

## **Intraosseous emergency access by physicians wearing full protective gear.**

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**OBJECTIVES:** To assess prospectively and randomly the feasibility, speed, and success rate of establishing an intraosseous access using the Bone Injection Gun (BIG) while wearing antichemical outfits. **METHODS:** Attempts to introduce intraosseous injection with or without a full protective gear (antichemical body suit, face mask, and butyl gloves) were performed using a turkey bone model. Time to proper placement was measured. **RESULTS:** The average time to successfully insert the BIG's needle while wearing a protective gear was 32 +/- 3 seconds compared with 22 +/- 2 seconds ( $p < 0.05$ ) without the outfit. Success rate was greater than or equal to 80%. When failure occurred, a second attempt always proved successful. **CONCLUSIONS:** The intraosseous insertion of the BIG's needle is rapid and easy but requires 50% more time when wearing protective gear than without it. Its use during emergent treatment of toxic mass casualty is of potential benefit and needs further investigation