

Dermal Checklist for assessing dermal risks during emergency response activities involving chemicals

Risk Analysis Activity		
Risk Assessment	Key Questions	Answers
1. Hazard Characterization	1a. Are chemicals present that represent a skin hazard (direct or systemic effects)?	
	1b. Are the effects acute (i.e., immediate), acute delayed or chronic?	
	1c. Are other stressors present that may affect the hazard?	
	1d. Can chemical be dermally absorbed following direct contact?	
	1e. Can dermal absorption occur following indirect contact (i.e., vapors or aerosols)?	
	1f. Is the chemical a systemic toxicant?	
	1g. Are dermal absorption rates known?	
2. Exposure Assessment	2a. Is dermal contact possible in immediate release zone?	
	2b. Is dermal contact likely outside the immediate release zone?	
	2c. Can dermal exposures occur during the transport of potentially contaminated materials or patients?	
	2d. Are sampling methods/tools available to assess dermal exposures?	
	2e. Are dermal exposure estimation models available?	
	2f. Do surface sampling techniques exist for the chemical of concern? If so, are they validated?	
	2g. Is biological monitoring an option?	

Dermal Checklist for assessing dermal risks during emergency response activities involving chemicals (Continued)

Risk Analysis Activity

3. Risk Characterization

3a. Are quantitative exposure limits for dermal exposures available?

3b. Is there a means to interpret or compare surface sampling results such as surface exposure limits?

3c. Are other dermal-related exposure recommendations available?

3d. Can exposures be compared to existing limits to support a risk characterization?

Risk Management

Key Questions

4. Exposure Mitigation

4a. What control techniques are needed to reduce the potential for direct dermal contact in the release zone?

4b. Are controls needed to reduce indirect dermal contact in the release zone?

5. Protective Equipment

5a. What chemical protection ensemble is needed?

5b. Are specific CPC selection guidelines available?

5c. What barrier material is needed to prevent dermal contact during activities in each response zone?

5d. What metrics (e.g., breakthrough time, compatibility data) are available to aid in selecting CPC?

6. Decontamination

6a. What specific decontamination procedures are needed?

6b. Are specific assays available to demonstrate the efficacy of decontamination?

7. Medical Surveillance

7. Are there specific medical surveillance requirements for exposed persons?