

Scotland Audit Group Bulletin

Toxicology

Audit lead: Dr H Holmes

Which area did you audit and why?

- Laboratory assays for toxins are a very important part of the management of patients with potentially serious poisoning
- The availability of these assays may vary between hospitals, particularly if the sample arrives out-of-hours
- This area was last audited in Scotland in 2002 and we wanted to find out if things have changed in light of revised guidelines
- We re-audited this in Oct 2018

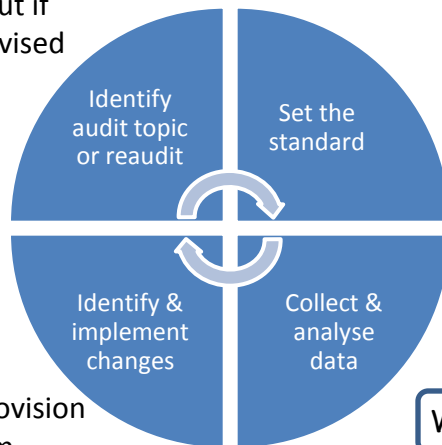


What were the audit standards?

- “Guidelines for laboratory analyses for poisoned patients in the UK”, ACB/NPIS, 2014
- Pathology Harmony recommendations for units and reference/therapeutic ranges
- RCPATH recommendations for communication of critical results

What are the next steps for laboratories?

- Review current gaps in service provision for paraquat, cyanide and thallium
- Review reference intervals and consider adoption of Pathology Harmony if appropriate
- Review telephoning practice of urgent results
- Be aware of assay interferences and be able to provide interpretive advice to users



What key things did you learn?

- All laboratories in Scotland offer urgent analysis of the supportive investigations and common drugs recommended in cases of acute poisoning
- Only 3 laboratories are able to offer a paraquat screen out of hours
- Only 3 or 4 laboratories offer methanol or ethylene glycol analysis, respectively
- Four laboratories indicated they could refer samples for cyanide analysis, however there is currently no service available in UK
- There was some deviation from Pathology Harmony reference/therapeutic ranges
- Some laboratories are not aware of, or have consistent protocols in place for, potential interference in drug assays (e.g Digibind, desferrioxamine, NAPQI)

