Pediatric Pulmonology and Sleep
Consult and referral guidelines

Introduction

We care for children and teens from birth to 18 years. The most common reasons patients are referred include:

- Recurrent cough or wheeze
- Recurrent bronchiolitis or bronchitis
- Difficult-to-control asthma
- Bronchopulmonary dysplasia, chronic lung worsening
- Recurrent pneumonia, tachypnea
- Noisy breathing
- Cystic fibrosis
- Sleep apnea/sleep disorders
- Technology Dependent–Ventilator or CPAP

We want to make referrals easy, fast and efficient for primary care providers. This tool was developed to help create productive visits for you and your patient.

Each guideline includes three sections: suggested workup and initial management, when to refer and information needed. Suggested workups may not apply to all patients, but these are studies we generally consider during office visits.

Feedback regarding these guidelines is encouraged. Please contact HDVCH Direct to share feedback.

For access to all pediatric guidelines, visit **helendevoschildrens.org/guidelines**

Appointment priority guide

Immediate	Call HDVCH Direct and/or send to the closest emergency department. Contact HDVCH Direct at 616.391.2345 and ask to speak to the on-call pulmonologist.
Urgent	Likely to receive an appointment within 2 days. Call HDVCH Direct and ask to speak to the on-call pulmonologist regarding an urgent referral.
Routine	Likely to receive an appointment within 14 days. Send referral via Epic Care Link, fax completed referral form to 616.2672401 or send referral through Great Lakes Health Connect.

Diagnosis/symptoms	Suggested workup/initial management	When to refer	Information needed
Recurrent Cough or Wheeze **Recurrent Bronchiolitis or Bronchitis**	Chest X-ray: PA and lateral Sweat chloride at an accredited CF Center Consider trial of bronchodilators at any age If non-responsive to bronchodilators, consider trial of oral and/or inhaled corticosteroids or montelukast (if age appropriate Oral prednisone is typically dosed ~2mg/kg/day x 5 days	Hospitalization Intubated/ICU admission ER visits Frequent need for oral steroid bursts Age < 2 years Unresponsive to usual therapy with increasing medication use Complicating conditions such as rhinitis, sinusitis, GE-reflux, and/or pneumonia Abnormal spirometry or needs frequent monitoring with spirometry History of chronic lung disease, prematurity, S/P RSV	Referral to include chief concern, summary of previous treatments and response, respiratory history since birth, all lab results, all chest films If sweat chloride test was obtained, must be from a CF Center accredited lab

Diagnosis/symptoms	Suggested workup/initial management	When to refer	Information needed
Difficult-to-Control Asthma	Chest X-ray: PA and lateral Consider upper GI and/or video fluoroscopic swallow study Consider allergy evaluation	Has been hospitalized Intubated/ICU admission ER visits Frequent need for oral steroid bursts Age < 2 years Unresponsive to usual therapy with increasing medication use Complicating conditions such as rhinitis, sinusitis, GE reflux and/ or pneumonia Abnormal spirometry or needs frequent monitoring with spirometry History of chronic lung disease, prematurity S/P RSV	Referral to include chief concern, summary of previous treatments and response, respiratory history since birth, all lab results, all chest films If sweat chloride test was obtained, must be from a CF Center accredited lab
Bronchopulmonary Dysplasia, Chronic Lung Disease (Worsening Respiratory Status for BPD)	Chest X-ray: PA and lateral Consider upper GI and/or video fluoroscopic swallow study	Unstable respiratory status or is slow to improve Oxygen requirement Difficulty growing or feeding Problem feeding or G-tube Re-hospitalization after discharge Inability to wean medications and/or oxygen	Referral to include these items, if obtained outside of Spectrum Health: SaO2, echocardiograms, growth and development evaluations, all lab results post-discharge, chest films, current treatments and response, current oxygen requirements, NICU discharge summary

Diagnosis/symptoms	Suggested workup/initial management	When to refer	Information needed
Recurrent Pneumonia, Tachypnea	Chest X-ray: PA and lateral, if ruling out CF Sweat chloride at an accredited CF Center Consider upper GI Consider cardiology consult	Recurrent illness despite treatment Increasing respiratory symptoms Symptoms that interfere with daily activities Respiratory symptoms/infections and problems with growth and/or development	Referral to include brief pre/ postnatal history, growth history, list of treatments and response, current treatments If sweat chloride test was obtained, must be from a CF Center accredited lab
Noisy Breathing	Babies under1 year with noisy breathing should see an ENT first		
Positive Cystic Fibrosis Newborn Screen From the State of Michigan: Elevated IRT plus 1 or more identified CF mutations	None needed In the rare circumstance of a suspected bowel obstruction or respiratory	As soon as the PCP receives a positive screen from the State of Michigan, please call HDVCH Direct and fax sweat chloride prescription to (616 267-2661. Pulmonary and genetic counselor appointments will be coordinated during that call. Appointments typically occur within 24 - 72 hours	Referral to include request for consultation, pertinent history and physical, sweat chloride, if ordered
Sleep Apnea/Sleep Disorders Including snoring, insomnia and hypersomnia	Consider treatment for allergic rhinitis or sinusitis first Consider ENT referral Sleep diary	Any symptom of sleep difficulties including sleep disordered breathing, daytime or nighttime symptoms Growth delay Nocturnal enuresis (only if associated with sleep disordered breathing)	Referral to include chief complaint, pertinent history and physical, growth grid, treatments pursued and responses, any lab results, prior ENT evaluations, sleep evaluations/studies
Technology Dependent Ventilator/CPAP		Please call HDVCH Direct for provider to provider referral	

Pulmonary Function Tests

To request PFTs, please consider the following within your request:

- Baseline spirometry–minimum age 5 years
- Spirometry with pre- and post-bronchodilator–administer bronchodilator only if baseline can be performed
- Spirometry with lung volumes and airway resistance–minimum age 7 years
- Spirometry with pre and post lung volumes and airway resistance–minimum age 7 years

For referral options, please see page 1.

HDVCH Direct phone: 616.391.2345