **BRIEF RESOLVED UNEXPLAINED EVENT (BRUE)**

- **I. Purpose:** To define and provide guidelines for the identification and management of pediatric patients with a Brief Resolved Unexplained Event (BRUE).
- II. Authority: Health and Safety Code, Sections <u>1797.220</u> and <u>1798</u>

#### **III. Definitions:**

A. Brief Resolved Unexplained Event (BRUE) – A transient event with no clear cause that is frightening to the observer and consists of a combination of apnea, color change, muscle tone change, and choking, or gagging in an infant (< one year of age).

## IV. Policy:

- A. A BRUE is any episode that is frightening to the observer that results in contacting Emergency Medical Services for further evaluation.
- B. EMS Personnel will provide supportive care. Treatment provided will generally be symptom-dependent, so a complete set of vital signs and a thorough assessment must be performed.
- C. Paramedics must establish Base Hospital Contact for all BRUEs.
  - 1. If parents refuse transport, Paramedics must complete an Against Medical Advice (AMA) ePCR AND establish Base Hospital Contact.

#### V. Procedure:

- A. Assessment
  - 1. For any patient 12 months or under with a chief complaint including symptoms such as:
    - a. Marked change or loss in muscle tone (hyper or hypotonia)
    - b. Color change (cyanosis, pallor, erythrism, plethora)
    - c. Absent, decreased, or irregular breathing
    - d. Loss of consciousness or altered level of consciousness
  - 2. History of any of the following
    - a. Absent, decreased, or irregular breathing
    - b. Loss of consciousness or other altered level of responsiveness
    - c. Color change
    - d. Loss in muscle tone
    - e. Episode of choking or gagging
    - f. Determine the severity, nature, and duration of the episode
      - i. Was the child awake or sleeping at the time of the episode?
      - ii. What resuscitative measures, if any, were taken?
  - 3. Obtain a complete medical history to include:
    - a. Known chronic diseases?
    - b. Evidence of seizure activity?
    - c. Current or recent infections?
    - d. Recent trauma?

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#### SANTA BARBARA COUNTY EMERGENCY MEDICAL SERVICES AGENCY

## BRIEF RESOLVED UNEXPLAINED EVENT (BRUE)

- e. Medication history?
- f. Known gastroesophageal reflux or feeding difficulties?
- g. Unusual sleeping or feeding patterns?

## B. Treatment

- 1. Assume the history given is accurate
- 2. Perform a comprehensive physical assessment that includes general appearance, skin color, extent of interaction with the environment, and evidence of current or past trauma. **Note: Exam May Be Normal.**
- 3. Treat any identifiable causes as indicated.
- 4. Transport.

**Note**: Base Hospital Contact is required if parents refuse transport (perform AMA with Base Hospital Contact).

### C. Precautions and Comments

- In most cases, the infant/child will have a normal physical exam when assessed by prehospital personnel. The parent/caregiver's perception that "something is or was wrong" must be taken seriously.
- Approximately 40-50% of BRUE cases can be attributed to an identifiable cause(s) such as child abuse, swallowing dysfunction, gastroesophageal reflux, infection, bronchiolitis, seizures, CNS anomalies, cardiac disease, chronic respiratory disease, upper airway obstruction, metabolic disorders, or anemia. The remaining causes have no known etiology.
- 3. Be cognizant that there may be various reasons for a parent/guardian to decline transportation after the child has experienced a BRUE. It is imperative that a thorough assessment is performed. If child abuse is suspected, report findings to Base Hospital, and contact law enforcement.

### VI. References:

A. BRUE and Evaluation of Lower-Risk Infants

VII. Attachments: None