

ELABORATIONS

News and Issues for Washington's Clinical Laboratories

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Sodium Azide Explosion Hazard in Labs

by Nicole Rose, Department of Labor & Industries

Sodium, lead, and copper azides are highly sensitive, explosive substances.

Solutions containing sodium azide are used in certain hospital and clinical laboratory processes, such as those associated with hematology and immunology. It is used in instrument reagents and also as a preservative. If proper precautions are not taken, it can react violently with metal (e.g. drain pipes or lab instrumentation), causing serious injuries.

In April 2010, a maintenance worker was replacing a sink in a hematology lab. Laboratory staff had always kept a stream of running water in the sink to dilute and flush the sodium azide. However, the copper pipe had dried out during the replacement process. This allowed sodium azide residue to react with the pipe, forming lead and copper azides. While the maintenance worker was assembling the sink and drain pipe, the pipe exploded due to the friction and shock from the azides being disturbed. The maintenance worker sustained serious permanent injury from the incident.

Visit these resources to find out about steps you can take to prevent sodium azide-related explosions in your workplace:

[Explosive Azide Hazard \(NIOSH Current Intelligence Bulletin 13\)](#)

Sodium Azide Solutions: Potential for Explosions from Improper Handling and Disposal (FDA)

Prudent Practices in the Laboratory, Handling and Disposal of Chemicals, a book available through the [Washington State Library System](#) or [The National Academies Press](#).

Please share this bulletin with others in your industry and safety network.

For more information, contact Nichole Rose at Rose235@lni.wa.gov or (360) 902-5427.

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Practice Guidelines

The following practice guidelines have been developed by the Clinical Laboratory Advisory Council. They can be accessed at the following website:
www.doh.wa.gov/lqa.htm

Acute Diarrhea	Lipid Screening
Anemia	PAP Smear Referral
ANA	Point-of-Care Testing
Bioterrorism Event Mgmt	PSA
Bleeding Disorders	Rash Illness
Chlamydia	Red Cell Transfusion
Diabetes	Renal Disease
Group A Strep Pharyngitis	Renal Disease eGFR
Group B Streptococcus	STD
Hepatitis	Thyroid
HIV	Tuberculosis
Infectious Diarrhea	Urinalysis
Intestinal Parasites	Wellness

Laboratory Guidelines for Renal Disease Screening: eGFR

Guidelines developed by the Clinical Laboratory Advisory Council are listed on the first page of each issue of the Elaborations newsletter. This issue contains the Laboratory Guidelines for Renal Disease Screening on page three.

A critical area of concern in the current cost-conscious health care environment is optimization of service delivery. Over-utilization of laboratory testing can lead to unneeded and costly treatments for the patient. Under-utilization can result in a misdiagnosis and delays in treatment.

The Council established a process to develop practice guidelines for clinical laboratory testing. The guidelines help laboratorians answer questions on appropriate test ordering. Clinicians use them as a review of a typical test-ordering pattern for asymptomatic patients. They are a compilation of existing data, not original work by the Council.

The Council elected to summarize the information into simple, easy-to-use flow-charts. Once it identifies a test as a candidate for a guideline, the Council forms a workgroup to develop a proposed guideline. The entire Council,

members of the state's laboratory community, and appropriate medical professional societies review the draft guideline. The workgroup evaluates the comments from the reviewers and incorporates them into the final document. The Council sends the guidelines to all clinical laboratories and other interested parties through this newsletter.

For educational purposes only: Clinicians should use these guidelines strictly as guidelines. The individual clinician is in the best position to determine which tests are most appropriate for a particular patient.

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NOTE: Letters to the editor may be published unless specified otherwise by the author.

Website addresses:

DOH home page: <http://www.doh.wa.gov>
LQA home page: <http://www.doh.wa.gov/lqa.htm>
PHL home page:
<http://www.doh.wa.gov/EHSPHL/PHL/default.htm>

18th Annual Clinical Laboratory Conference

November 7, 2011
8:00 a.m. - 4:30 p.m.

