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Hr-mas Analysis Of Skin Exposed To Chemical Warfare Agents

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In the event of a chemical warfare agent (CWA) release, there is a likelihood of CWA deposition on the exposed skin of an unprotected population. Therefore, it is vital to understand the interaction of CWAs and skin to design and evaluate successful decontamination techniques and technologies. This research uses HR-MAS NMR to analyze pig skin samples before and after exposure to chemical warfare agents. The degradation of the agents was followed using this nondestructive technique, and breakdown products and the rates of degradation were measured. Nerve agents and blister agents can be investigated using this technique. Further research will allow for evaluation of effectiveness of decontamination methods at different time points.

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