

## Huffer's Hand

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A 46 year-old man was brought to the emergency department after being found lying in an alley with bleeding hands. The patient reported frequent inhalation of 'Dust-Off' (difluoroethane), a refrigerant-based propellant cleaner, spraying the can for repetitive

short intervals throughout the day. This practice is also known as 'huffing' or 'dusting'. The propellant cans become very cold when sprayed and the patient reported initial numbness and tingling of his hands. This progressed to blistering and frank bleeding after prolonged, repetitive use.



**Figure 1:** Blistering and frank bleeding hands after prolonged, repetitive use of Dust-Off.

Open, bleeding wounds with peripheral eschar were noted on examination, involving the volar aspect of the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> fingers of his right hand, consistent with third-degree frostbite. Neurovascular status of the hand was intact and there were no signs of superimposed bacterial infection. Radiograph showed no evidence of osteomyelitis and CBC and chemistry panel were within normal ranges. Poison control was contacted and recommended cardiac monitoring as

difluoroethane sensitizes myocardium to catecholamine effects and can precipitate ventricular tachycardias. ECG demonstrated sinus tachycardia which resolved without intervention. The patient required no acute surgical therapies. He was discharged with appropriate wound care instructions and prophylactic antibiotics. He was scheduled to follow up with orthopedic surgery as an outpatient.