Tukwila Community Center
Tukwila, WA

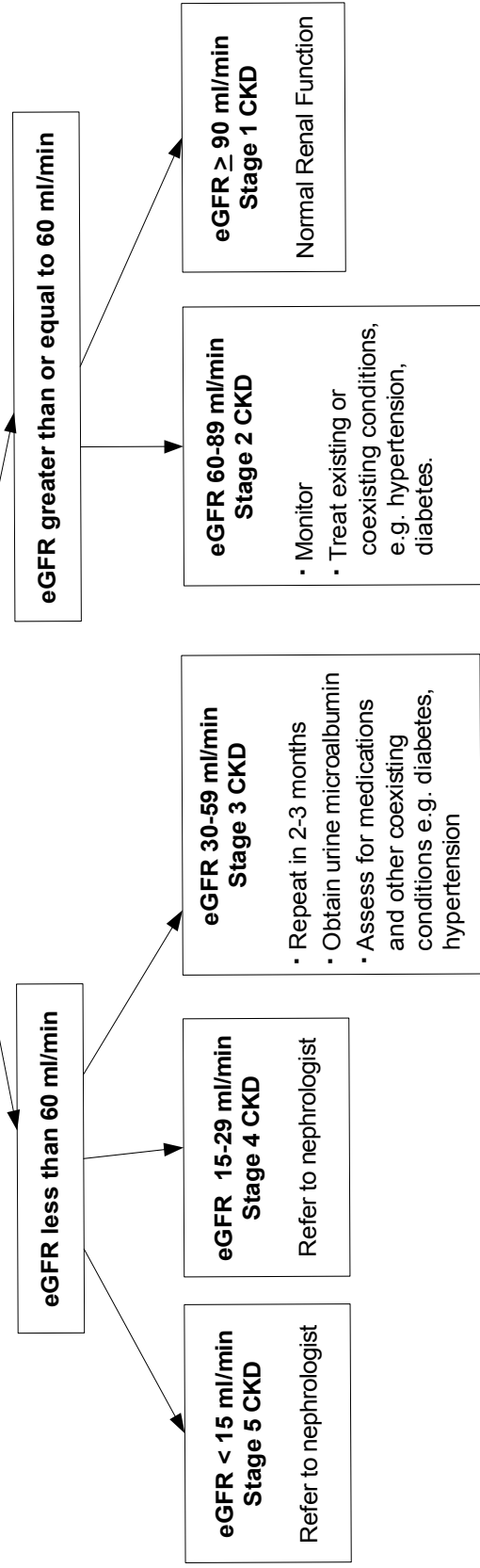
Mark your calendars NOW!

RENAL DISEASE SCREENING GUIDELINES

Washington State Clinical Laboratory Advisory Council to the
Washington State Department of Health
Originally published: July 2011

FOR EDUCATIONAL PURPOSES ONLY
The individual clinician is in the best position to determine which tests are most appropriate for a particular patient.

Serum Creatinine/ Calculated eGFR (Estimated Glomerular Filtration Rate)



Factors to consider:

- eGFR has not been validated for persons less than 18 or greater than 70 years old
- Conditions that may affect eGFR include extreme body size, severe malnutrition or obesity, skeletal muscle disease, paraplegia or quadriplegia, vegetarian diets, rapidly changing kidney function
- eGFR needs to be adjusted for black population
- eGFR is reliable when serum creatinine has a steady state; not rising or declining
- Drug interference with creatinine method or levels may cause inaccurate eGFR results

Abbreviations:
CKD: Chronic Kidney Disease

References:

1. New England Journal of Medicine: Assessing Kidney Function - Measured and Estimated Glomerular Filtration Rate 354:23 June 8, 2006
2. National Kidney Foundation. K/DOQI clinical practice guidelines for chronic kidney disease: Evaluation, classification and stratification. Am J Kidney Disease. 2002;39 (Suppl 1): S1-S266
3. Levey AS, Stevens LA, Estimating GFR Using the CKD Epidemiology Collaboration (CKD-EPI) Creatinine Equation More Accurate GFR Estimates. Lower CKD Prevalence Estimates and Better Risk Predictions. American Journal of Kidney Diseases 2010; 55(4):622-627.

LQA - New Address & Phone Numbers

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Calendar of Events

Training Classes:

Northwest Medical Laboratory Symposium
October 12-15 Seattle

18th Annual Clinical Laboratory Conference
November 7 Tukwila

2012 ASCLS-WA Spring Meeting
April 2012 Kennewick, WA

Contact information for the events listed above can be found on page 2. The Calendar of Events is a list of upcoming conferences, deadlines, and other dates of interest to the clinical laboratory community. If you have events that you would like to have included, please mail them to ELABORATIONS at the address on page 2. Information must be received at least one month before the scheduled event. The editor reserves the right to make final decisions on inclusion.

For persons with disabilities, this document is available upon request in other formats. To submit a request, please call 1-800-525-0127 (TTY/TDD) 1-800-833-6388).



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