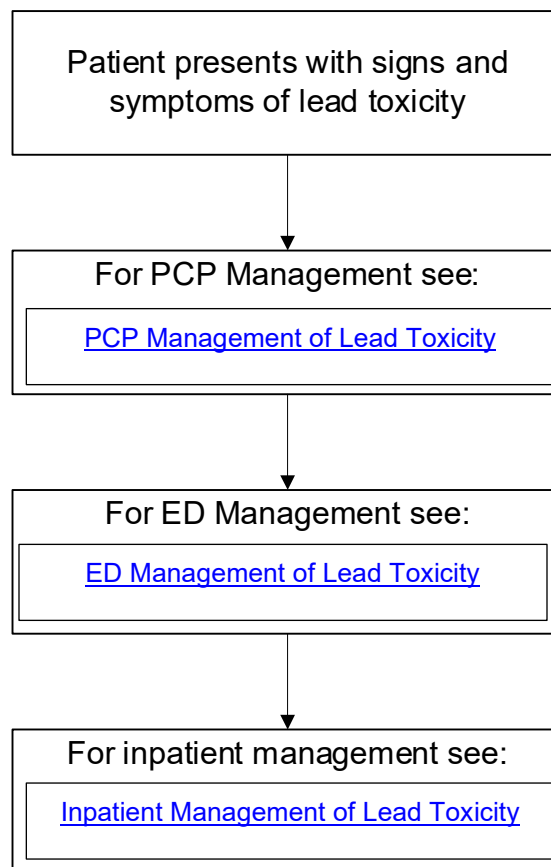


## Guideline: Pediatric Lead Toxicity Evaluation and Management, Inpatient/Outpatient

Last updated: 4/23/2021

### Clinical algorithm:



## **Clinical guideline summary**

**CLINICAL GUIDELINE NAME:** Pediatric Lead Toxicity Evaluation and Management

**PATIENT POPULATION AND DIAGNOSIS:** Patients <18 years old

**APPLICABLE TO:** Helen DeVos Children's Hospital and SHMG Offices

**BRIEF DESCRIPTION:** Guideline for management of elevated lead levels in children < 18 years old.

**TEAM LEADER(S):** Jeri Kessenich & Brad Riley

**OWNING EXPERT IMPROVEMENT TEAM (EIT):** Pediatric Clinical Practice Guideline Group

**MANAGING CLINICAL PRACTICE COUNCIL (CPC):** Children's Health CPC

**CPC APPROVAL DATE:** 6/17/2021

**OTHER TEAM(S) IMPACTED** (Example: other CPCs, anesthesia, nursing, radiology, etc.):  
Nursing, Lab, MSW

**IMPLEMENTATION DATE:** 6/18/2021

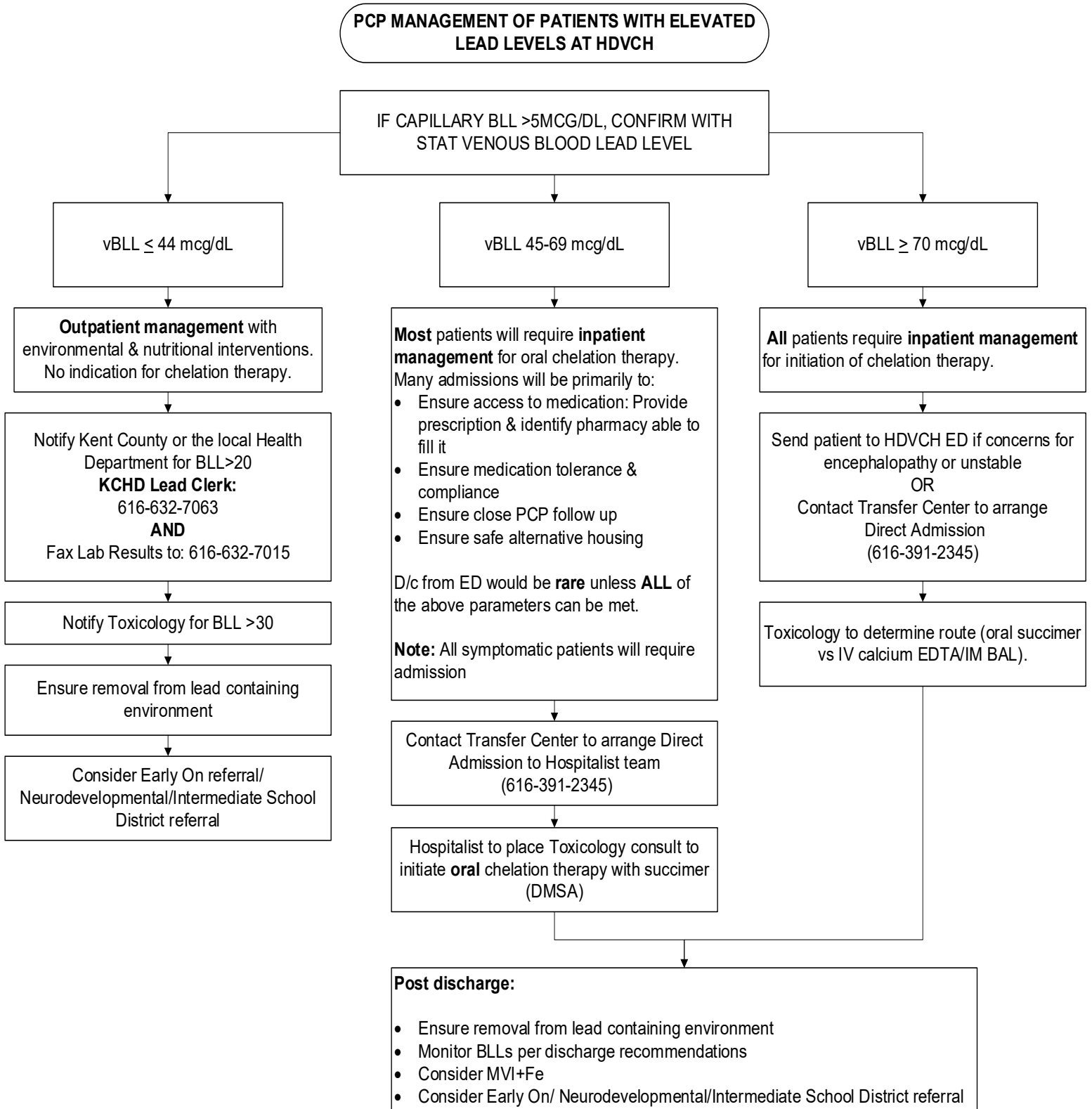
**LAST REVISED:** 4/23/2021

**FOR MORE INFORMATION, CONTACT:** Jeri Kessenich

# Clinical pathways clinical approach

## TREATMENT AND MANAGEMENT:

### PCP Management of Lead Toxicity



## ED Management of Lead Toxicity

### ED MANAGEMENT OF PATIENTS WITH ELEVATED LEAD LEVELS AT HDVCH

IF CAPILLARY BLL >5MCG/DL, CONFIRM WITH STAT VENOUS BLOOD LEAD LEVEL

vBLL ≤ 44 mcg/dL

