

Pediatric Infectious Disease

Consult and referral guidelines

Introduction

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

- Chronic or recurrent infections
- Chronic or recurrent fevers
- Recurrent sinopulmonary or otitis infections
- Immunodeficiency evaluation and care
- Chronic Hepatitis B management
- Hepatitis C (chronic infection management and evaluation of infants born to Hepatitis C positive mothers)
- HIV management and care (including care for infected children, perinatal evaluation, and non-occupational postexposure prophylaxis [nPEP])
- Histoplasmosis
- Lyme Disease
- Recurrent Methicillin Resistant Staphylococcus Aureus (MRSA) infections
- Travel Medicine Clinic (adult and pediatrics)
- Adoption counseling for adoptees with HIV, Hepatitis B or Hepatitis C

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 work-up and initial management, when to refer, and information needed. Suggested work-ups 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 and type “guidelines” in the search field.

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 physician.
Urgent	Likely to receive an appointment within 2 days. Call HDVCH Direct and ask to speak to the on-call Infectious Diseases physician regarding an urgent referral.
Routine	Likely to receive an appointment within 7 days. Send referral via Epic Care Link, fax completed referral form to (616) 267-2301, or send referral through Great Lakes Health Connect.

Diagnosis/symptoms	Suggested work-up/initial management	When to refer	Information needed
General referrals			Records including growth chart, immunizations, previous cultures with sensitivities, CBC, and radiographic studies
Chronic or recurrent Infections	Detailed history of infectious history, IgG (subclasses note recommended), IgA, IgM levels, CBC, culture results		See General Referrals Antibiotic courses given Any positive family history for immune deficiencies
Chronic or recurrent Fevers	Detailed history of fever episodes with associated symptoms/signs, fever log, CRP, ESR and culture results (while febrile and afebrile)	Ongoing fevers for more than 3 episodes, or concerning associated symptoms	See General Referrals Antibiotic courses given Any positive family history for periodic fevers
Recurrent sinopulmonary or otitis infections	Consider ENT evaluation before referral or concurrently Evaluation for atopy, cultures and sensitivities IgG, IgA and IgM levels		See General Referrals Antibiotic courses given ENT notes, Pulmonology notes, and Allergy notes

Diagnosis/symptoms	Suggested work-up/initial management	When to refer	Information needed
Immunodeficiency evaluation and care	<p>IgG, IgM and IgA levels, CBC with differentials</p> <p>Documentation of infections with unusual or opportunistic organisms (pneumocystis jiroveci pneumonia, mycobacterium, candida infections in older children)</p>	<p>If there is recurrent or persistent infections, an unusual organism causing infection, severe course of a typically mild infection, or family history of immunodeficiency.</p> <p>If the State Newborn Screen for SCIDS is positive immediately call HDVCH Direct and ask for the <i>Pediatric Allergy and Immunology Physician</i> on call. If they cannot be reached, the Pediatric Infectious Diseases Physician can take the call.</p>	<p>See General Referrals</p> <p>Immunoglobulin levels, FISH 22q11 if DiGeorge, any flow cytometry results if performed</p>
Chronic Hepatitis B management	<p>Hepatitis B viral load, Hepatitis Be antigen/antibody, complete metabolic profile, alpha fetoprotein level, CBC, Hepatitis C testing, HIV testing</p>	<p>When a pediatric patient is identified as having positive hepatitis B</p>	<p>See General Referrals</p> <p>Previous or current antiviral therapy</p> <p>Adoption or refugee papers if an international immigrant</p> <p>Any liver ultrasound studies</p>
Mom with diagnosis of Hepatitis C	<p>C18 differential test</p>		
Chronic Hepatitis C management	<p>After the child has been identified as having Hepatitis C: Hepatitis C viral load, Hepatitis C antibody, complete metabolic profile, alpha fetoprotein level, CBC, hepatitis B testing, HIV testing</p> <p>Nucleic acid viral load if child is younger than 18 months</p>	<p>When a pediatric patient is identified as having positive hepatitis C, or was born to a hepatitis C positive mother</p>	<p>See General Referrals</p> <p>Any liver ultrasound studies</p>

