



AMERICAN OSTEOPATHIC ASSOCIATION

**BASIC STANDARDS  
FOR  
FELLOWSHIP TRAINING  
IN  
MEDICAL TOXICOLOGY**

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American Osteopathic Association  
And the  
American College of Osteopathic Emergency Physicians

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1 **ARTICLE I**

2 **INTRODUCTION**

3 These are the Basic Standards for Residency Training in Medical Toxicology as established by the  
4 America College of Osteopathic Emergency Physicians (ACOEP) and approved by the American  
5 Osteopathic Association (AOA). These standards are designed to provide the osteopathic fellow  
6 with advanced and concentrated training in medical toxicology and to prepare the fellow for  
7 examination for certification in Emergency Medicine by the American Osteopathic Board of  
8 Emergency Medicine (AOBEM)

9  
10 **STANDARD TWO**

11 **MISSION**

12 The mission of the osteopathic medical toxicology training program is to provide fellows with  
13 comprehensive structured cognitive and clinical education that will enable them to become  
14 competent, proficient, and professional osteopathic medical toxicologists.

15  
16 **STANDARD THREE**

17 **EDUCATIONAL PROGRAM GOALS AND OBJECTIVES**

18 The goals and objectives of the osteopathic medical toxicology program are to train fellows to  
19 become proficient in the core competencies.

20 **A. Osteopathic Philosophy & Manipulative Medicine**

21 Osteopathic philosophy and osteopathic manipulative medicine: integration and application  
22 osteopathic principles into the diagnosis and management of patient clinical presentations.

- 23 3.1. Training in osteopathic principles and practice shall be provided in both structured  
24 educational activities and clinical formats.
- 25 3.2. Programs shall provide the opportunity to develop Osteopathic Manipulative Medicine  
26 (OMM) skills as it applies to medical toxicology.
- 27 3.3. Programs shall appropriately integrate OMM and its applications in the practice of medical  
28 toxicology.

29  
30 **B. Medical Knowledge**

31 Medical knowledge: a thorough knowledge of the complex differential diagnoses and treatment  
32 options in medical toxicology and the ability to integrate the applicable sciences with clinical  
33 experiences.

- 34 3.1 The training program shall provide the opportunity to develop the teaching skills of fellows  
35 in medical toxicology.
- 36 3.2 The program shall provide the opportunity to develop interest in and understanding of  
37 research in medical toxicology.

1 3.3 The program shall prepare fellows to use critical thinking in making effective decisions for  
2 patient management.

3 3.4 The program shall prepare the fellow to demonstrate proficiency in the psychomotor skills  
4 required of a competent toxicologist.

5 3.5 The program shall train the fellow to read, interpret, and participate in clinical research.  
6

### 7 **C. Patient Care**

8 Patient care: the ability to rapidly evaluate, initiate and provide appropriate treatment for patients  
9 with conditions resulting from exposure to or ingestion of agents that may be natural or man-made  
10 toxins and assisting the primary physician in the care of the patient and potentially restoring the  
11 patient to a healthy state.

12 3.1 The program shall provide the medical toxicology fellow with progressive patient care  
13 responsibilities, commencing with general medical skills and progressing to complete care of  
14 patients in need of care.

15 3.2 The program shall provide training that will enable the medical toxicology fellow to evaluate,  
16 initiate treatment, and provide appropriate therapy, and disposition of the patient.  
17

### 18 **D. Interpersonal and Communication Skills**

19 Interpersonal and communication skills: use of clear, sensitive and respectful communication with  
20 patients, patients' families and members of the health care team.

21 3.1 The program shall provide fellows with the opportunity to develop teaching skills in medical  
22 toxicology.

23 3.2 The program shall train fellows on the appropriate methods in which to educate patients and  
24 their families concerning health care needs.

25 3.3 The program shall educate fellows to become culturally sensitive to the patient populations  
26 served and implications of providing healthcare to them.  
27

### 28 **E. Professionalism**

29 Professionalism: adherence to principles of ethical conduct and integrity in dealing with patients,  
30 patients' families and members of the health care team.

31 3.1 Programs shall provide the opportunity to learn and practice professionalism as manifested  
32 through carrying out professional responsibilities, adherence to ethical principles and  
33 sensitivity to diverse populations.

34 3.2 Programs shall provide a learning environment that encourages cultural sensitivity and  
35 patient safety.

