

Treatment of 1st Time Seizure

Clinical Guideline

This guideline supports initial treatment of patients with 1st time seizure and includes information for referral to the Children’s Wisconsin Neurology Clinic.

To support collaborative care, we have developed guidelines for our community providers to use when referring to, and managing patients with, the pediatric specialists at Children’s Wisconsin.

These guidelines provide information and recommendations for jointly managing patient care between community providers and our pediatric specialists.

Symptoms/Diagnosis/Causes:	Referring provider’s initial evaluation and management:	When to initiate or consider referral to Neurology Clinic:	How to refer and what to send to Neurology Clinic:	Specialist’s workup will likely include:
<p>Signs and symptoms</p> <p>Symptoms before seizures (preictal)</p> <ul style="list-style-type: none"> Precipitating events: illness, trauma, toxins, sleep deprivation Preceding aura: strange smell or taste, change in vision, epigastric sensation Behavior/ mood before and after <p>Symptoms during seizure (ictal)</p> <ul style="list-style-type: none"> Retention or loss of awareness during event Cry, gasp, garbled or slurred speech Head and eye deviation, posturing, stiffening, rhythmic jerking Automatisms: purposeless repetitive movements (lip smacking, picking at clothes) Movements or whole body or focal Change in breathing or cyanosis Drooling, pupillary dilatation, incontinence <p>Symptoms after seizure (postictal)</p> <ul style="list-style-type: none"> Lack of recall of event, confusion, lethargy Nausea or vomiting Headache Muscle aches Transient focal weakness (Todd’s paralysis) 	<ul style="list-style-type: none"> See Diagnosis information on next page, left column 	<ul style="list-style-type: none"> Any first seizure outside of simple febrile seizure 3 or more simple febrile seizures Abnormal EEG <p>Urgent evaluation:</p> <ul style="list-style-type: none"> If seizure lasts > 5 minutes and/or child does not return to baseline 	<p>How to refer:</p> <ol style="list-style-type: none"> In Children’s Epic: place an ambulatory referral to Neurology. External providers: <ul style="list-style-type: none"> In your instance of Epic - Place an external referral order to CHW NEUROLOGY CLINICS or Fax (414-607-5288) or Online ambulatory referral <p>For urgent requests: Contact the Physician Consultation Line (414-266-2460).</p> <p>What to include in the referral:</p> <ul style="list-style-type: none"> Urgency of the referral What is the key question you would like answered? Chief complaint, onset, frequency Recent office, ED, inpatient notes related to seizure Imaging results Any other pertinent diagnostics 	<ul style="list-style-type: none"> EEG Imaging Potentially labs

Treatment of 1st Time Seizure

Clinical Guideline

Symptoms/Diagnosis/Causes:	Referring provider's initial evaluation and management:	When to initiate or consider referral to Neurology Clinic:	How to refer and what to send to Neurology Clinic:	Specialist's workup will likely include:
<p>Diagnosis</p> <ul style="list-style-type: none"> • EEG. CW schedulers will give pt/family instructions. • Laboratory tests: routine lab testing is not recommended, consideration for lab tests should be based on individual clinical circumstances. • Neuroimaging: consider for certain clinical circumstances such as focal neurological symptoms on examination, significant cognitive or motor impairment of unknown etiology, or seizures with partial onset <ul style="list-style-type: none"> ○ MRI- preferred modality on <i>non-urgent</i> basis ○ CT - only for emergent imaging when cannot obtain or wait for MRI (e.g., postictal persistent focal deficit, patient not returning to baseline, history of trauma) <p>Causes</p> <ul style="list-style-type: none"> • Hypoglycemia • Electrolyte disturbances infection • Trauma • Toxic exposure • Stroke • Acquired or genetic cause associated with an anatomic or pathologic abnormality such as developmental malformation or neurocutaneous syndrome 	<ul style="list-style-type: none"> • See Diagnosis information in left column 	<ul style="list-style-type: none"> • See above 	<ul style="list-style-type: none"> • See above 	<ul style="list-style-type: none"> • See above

Treatment of 1st Time Seizure

Clinical Guideline

References

Hirtz D, Ashwal S, Berg A, Bettis D, Camfield C, Camfield P, Crumrine P, Elterman R, Schneider S, Shinnar S. Practice parameter: evaluating a first nonfebrile seizure in children: report of the quality standards subcommittee of the American Academy of Neurology, The Child Neurology Society, and The American Epilepsy Society. *Neurology*. 2000 Sep 12;55(5):616-23. doi: 10.1212/wnl.55.5.616. PMID: 10980722.

Please contact clinicalguidelines@childrenswi.org for questions or comments.

Original: 12/2023

Revision Date: 1/2026 - summary of revision (e.g., formatting, addition of urgent referral criteria)

Approved by the authors below on 03/01/2026

Approved by: Specialty Medical Leader, CSG Clinical Integration, Primary Care Clinical Guidelines Core Team

Department	Name, credentials
Division of Child Neurology Department of Neurology, Owner	Lileth Mondok, MD

Medical Disclaimer

This Clinical Guideline (CG) is designed to provide a framework for evaluation and treatment. It is not intended to establish a protocol for all patients with this condition, nor is it intended to replace a clinician's judgement. Adherence to this CG is voluntary. Decisions to adopt recommendations from this CG must be made by the clinician in light of available resources and the individual circumstances of the patient. Medicine is a dynamic science; as research and clinical experience enhance and inform the practice of medicine, changes in treatment protocols and drug therapies are required. The authors have checked with sources believed to be reliable in their effort to provide information that is complete and generally in accord with standards accepted at the time of publication. However, because of the possibility of human error and changes in medical science, neither the authors nor Children's Hospital and Health System, Inc., nor any other party involved in the preparation of this work warrant that the information contained in this work is in every respect accurate or complete, and they are not responsible for any errors in, omissions from, or results obtained from the use of this information.