**Outpatient management** with environmental & nutritional interventions. No indication for chelation therapy.

Notify Kent County or the local Health Department for BLL >20  
**KCHD Lead Clerk:**  
 616-632-7063  
**AND**  
 Fax Lab Results to: 616-632-7015

Notify Toxicology for BLL >30

Ensure removal from lead containing environment

Consider Early On referral/  
 Neurodevelopmental/Intermediate School District referral

vBLL 45-69 mcg/dL

**Most patients will require inpatient management** for oral chelation therapy. Many admissions will be primarily to:

- Ensure access to medication: Provide prescription & identify pharmacy able to fill it
- Ensure medication tolerance & compliance
- Ensure close PCP follow up
- Ensure safe alternative housing

D/c from ED would be **rare** unless **ALL** of the above parameters can be met.

**Note:** All symptomatic patients will require admission

Obtain CBC & CMP

Consult toxicology to verify need for admission and to initiate **oral** chelation therapy with succimer (DMSA)

**IF admission is required:**  
 Notify Hospitalist

**IF admission is NOT required:**

- Notify MSW, PCP, & Kent County or the local Health Department to aid in safe discharge planning
- Provide the following info to KCHD contacts below: Patient/Parent Name, Address, Contact Info, PCP, Lead Level, Treatment Plan & Hospital Contact (MSW or NCM)

