

## HAZMAT FRA/FRO STUDY GUIDE

The purpose of this study guide is to provide some topic areas that might be useful to focus on in order to be more successful on the AZCFSE written FRA/FRO examination. There is no guarantee that all topics covered on the exam will be listed in this study guide.

1. Types of transportation tanks (Be able to identify and name them. Know modes and responsible parties)
2. Understand DOT placards, labels and markings
3. Understand All DOT hazard classes and divisions
4. Roles of the different agencies: EPA, DOT, Chemtrec, FBI, Postal Service, OSHA
5. When to call Chemtrec and the information they need; what to expect and not to expect
6. Radiation hazards: types, classification, protection, and PPE required
7. PPE levels of protection (protective clothing) & working knowledge of SAR, SCBA, PAR
8. Chemical agents and their classification (DOT, UN, etc)
9. Decontamination (understand the different types)
10. Emergency decontamination procedures
11. Technical decontamination steps
12. Remote shut off's/ remote shut off's on MC carriers (understanding how they work, the different types, and locations)
13. Defensive control techniques (understand and be able to define): absorption, adsorption, damming, diking, dilution, diversion, vapor dispersion, remote valve shutoff
14. Exposure: signs, symptoms, routes, affects, protection, guidelines
15. Review Sheltering-in-place steps
16. Outline three zones
17. Understand the terminology of the Control Zones
18. Command: functions, areas, roles, positions, and safety officer roles
19. Understand the difference between Level I, II, and III Incidents
20. Definitions of permeation, penetration, and degradation
21. Understand how to identify the Table of Initial Isolation and Protective Distances.
22. Emergency Response Guide (ERG): Uses and sections; Understand the operational components of the ERG versus the NIOSH, Understand the Isolation zones and color as related to the ERG; Understand the Potential Hazard categories found in the Orange Pages of the ERG
23. Review the steps involved during the protective action phases of an incident
24. Know the definition of a hazardous material as defined by DOT.
25. Understand the indications of a terrorist incident to include secondary device awareness.
26. What are the health effects of all common WMD agents CBRNE (Chemical biological radiological nuclear explosive) and what the targets may be for those agents

27. Understand the factors involved with Illicit Laboratories to include Methamphetamines, Biological and chemical Labs (signs to look for)
28. Which biological or chemical agents are the easiest or most difficult for someone to make?
29. Understand the PPE types and levels for Awareness and Operations level personnel
30. Know the isolation, evacuation and Deny Entry concepts.
31. Understand the definition of all four signal words Poison, Danger, Warning, and Caution
32. What are the details and types of information that an MSDS will provide
33. Know all components/definitions of the NFPA 704 diamond systems
34. Understand military markings
35. Where would first responders find pipeline markings?
36. Understand the names of shipping papers that are referenced to the type of transportation & the information that may be found on those shipping papers
37. Types of radioactive material packaging (understand the differences).
38. What is a LERP and who should have it?
39. Foam types and uses
40. Container types and categories
41. Terrorism concerns and actions