36 3.3 Programs shall educate the fellows so that they make sound judgments as to the expected  
37 risks arising from therapy as well as the condition being treated with an understanding of  
38 associated ethical and legal principles.  
39

- 1 3.4 Fellows shall be encouraged to participate in community and professional organizations.  
2 3.5 Programs shall provide education as well as the opportunity to participate in continuing  
3 education to promote personal and professional growth for both the fellow and teaching  
4 staff.  
5

6 **F. Practice-Based Learning and Improvement**

7 Practice-based learning and improvement: commitment to lifelong learning and scholarly pursuit in  
8 medical toxicology for the betterment of patient care.

- 9 3.1 The program shall promote lifelong learning in medical education.  
10 3.2 The program shall prepare the fellow to meet board eligibility requirements of the AOA  
11 through the American Osteopathic Board of Emergency Medicine.  
12 3.3 The program shall train the fellow to manage clinical problems in clinical settings, employing  
13 basic scientific principles and evidenced-based medicine.  
14 3.4 The program shall develop measurable objectives to assess the progression of the fellow in  
15 the two-year training program.  
16

17 **G. Systems-Based Practice**

18 Systems-based practice: skills to lead health-care teams in the delivery of quality patient care using all  
19 available resources.

- 20 3.1 The program shall provide learning experiences that promote a broad understanding of the  
21 role of medical toxicology as it relates to other medical disciplines.  
22 3.2 The program shall provide the opportunity to develop professional leadership and  
23 management skills.  
24 3.3 The program shall train the fellow to provide cost-effective care to medical toxicology  
25 patients.  
26 3.4 The program shall train the fellow to collaborate effectively, and share knowledge with  
27 colleagues and allied health professionals.  
28 3.5 The program shall train the fellows to perform the basic skills needed for mass casualty  
29 management and coordination for the hospital and community.  
30

31 **STANDARD FOUR**

32 **INSTITUTIONAL REQUIREMENTS**

33 **A. Department of Emergency Medicine**

34 The Department of Emergency Medicine at the base institution shall:

- 35 4.1 Have a chairperson who is currently certified in emergency medicine by the AOA through  
36 the American Osteopathic Board of Emergency Medicine (AOBEM) or the American Board  
37 of Emergency Medicine (ABEM). He or she shall maintain continuous certification.

1 Lifetime certificate holders are not exempt from this recertification requirement.

2 4.1.1 The Chair of the department may not be the program director

3 4.2 Have a program director that fulfils the requirements for core faculty. The program  
4 director's responsibilities are outlined in Standard Six.

5 4.2.1 The institution shall compensate the program director for at least 12 hours non-  
6 clinical time per week.

7 4.3 Have faculty and core faculty to teach and supervise fellows.

8 4.3.1 The role and duties of the core faculty shall be clearly defined. This requires at least  
9 four (4) hours of compensated, non-clinical time per week.

10 4.4 Ensure that all physicians that are clinically supervising medical toxicology fellows are  
11 certified by the appropriate AOA certifying board or the certifying board recognized by the  
12 ABMS or in the process of being certified.

13 4.5 Have a minimum of one (1) core faculty member for every four (4) fellows.

14 4.6 Have the scope, volume, and variety to support a fellowship with at least two (2) approved  
15 fellowship positions per year. A minimum volume of 30,000 Emergency Department visits  
16 annually at the base institution is required. Educationally justifiable exceptions may be  
17 considered, such as clinical sites in a rural setting.

18 4.7 Maintain active affiliations with:

19 4.7.1 Poison control center(s) serving large geographical area(s) and certified by the  
20 American Association of Poison Control Centers (AAPCC).

21 4.7.2 Schools of pharmacology with active programs in medical toxicology, clinical  
22 pharmacology and pharmacokinetics.

23 4.7.3 School(s) of public health with programs in epidemiology, biostatistics and  
24 occupational and environmental health.

25 4.8 Provide experience and training in the management of toxicology patients. This training  
26 should take place at the base hospital and its affiliated sites.

27 4.9 Adopt formal program and departmental policies that are shared with the fellow upon  
28 commencement of training and develop a fellow manual that includes the complete medical  
29 toxicology curriculum.

## 30 **STANDARD FIVE**

### 31 **PROGRAM REQUIREMENTS AND CONTENT**

#### 32 **A. Curriculum**

33 The medical toxicology program shall create and adhere to a two-year curriculum (OGME-5 to  
34 OGME-6) that meets or exceeds the requirements listed within this document.

35 5.1 Each program shall have a written, curriculum on file at its institution that is updated and  
36 distributed annually to all fellows.  
37  
38

- 1 5.2 Progression through the fellowship program shall be based upon the following:
- 2 5.2.1 Meeting stated goals and objectives of the program;
- 3 5.2.2. Demonstrating increasing competence in skills and techniques.
- 4 5.2.3. Proficiency in the use of diagnostic and therapeutic modalities.
- 5 5.2.4. Ongoing demonstration of professional behaviors.
- 6 5.3 The curriculum shall be evaluated and updated annually by faculty and fellows.

