

**The loss of the Steamship General Slocum, June 15, 1904**

On June 15, 1904, a church group headed out for an excursion through New York City's East River on the Steamship General Slocum. Approximately half an hour after the ship left the pier, it caught fire. Despite being only hundreds of yards from shore, the Captain continued to go full speed ahead in hopes of beaching at North Brother Island, where a hospital was located. This served to fan the flames quickly over the entire highly flammable ship, killing many in the inferno. Most of those who were not killed by the fire drowned, even though the Captain did successfully beach the ship at North Brother Island, due to the depth of the water and lack of safety equipment.

To perform a root cause analysis of the General Slocum tragedy, we can use a cause map. A thorough root cause analysis built as a Cause Map can capture all of the causes in a simple, intuitive format that fits on one page. First we look at the impact to the goals. On the General Slocum there were at least 1,021 fatalities of the passengers and crew that were aboard. (However, only two of the crew were killed.) There were other goals that were affected but the magnitude of the loss of life makes any other goals less significant. The deaths and injuries are impacts to the safety goals.

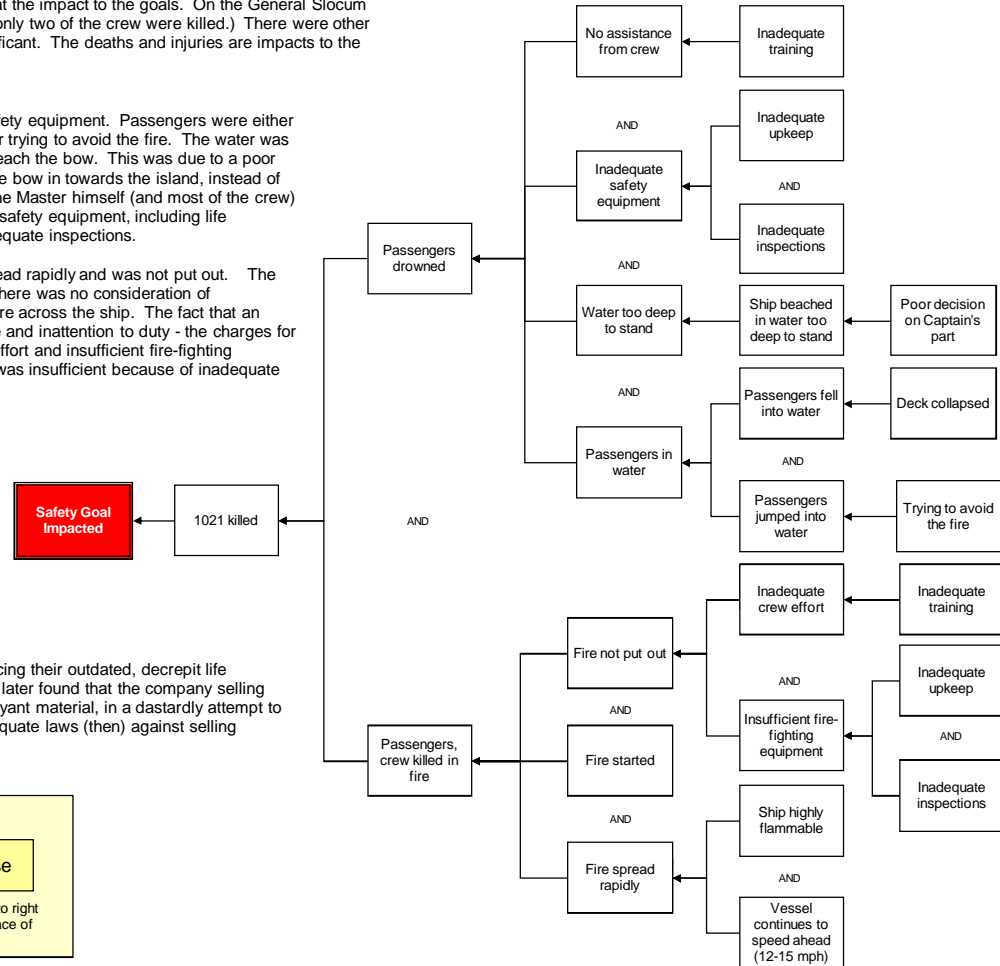
Passengers drowned because they were in water over their heads with inadequate help or safety equipment. Passengers were either in the water because they fell when the deck collapsed, or because they jumped into the water trying to avoid the fire. The water was too deep to stand because only the bow was in shallow water and the passengers could not reach the bow. This was due to a poor decision on the Master's part (namely his decision to beach the ship at a severe angle, with the bow in towards the island, instead of parallel to the island, where passengers would have been able to wade to shore.) Note that the Master himself (and most of the crew) were on the bow side of the ship and were able to (and did) jump off and wade to shore. The safety equipment, including life preservers, life boats, and life rafts, was mostly unusable due to inadequate upkeep and inadequate inspections.

Passengers (and two crewmembers) were also killed by fire. Once the fire was started, it spread rapidly and was not put out. The fire spread rapidly because the ship was highly flammable. When this ship was constructed, there was no consideration of flammability. Additionally, the current of air created by the vessel speeding ahead drove the fire across the ship. The fact that an experienced Master would have allowed this situation was considered misconduct, negligence and inattention to duty - the charges for which the Master was later convicted. The fire was not put out because of inadequate crew effort and insufficient fire-fighting equipment. The crew effort was inadequate of a lack of training. The fire-fighting equipment was insufficient because of inadequate upkeep and inadequate inspections.

Although many people have not heard of the General Slocum tragedy, many of its lessons learned have been implemented to make ship travel safer today, although many of the solutions were not implemented widely enough or in time to prevent the Titanic disaster from occurring eight years later. (Although there were actually more people killed on the General Slocum, it is believed that the Titanic disaster is more well known because the passengers on Titanic were wealthy, as opposed to the working class passengers on General Slocum. It is also surmised that sympathy for the highly German population aboard General Slocum was diminished as World War I began.)

In a macabre ending to a gruesome story, ships began replacing their outdated, decrepit life preservers after the investigation on General Slocum. It was later found that the company selling these new life preservers had hidden iron bars within the buoyant material, in a dastardly attempt to raise their apparent weight. Unfortunately there were no adequate laws (then) against selling defective life-saving equipment.

Even more detail can be added to this Cause Map as the analysis continues. As with any investigation the level of detail in the analysis is based on the impact of the incident on the organization's overall goals.



**Cause Map**  
Detail Level



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