Skunking by Doug Tack, DVM

Probably the most feared problem encountered by those who work their terriers. For those of you who have not heard of it - trust me, it does exist. We are not making this up! We do not know all there is to know about this problem, but I'll do my best to fill you in on what we do know. We also do not know why some dogs can get "skunked" and will seemingly be unaffected, but another dog in the same set of circumstances might die. Those terriers that seem to be most severely affected are those that are in small, tight tunnels and have gotten close to the skunk before getting blasted. The skunk has once exit plugged, the terrier the other. The skunk then releases several ounces of scent from his glands. This scent is predominantly sulfuric acid. If the terrier is lucky, fresh air manages to dilute this blast of acid out quickly. If not your dog is in big trouble. I suggest you dig quickly if you suspect that this has happened. This acid quickly enters the airways. It not only causes severe burning of the airways, but it enters the lower airway and airsacs (Alveoli), where it crosses over into the blood stream. This is where it causes the most damage. It can cause Acute Anaphylaxis (Anaphylactic Shock) and sever Metabolic Acidosis. If your dog is lucky enough to live through these stages, we can see any number of secondary blood disorders (Methemoglobiaemia).

Treatment Recommendations -

- 1. Get dog out of hole immediately.
 - a. If unconscious, intubate (if possible) and then treat for shock
 - b. IV Catheter, Fluids, IV steroids (Soludelta Cortef, Dexamethasone SP, etc.)
- 2. Get to the best 24-hour Critical Care Facility available immediately.

What your doctor should be looking for -

- 1. After initial stabilization, bloods should be drawn to check for secondary complications. The most common one being Methemoglobinemia (if you can't remember this, tell them it is the same things cats get when the ingest Tylenol and should be treated the same way). The gums and blood will be a brownish color. If this is the case, monitor blood oxygen, get pet into an oxygen rich environment and begin Acetyl cystine (Mucomyst) therapy.
- 2. Down the Road (days to weeks) A number of these pets have developed Immune Mediated Hemolytic Anemia. This is where the body starts attacking it's own red blood cells. We think this may happen due to damage of the RBC's from the sulfuric acid or as a result of the Methemoglobinemia. Don't give up!
- 3. If any question, call my office at (516) 661-5380. We are there 24 hours a day. You can also beep me at (516) 453-1616.

If your dog has been "skunked" -

Please have your Veterinarian take a Purple (EDTA) tube, fill it with blood and freeze it. Call me, and I will have it tested, at my expense, for Methemoglobinemia. We need more information on this problem.

Note: Previous therapeutic regimes have included Atropine to reduce airway secretions. I would not recommend this unless under close veterinary supervision. Atropine can cause profound tachycardia (fast heartbeat), which can worsen the shock.