7

8 **B. Rotation Structure**

- 9 5.1 Each fellow shall complete the following 24 month program and include the training in
- 10 medical toxicology, including but not limited to:
  - 11 5.1.1 Medical toxicology as presented by patients through
    - 12 5.1.1.1 Hospital and outpatient settings, such as emergency departments, intensive
    - 13 care units, medical and surgical units and clinics.
    - 14 5.1.1.2 Regional poison control centers
    - 15 5.1.1.3 Occupational and public health programs in hospital wards, clinics, or
    - 16 affiliated industrial programs.
  - 17 5.1.2 Pharmacology / toxicology
  - 18 5.1.3 Epidemiology
  - 19 5.1.4 Biostatistics
  - 20 5.1.5 Study design
  - 21 5.1.6 Pharmacokinetics
  - 22 5.1.7 Forensic medicine

23

24 **C. Didactic Educational Activities**

- 25 5.1 The program shall provide an average of four (4) hours of didactic educational activity per
- 26 week.
  - 27 5.1.1 Core faculty shall be involved in both the planning as well as the administration of
  - 28 the educational activities.
  - 29 5.1.2 These activities shall be based upon the two-year core curriculum.
  - 30 5.1.3 The content shall be covered in its entirety at least once during the fellowship
  - 31 training program.
  - 32 5.1.4 Greater than fifty percent of these activities shall be planned and presented by non-
  - 33 fellow educators.
  - 34 5.1.5 The core faculty and fellows shall participate in required OPTI educational
  - 35 programs.

1 5.1.6 Fellows shall be excused from all in-house clinical duties to attend these activities

2 5.1.7 Fellows shall be required to attend the didactic activities unless excused by the  
3 program director.

4  
5 **D. Professional Development**

6 Programs shall require fellows to:

7 5.1 Participate in available seminars, workshops and conferences provided through regional,  
8 state and national professional organizations.

9 5.2. Learn teaching skills by actively participating in the process of instructing medical students,  
10 residents, other fellows, and allied health professionals.

11  
12 **STANDARD SIX**

13 **PROGRAM DIRECTOR / FACULTY**

14 **A.** The institution shall have a program director and appropriately qualified faculty and core  
15 faculty in place prior to applying for initial approval or for increasing fellow positions, and  
16 shall maintain this faculty during the term of approval of the program. Only programs  
17 maintaining adequate faculty shall be eligible for approval, continuance of approval, or  
18 increases in fellow positions.

19 6.1 Any proposed changes in program director or core faculty staffing shall be submitted in  
20 writing and approved by the ACOEP Committee on Graduate Medical Education prior to  
21 appointment, as applicable.

22  
23 **B. Program Director**

24 6.1 The sponsoring institution shall designate an osteopathic medical toxicologist as program  
25 director who has sufficient time for both program administration and clinical instruction.  
26 Appointments are subject to the approval of the ACOEP Committee on Graduate Medical  
27 Education, as applicable and subsequent registry by the AOA.

28 6.2 The program director may not serve as or act in the capacity of the chair of the Department  
29 of Emergency Medicine, or as program director of more than one residency or fellowship  
30 program. He or she may be the director of medical education if the institution has three or  
31 fewer osteopathic residency or fellowship programs.

32 6.3 The program director of the medical toxicology fellowship shall possess the following  
33 qualifications:

34 6.3.1 Active, full-time staff membership (a minimum of 30 hours per week which includes  
35 clinical as well as educational activities) within the department or section of  
36 emergency medicine at the base institution.

37  
38 6.3.2 Certification by the AOA through in emergency medicine, internal medicine,  
39 pediatrics or preventive medicine by the appropriate AOA certifying board or in the

