

Emergency Medicine Residency toxicology education: a survey study

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Background: There is limited information describing US emergency medicine (EM)- resident-toxicology (TOX) education. We sought to determine the nature of education through survey of EM-residency-program directors.

Methods: A survey was sent to directors of the 164 ACGME approved US EM residency programs. Follow-up email was sent 1 and 2 weeks following initial request. Respondents were asked whether rotation in TOX (mandatory or elective) was part of the residency curriculum, duration and nature of rotation, whether the rotation was available locally (<1hr drive from home institution), the number of full-time board-certified/eligible TOX faculty, and the number of TOX lectures that were given to residents each calendar year outside of a rotation.

Results: 107 programs responded (65%). Seventy-one programs reported mandatory rotation (66%) and 22 an available elective (21%). Durations were 4 (n=67, 72%), 3 (n=7, 4%), 2 (n=18, 18%) and 1 week (n=1, 1%). Lecture-based didactics (n=87, 94%); 'on-call' for consults (n=59, 63%); rounds on ED or inpatient patients (n=65, 70%); call-backs to providers from poison control center (PCC) (n=60, 65%); answering PCC calls (n=32, 34%); self-directed learning (n=70, 75%); online lectures or other resources (n=27, 29%); and case-based presentation or discussion (n=22, 24%) were reported components. Nine mandatory rotations (mean: 6hrs; range: 2-12hrs) and seven available electives (mean 4hrs; rang: 2-5hrs) were more than 1hr drive from home institution. Twenty-one programs reported zero(23%), 22 reported 1 (24%), 41 reported 2-5 (44%), 7 reported 6-10 full-time faculty (8%), and 2 programs reported more than 10 full-time faculty (2%). Of the 14 responding programs with no available rotation, 11 reported zero (79%), 1 reported one (7%), and 2 reported 2 full-time TOX faculty (14%). The mean number of TOX lectures in programs with mandatory or elective rotations was 11 (range: 0-35) and 11.6 (range 0-20) without a rotation.

Conclusion: The majority of responding EM training programs have mandatory or elective medical toxicology rotations of 2-4 weeks. However, almost half of the responding programs report 1 or less full time medical toxicology faculty. Further investigation is warranted to determine the impact this discrepancy may have on medical toxicology education to EM residents.