

EMERGENCY MEDICAL TREATMENT FOR MASSIVE BEE STINGS: A FIRST RESPONDER'S APPROACH

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Dr. Gwen Davis - Station Veterinarian and Manager of Tuskegee University Apiary, George Washington Carver Agricultural Experiment Station, Tuskegee University, Tuskegee, Alabama. A native of New York, she received her B.S. and DVM at Tuskegee University. She received certifications as a beekeeper and has achieved the journeyman level in the Master Beekeepers Program of the North Carolina Agricultural Extension Service and the North Carolina State Beekeepers Association. She also is licensed as an Emergency Medical Technician, Level III.

The Africanized honey bee is a current threat to Americans. Their arrival is imminent and it is necessary to begin educating the public and in particular rescue personnel in the proper response to a massive bee attack. Hopefully, the measures suggested here can become part of the dialogue among professionals on the best way to respond so that, when the Africanized bee arrives, rescue techniques will be in place.

A single bee sting is a discomforting annoyance to most people. It can be life threatening to allergic persons, but a massive stinging attack of more than 500 stings is always an emergency. Without proper treatment a massive stinging attack will be fatal.

Following are the steps that should be taken by two kinds of persons arriving on the scene of an attack: an untrained person and rescue personnel.

Untrained person's response.

1. Get someone to call 911 and report a massive bee attack, giving location. A victim must always receive immediate medical attention.
2. If you have access to a car, roll up all windows and turn the air conditioner on full blast. Cool air slows the activity of bees. Call the victim to your car and drive him/her to the hospital. You will also be stung by bees entering with the victim. Obviously, if you are allergic to bee stings, you should not attempt a rescue.
3. Do not approach within 200 yards of the bees or their source (you should be able to see where they are coming from) or there will be two victims — the original victim and yourself.
4. The best you may be able to do is lead a victim who is able to run to a viable means of escape. Yell to victim: "Run this way." Use a blanket or tarp for cover (not obscuring vision) only if immediately available. Running immediately away from the bees into a car, a house, or some other shelter is the best hope for a victim.

5. For a victim who is disoriented, has fallen, or is in any way incapacitated, to attempt to rescue within 200 yards of the bees you must have full protective gear. I want to be perfectly clear on this. Do not attempt to go into an attack without full gear. It would be like going into a room fully ablaze to rescue someone.

6. If a beekeeper should happen to be the first responder, put on full gear and bring a blanket to cover the victim. If readily available, have the victim down with water to remove bees then cover or drag the victim to a car for transport to a hospital.

Response by medical personnel. (This program was prepared with the help of the Tuskegee Ambulance Service.) All rescue personnel must be trained and equipped for massive stinging attacks. In responding to a call, the vehicle with the air conditioning turned on full blast should drive to the scene and stop about 200 yards from the victim. (Police should cordon off a 400 yard zone of safety from the scene.)

The scene should then be moved within close proximity of the victim and contact should be initiated with a hospital or base station. If possible, vehicles with a separate cab should be used, so the bees entering with the victim will not interfere with the driver.

Rescue personnel should only take a stretcher and a blanket. All emergency treatment should be performed en route to the hospital. Other equipment such as trauma box, oxygen tank, defibrillation units should be left in the ambulance.

Maintaining a breathing airway is always the first priority in a massive stinging attack. Bees have tendency to sting around the face and neck, and swelling will progress rapidly in most cases. It is always advisable to pass an endotracheal tube even if the victim is still conscious. If it is impossible to pass an ET, pass an esophageal airway. It may be necessary eventually to perform a tracheotomy.

The patient should be monitored closely throughout the transport. The main reactions to massive bee stings are airway obstruction, bronchospasms, cardio-genic shock, and neurogenic shock. It may be necessary to initiate defibrillation to these patients. Keep in close contact with the hospital or base station by radio so that orders may be received from the doctor and the hospital can prepare for definitive emergency care upon arrival at the hospital.

Cardiac dysrhythmia is imminent and in fact, most fatal victims of massive bee stings die of cardiac arrest. If the heart has stopped, initiate CPR. The precordial thump may be very valuable in these situations because generally there are no underlying problems with the heart.

Constantly monitor blood pressure. Shock may develop quickly. Always place the victim on the MAST trousers in case they must be inflated.

Start an IV on the patient with large bore (14 or 16 gauge) catheter with lactated ringers wide open. Medications that doctors may order are: Epinephrine Dopamine, Aminophylline, steroids, calcium gluconate.