- 1 process of being certified and recertified within the prescribed time frame of the  
2 respective osteopathic specialty board. He or she shall maintain continuous  
3 certification. Lifetime certificate holders are not exempt from this recertification  
4 requirement.
- 5 6.3.3 Additional credentialing with a Certificate of Added Qualification in medical  
6 toxicology by the AOA through the American Osteopathic Board of Emergency  
7 Medicine and recertified within the prescribed time frame of the AOBEM. He or  
8 she shall maintain continuous certification in medical toxicology.
- 9 6.3.4 Membership in the American College of Osteopathic Emergency Physicians  
10 (ACOEP).
- 11 6.3.5 Specialty expertise and documented educational and administrative experience  
12 acceptable to the Committee on Graduate Medical Education of ACOEP.
- 13 6.3.6 Three (3) years experience as full time faculty within a medical toxicology fellowship  
14 program, or full time practice of medical toxicology for a minimum of five (5) years.
- 15 6.3.7 Fulfill and maintain the qualifications as a core faculty member of a medical  
16 toxicology residency program, in addition to administrative and demonstrated  
17 leadership skills, and completion of the AOA's Continuing Medical Education  
18 requirements, medical toxicology training skills, and faculty development.
- 19 6.4 The program director shall have the following responsibilities:
- 20 6.4.1 Direct the medical toxicology fellowship program and ensure that the fellow receives  
21 the training outlined in the written program description.
- 22 6.4.2 Ensure the arrangements of outside rotations with formal affiliation agreements as  
23 needed to meet the program's educational objectives.
- 24 6.4.3 Evaluate the fellows, rotating residents, faculty, and the medical toxicology  
25 fellowship program.
- 26 6.4.4 Submit reports to the ACOEP as required.
- 27 6.4.5 Verify the completion of didactic and clinical schedules.
- 28 6.4.6 Actively participate in postdoctoral education and training at the base institution.
- 29 6.4.7 Notify the ACOEP of all fellows in training on an annual basis.
- 30 6.4.8 Participate in the annual ACOEP Program Directors' Faculty Development  
31 workshop. Attendance at this annual conference is mandatory for the program  
32 director or his/her designee. The program director shall attend a minimum of once  
33 every two years.
- 34 6.4.9 Ensure that the program complies with the standards, policies, and procedures of the  
35 AOA.
- 36 6.4.10 Prepare for and participate in the AOA inspection of the program in cooperation  
37 with the Division of Postdoctoral Education and the designated evaluator.
- 38 6.4.11 Inform the AOA, OPTI, and ACOEP's Committee on Graduate Medical Education  
39 of major changes in the program, including but not limited to, changes in  
40 institutional ownership, affiliation, department chair, or other major administrative

1 changes within thirty (30) days of their occurrence.

2 6.4.12 Develop written goals and objectives for each rotation and maintain these through  
3 periodic updating.

4 6.4.13 Maintain the appropriate ratio of qualified core faculty for the program.  
5

## 6 **C. Core Faculty**

7 Core faculty is the dedicated educators who demonstrate and provide ongoing academic leadership  
8 within the residency program above and beyond the valuable role of the clinical faculty.

### 9 6.1 Requirements

10 6.1.1 The program director shall designate a minimum of two (2) core faculty who shall  
11 participate in the medical toxicology fellowship program.

12 6.1.2 Additionally, a minimum of one core faculty member for every four (4) fellows shall  
13 be maintained.

14 6.1.3 A minimum of fifty percent (50%) of the core faculty shall be osteopathic emergency  
15 physicians who participate in the training of residents.

16 6.1.4 The program director may be counted as a member of the core faculty.

### 17 6.2 Qualifications: Core faculty shall meet the following qualifications prior to and throughout 18 the duration of their appointment:

19 6.2.1 Core faculty members are specifically designated, full-time members of the  
20 Department of Emergency Medicine at the base institution. Full time is defined as a  
21 minimum of 30 hours per week which includes clinical as well as educational  
22 activities.

23 6.2.2 Core faculty members shall be certified or an active candidate in the process of  
24 obtaining a Certificate of Added Qualifications in Medical Toxicology by the  
25 AOA/AOBEM or ABEM. He or she shall maintain continuous certification.  
26 Lifetime Certificate holders are not exempt from this recertification requirement.

### 27 6.3 Scholarly Activity: Each core faculty member shall demonstrate scholarly activity prior to 28 and throughout the duration of their appointment. Scholarly activity is the academic 29 pursuits that involve creative, intellectual work that is peer-reviewed and publicly 30 disseminated.

31 6.3.1 Scholarly activity should occur within a four-year period. Acceptable activities may  
32 include a minimum of 2 major or 1 major and 2 minor scholarly activity within this  
33 time frame for each core faculty member. Other activities may be accepted on an  
34 individual basis at the discretion of the committee on graduate medical education.  
35 Scholarly activities for each core faculty member shall be well documented, to  
36 include dates, locations, and details.

