Statewide EMS Response to Alpha-gal Allergy
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Data are from the Centers for Disease Control and Prevention Web site (http://www.cdc.gov/ticks/geographic_distribution.html#lone-star)
Patients with delayed anaphylaxis to red meat whose serum contained IgE antibodies to alpha-gal

Commins S. et.al. J Allergy Clin Immunol 2011;127:1286-93
Alpha-gal Task Force

Created by Act 1247 to make recommendations for early diagnosis and treatment for alpha-gal allergy
The law’s lead sponsor
Representative Julie Mayberry
has this allergy
The disease is caused by reaction to Galactose-alpha-1,3-galactose. The body is overloaded with immunoglobulin E. It is a response to eating mammalian meat after this carbohydrate has been transferred to the victim by the lone star tick.
Symptoms include hives, angioedema, GI upset, whole body itching and sometimes anaphylaxis.
EMS is involved to help provide early life saving intervention by administering epinephrine.
Act 1108 expands public access to auto-injectable epinephrine to include an authorized entity that prescribes epinephrine.
This includes a:

- parent
- camp counselor
- scout leader
- school nurse, teacher or other school employee
- forest ranger or tour guide
We now have a legal opinion from ADH. First responders are included. Firemen and Police Officers.
EMS needs to make certain of the availability of epinephrine and early recognition of anaphylaxis. Expand authorization as to who administers epinephrine.
Long Term Treatment of Patients with Alpha-gal Allergy
If a patient is tolerating mammalian dairy products these items do not have to be stopped. Patients with IgE antibodies and a clinical history of this disease need to have an epinephrine auto injector.
These patients should meticulously avoid all mammalian meat products.
It has been observed that tick avoidance will lead to waning of the IgE antibodies to alpha-gal over time. However, reintroduction to mammalian meats should only be performed under the supervision of an experienced clinician.
This information will be distributed to all EMS medical directors so that they will educate the EMTs, paramedics and first responders.
Alpha-gal Allergy is a delayed reaction to consumption of mammalian meat in patients with IgE antibodies specific for galactose –alpha-1,3-galactose.
Patients have a history of tick bite and a recent ingestion of red meat. They frequently have eaten 3-6 hours before symptoms occur.
Symptoms include hives, angioedema, GI upset, whole body itching and sometimes anaphylaxis.
Early recognition is paramount and could be life saving. This condition could be overlooked in the absence of an insect bite, no prior history of allergy or thinking that the patient is having a hysterical reaction.
Responders must have a high degree of suspicion.
Treatment is administration of epinephrine promptly.
Any person that is suspected to have an Alpha-gal allergy needs to be transported to an ED as soon as possible. These patients will need more than an injection of epinephrine.
For non medical personnel who administer epinephrine under the provisions of Act 1108 must also activate the EMS system as soon as possible and report the use of auto-injectable epinephrine to the medical provider responding to the emergency.