



# Informational Bulletin

## Stevens-Johnson Syndrome

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Approved By: Mark S. Ciarrocca, Acting Fire Rescue Chief

On April 19, 2019 M1108 was dispatched for a reported illness. Pre-arrival notes indicated an Autistic 4 year old suffering from a rash and, based on a phone call with their pediatrician, possible Scarlet Fever. Crew arrived on scene to find a non-verbal 4 year old, mentally at her baseline, but not acting herself. Parents on scene reported that she was usually up and active. However, over the last day she has had an extreme decrease in her activity. Upon arriving on scene the crew found the patient laying in her bed. Mom reported that two days prior she had noticed a blister and was at the pediatrician's office. The pediatrician diagnosed the child for with Strep Throat, the second time in five weeks. The child was started on antibiotics and taken home.

Mom has been alternating Ibuprofen and Tylenol to control the fever. Throughout the day, while checking on her, mom noticed a rash forming on the upper body. She became distraught when she noticed the rash had spread to the genitalia. Rash was red on the upper body, red and purple on the genitalia. Crews performed an initial assessment and prepared for transport. Once the stretcher was inside, with Pedi-mate, mom attempted to pick the child up. Prior to this, neither parent nor crew had seen the patient's back. When mom attempted to pick the child up she stated that her back was falling off. Assessment revealed a large 1<sup>st</sup> degree burn to the entire back, buttocks, and upper legs. Rapid recognition of Stevens-Johnson syndrome led the lead provider to immediately request an Engine Company, make contact with medical control, and then request air medical transport. Decision was then made, based on patient's stable condition and weather, that ground transport would be utilized. Emergent transport to Inova Fairfax Hospital was initiated, selection based on proximity to a Pediatric Emergency Department and ICU. Transport occurred without incident. Treatment was focused on supportive care.

### What is Stevens - Johnson syndrome?

Stevens - Johnson syndrome, commonly referred to as SJS, is a rare but serious disorder of the skin and mucous membranes. While it is rare, there are some common causes of it. Those include an infection or a reaction to a medication. During the initial onset it may appear as flu-like symptoms that is followed by a red and purple rash that spreads and blisters. During this process your skin will begin to die and slough or peel off. Most times when occurring it resembles a 1<sup>st</sup>-2<sup>nd</sup> degree burn. Blisters can also form inside the body causing it hard to eat, swallow, or urinate. SJS requires immediate medical treatment and will require admission often to an intensive care unit or burn unit.

### Causes

SJS is a rare and unpredictable reaction. The exact cause of the reaction may not be determined, however, it is usually prompted by certain medications or infections. The reaction to the medication is spontaneous, meaning it could occur after multiple uses, the first use, or in some documented cases up to two weeks after the medication has been stopped. Persons that are immunocompromised, have a history or family history of SJS, and the HLA-B1502 gene are at greater risk. Below is a list of common causes to consider.

- Anti-gout medications
- Anticonvulsants – increased risk with radiation therapy
- Antipsychotics – increased risk with radiation therapy
- Pain relievers such as Tylenol, Motrin, and Aleve
- Antibiotics
- Herpes Virus
- Pneumonia
- HIV
- Hepatitis

### **Signs and Symptoms**

- Fever
- Unexplained widespread skin pain
- Red or purple rash that spreads
- Blisters on the mucous membranes of the eyes, nose, mouth, and genitalia
- Sloughing of the epidermis
- Unexplained burn patterns
- Other common symptoms that are present before the rash develops include
  - Fever
  - Sore mouth and throat
  - Fatigue
  - Cough Burning Eye

### **Prehospital EMS Objectives**

- Rapid recognition and transport to appropriate facility (ICU capable for age or Burn Unit)
- Supportive Care
  - Fluid replacement if indicated
  - Wound care
  - Pain management

### **Treatment of SJS**

- Stopping the medication that caused the reaction
- Antibiotics to control infection
- Steroids
- Intravenous Immunoglobulin (IVIG)

## Images

- This image depicts what the rash looks like and is very similar in color to the rash experienced by the patient



- This image depicts the back of the patient where you can see the skin starting to slough and peel away



## References

- <https://www.webmd.com/skin-problems-and-treatments/stevens-johnson-syndrome#2>
- <https://www.mayoclinic.org/diseases-conditions/stevens-johnson-syndrome/symptoms-causes/syc-20355936>
- <https://my.clevelandclinic.org/health/diseases/17656-stevens-johnson-syndrome>

Questions regarding this bulletin should be directed to Technician I Jordan Coleman or Battalion Chief RJ Arft.