37

- 1 6.4. Major Scholarly Activities shall be defined as follows:
- 2 6.4.1 Serving as chair or vice chair of a national, regional or state medical society  
3 committee.
- 4 6.4.2 Serving as an active member of a committee of a national, regional or state medical  
5 association.
- 6 6.4.3 Publication of original research or review article in peer-reviewed medical or  
7 scientific journal, or chapter in medical textbook.
- 8 6.4.4 Receipt of grant funding for medical, educational or service research.
- 9 6.4.5 Presentation or publication of case reports or clinical series at national, regional or  
10 state professional and scientific society meetings and conferences.
- 11 6.4.6 Member of an editorial review board of a national, regional or state peer-reviewed  
12 publication.
- 13 6.4.7 Participation in item writing or as an examiner for a national medical certification  
14 board.
- 15 6.4.8 Presentation at a national, regional or state CME meeting or seminar.  
16
- 17 6.5 Minor Scholarly activities shall be defined as:
- 18 6.5.1 Research projects currently in progress. The study has been approved by IRB and  
19 data-collection actively occurring.
- 20 6.5.2 Preparation of grant funding request material for medical, educational or service  
21 research.
- 22 6.5.3 Visiting professorship (guest medical toxicology lecturer to peers or residents at an  
23 outside institution).
- 24 6.5.4 Item writing for the ACOEP Resident In-Service Examination.
- 25 6.5.5 Serve in the capacity as an active judge (or evaluator) at a national, regional or state  
26 academic meeting.
- 27 6.5.6 Publication of an article or chapter in a non-peer reviewed medical or scientific  
28 journal.
- 29
- 30 6.6 Responsibilities
- 31 6.6.1 Core faculty shall be involved in the preparation and presentation of didactic  
32 educational program, such as formal lectures, case conferences and journal clubs and  
33 other requirements of the core curriculum.
- 34 6.6.2 Core faculty shall attend a minimum 33% of the program's required didactic  
35 educational activities.
- 36 6.6.3 Core faculty shall encourage and support fellows in scholarly activities and act as  
37 mentors for required research projects.
- 38 6.6.4 Core faculty shall be provided sufficient non-clinical time to provide instruction,  
39 leadership and participation in scholarly activities.
- 40

1 **STANDARD SEVEN**

2 **FELLOW REQUIREMENTS**

- 3 7.1 The fellow shall be board eligible/board certified in emergency medicine, pediatrics, internal  
4 medicine or preventive medicine through the AOA and the respective certifying boards  
5 upon entry into the program.
- 6 7.2 The medical toxicology fellow shall be a member of the ACOEP and maintain membership  
7 in the ACOEP throughout their term of training.
- 8 7.3 Each fellow shall adhere to established policies and procedures for fellowship training, as  
9 outlined in this document, and in the fellow manual.
- 10 7.4 The fellow shall progressively assume responsibility for patient care during the fellowship  
11 program, so that by the final year, the fellow shall be able to assume complete management  
12 of all assigned cases.
- 13 7.5 The fellow shall maintain formal records and logs of all activities related to the educational  
14 program. These records and logs shall be submitted monthly to the program director for  
15 review and verification. Copies of these records and logs shall be kept on permanent file by  
16 the administration at the base institution and shall be available at the time of the inspection.  
17 These records and logs should document the fulfillment of the requirements of the program,  
18 describing the volume, variety, and scope, and progressive responsibility on the part of the  
19 fellow for cases and procedures performed under supervision.
- 20 7.6 The fellow shall complete one substantive research project related to medical toxicology  
21 during the program that is approved by the program director. The completed research  
22 project shall be submitted to the ACOEP in a publishable format during the final six months  
23 of the program.
- 24 7.7 The fellow shall be required to participate in professional staff activities, e.g. department  
25 meetings, hospital committees, house/staff associations, OPTI committees.

26 **STANDARD EIGHT**

27 **EVALUATION**

- 28
- 29 8.1. The curriculum shall be evaluated annually by faculty and fellows as a method for revision  
30 and updating of the documents.
- 31 8.2. The program director, with faculty input, shall complete written quarterly evaluations of  
32 fellow performance. This should include evaluations from all affiliated training sites and  
33 supplemented rotation sites.
- 34 8.3 Fellow Evaluations shall be learner-centered, developmental, foster continuous  
35 improvement, and based upon educational objectives for each assignment and program  
36 activity.
- 37

- 1 8.4. Completed evaluations shall be shared with the fellow in consultation for improvement.  
2 They shall be signed by the program director and fellow to document that evaluation and  
3 counseling have occurred quarterly as required. Copies of evaluations should be made  
4 available to the fellow.
- 5 8.5. The program director shall document that fellows requiring remediation, redirection, or  
6 counseling as a result of the evaluation process must be given feedback and a corrective  
7 action plan in a timely manner. There shall be documentation of follow-up evaluations of  
8 these fellows. The program director shall review these with the core faculty.
- 9 8.6. The fellow shall anonymously evaluate faculty on an annual basis.  
10