Diagnosis/symptoms	Suggested work-up/initial management	When to refer	Information needed
<p>HIV management</p> <p>Care for infected children</p> <p>Perinatal evaluation</p> <p>Non-occupational post-exposure prophylaxis (nPEP)</p> <p>Pre-exposure prophylaxis (PrEP)</p>	<p>HIV antibody, HIV viral load, CD4 count, CBC with differential, complete metabolic profile</p> <p>HIV DNA RNA, PCR, CBC with differential, complete metabolic profile</p> <p>HIV antibody, CBC with differential, complete metabolic profile, Hepatitis C antibody, Hepatitis B surface antibody, Hepatitis B surface antigen</p> <p>HIV antibody, CBC with differential, complete metabolic profile</p>	<p>When a pediatric patient is identified as having HIV, including international adoptees and refugees</p> <p>When an infant is born to a mother with known or suspected HIV infection</p> <p>When a child is exposed to blood or body fluids – including sexual assault - that is potentially contagious for HIV, as well as Hepatitis B and C</p> <p>When an HIV-negative adolescent or teenage has increased risk of HIV infection, and desires preventative medication</p>	<p>Initial management labs, previous and current antivirals, prior or current opportunistic infections, developmental status, psychiatric comorbidities, nutritional status</p> <p>Maternal HIV testing results, maternal treatment history, history of maternal comorbidities</p> <p>Prior testing results for HIV, Hepatitis B, Hepatitis C, Hepatitis B vaccine receipt, time of exposure</p> <p>Prior testing results for HIV and sexually-transmitted infections</p>
<p>Histoplasmosis</p>	<p>Histoplasma serologies, Histoplasma urine antigen, complete metabolic profile, chest x-ray and/or thoracic CT scan</p>	<p>If symptomatic for more than 1 month or has pulmonary nodules</p>	<p>See General Referrals</p> <p>Chest radiographic studies and Histoplasma labs</p>
<p>Lyme Disease</p>	<p>Lyme Disease Serology first</p> <p>Second, confirmatory IgG and IgM Western Blot results (HDVCH currently sends to Mayo Clinic)</p> <p>If patient has Erythema migrans bullseye rash, and reasonable exposure history, testing does not need to be performed and treatment should be given immediately</p>	<p>Treated patients without symptoms do not need to be referred</p> <p>Refer to AAP Redbook for recommended antibiotic treatment</p> <p>Patients with ongoing or recurrent symptoms after initial treatment should be referred</p>	<p>See General Referrals</p> <p>Lyme testing results from a laboratory that uses FDA approved assays, previous treatment courses</p>

Diagnosis/symptoms	Suggested work-up/initial management	When to refer	Information needed
Recurrent MRSA infections	Culture of abscess material with sensitivities, treatment with Bactrim or clindamycin Refer to AAP website for bleach bath protocol	When patient has multiple infections in a short period of time or if multiple family members are having infections	See General referrals Culture results with sensitivities
Travel Medicine Clinic	None	When children, adolescents, teens and even parents will be traveling abroad We care for the whole family and can accommodate travelers with special needs and chronic health conditions	Prior vaccinations, including routine and travel vaccines Anticipated travel destinations and dates of travel - it is preferable to be seen 6 to 8 weeks before arrival in country in order for travel immunizations to be effective The cost of visits is not covered by insurance and will need to be paid out of pocket
Adoption counseling for adoptees with HIV, Hepatitis B or Hepatitis C	Parents considering adoption of a child with one of these infections can have a meeting with a Pediatric Infectious Diseases physician to review available medical records We will also discuss treatment options, prognosis and long term care issues	When a potential adoptee with one of these conditions is being considered	Any medical records that were provided by the adoption agency The cost of these visits is not covered by insurance and will need to be paid out of pocket

HDVCH Direct phone: (616) 391-2345

HDVCH developed these referral guidelines as a general reference to assist referring providers. Pediatric medical needs are complex and these guidelines may not apply in every case. HDVCH relies on its referring providers to exercise their own professional judgment with regard to the appropriate treatment and management of their patients. Referring providers are solely responsible for confirming accuracy, timeliness, completeness, appropriateness and helpfulness of this material and making all medical, diagnostic and prescription decisions.