Adult Status Epilepticus Protocol*

**Impending SE**
≥5 minutes of continuous seizure activity or repeated episodes without return to baseline

**Monitor:**
- Airway
  - Non-invasive airway protection: suction, O2, airway positioning
- Breathing
- Circulation

**Workup:**
- Fingerstick glucose
- STAT sodium

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<tr>
<th>IV Access? (2x lines preferred)</th>
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<td>Yes</td>
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**Established SE**
Seizure continues after bolus dosing of benzodiazepine therapy

**Monitor:**
- Airway
  - Prepare to intubate patient
- Breathing
- Circulation

**Workup:**
- CBC, CMP, serum AED levels
- Head CT, EEG (obtain for any first time seizure)
  - If febrile, LP & blood culture

**Consult:**
- Neurology

**Intervention:**
- Treat possible etiologies

Repeatability or Progress to Second Line Therapy

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<th>Single bolus dose of one of the following:</th>
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<tr>
<td>Fosphenytoin IV** or Levitiracetam IV or Valproic Acid IV*** or Home AED</td>
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<td>20 mg/kg, max 1500 mg or 40 mg/kg, max 4500 mg or 30 mg/kg, 3000 mg max or bolus dosing</td>
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**Refractory SE**
Seizure activity continues after bolus dosing of benzodiazepine and second line therapy

**Monitor:**
- Airway
  - Intubate patient
- Breathing
- Circulation
- Continuous EEG

**Intervention:**
- Titrate drip to achieve seizure activity-free cEEG
- Ensure adequate access (consider central venous line)

**Patient intubated?**
Yes

- Re-bolus any of the second line therapies & intubate

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<th>Midazolam IV or Propofol IV**** or Phenobarbital</th>
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<td>0.2 mg/kg or 1-2 mg/kg, ≤80 mcg/kg/min or 20 mg/kg single bolus</td>
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**Titration / Breakthrough SE:**
- 1-10 mg/hr, titrate by 1 mg/hr
- 5-80 mcg/kg/min, titrate by 5-10
- RN titrated, >10 mg/hr by physician, mcg/kg/min every 5-10 minutes
- RN titrated, bolus restricted to physician

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* Protocol intended to guide treatment of status epilepticus in adult patients not due to toxic etiology
** Fosphenytoin max rate is limited to 150 mg/min
*** Valproic acid should not be used if patient has liver or metabolic diseases
**** High dose, long duration propofol drips must be monitored for propofol-related infusion syndrome
This guideline was ratified by the emergency department faculty at Maine Medical Center in December, 2018. It reflects our expert opinion and is not necessarily applicable to all institutions. It is intended to be a reference for clinicians caring for patients and is not intended to replace providers’ clinical judgment.

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