**KCHD Lead Clerk:**  
 616-632-7063  
**AND**  
 Fax Lab Results to: 616-632-7015

vBLL ≥ 70 mcg/dL

**All patients require inpatient management** for initiation of chelation therapy.

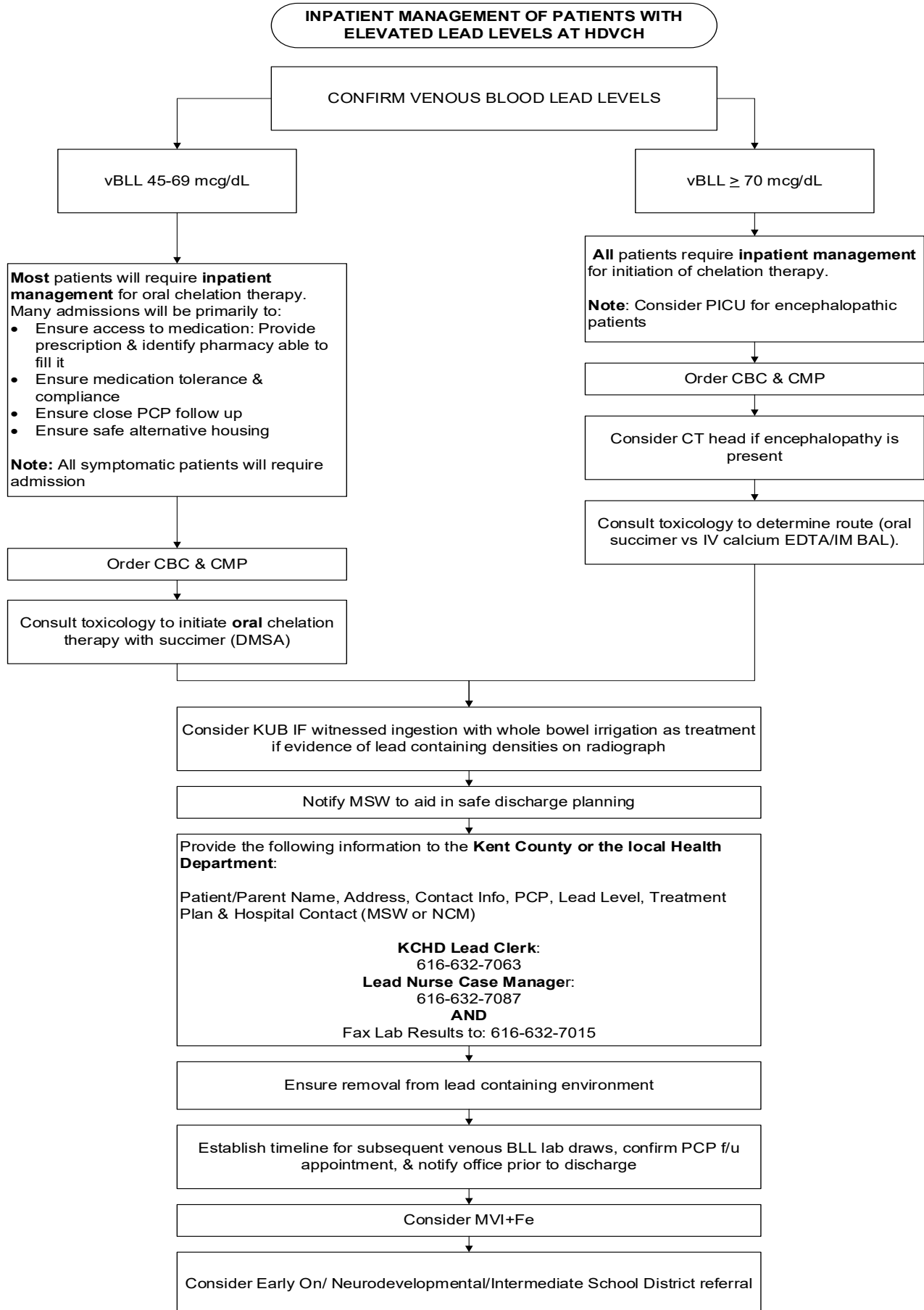
**Note:** Consider PICU for encephalopathic patients

Obtain CBC & CMP

Consult toxicology to determine route (oral succimer vs IV calcium EDTA/IM BAL).

Notify Intensivist/Hospitalist for admission

# Inpatient Management of Lead Toxicity



## References:

- AAP Policy Statement: Treatment Guidelines for Lead Exposure in Children. *Pediatrics* 1995; 96;155.
- California Poison Control System (2018). *Poisoning and Drug Overdose (Seventh Edition)*. K R Olson (Ed.). McGraw Hill Education.
- Centers for Disease Control and Prevention. Managing Elevated Blood levels Among Young Children, Chapter 3. Retrieved from <https://www.cdc.gov/nceh/lead/casemanagement/managingEBLLs.pdf>.
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