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Overview of the New Horizons DEIS

New Horizons Mission to Pluto

- NASA will not launch if it is not SAFE!
- Over the past 40 years, RTGs have been used safely and reliably. Some of these successes include:
  - Six Apollo Flights to the Moon
  - Two Pioneer Spacecraft to Jupiter and Saturn
  - Two Mars Viking Landers
  - Two Voyager Missions to the Outer Planets
  - Galileo Mission to Jupiter
  - Ulysses Mission to the Sun's Poles
  - Cassini-Huygens Mission to Saturn

Draft EIS Summary of Results

- Impacts of a successful launch – the most likely outcome – would come mainly from the Atlas V solid propellant booster exhaust emissions; these would include:
  - Temporary effects on local air quality near the launch site.
  - Short-term ozone degradation along the vehicle's flight path.

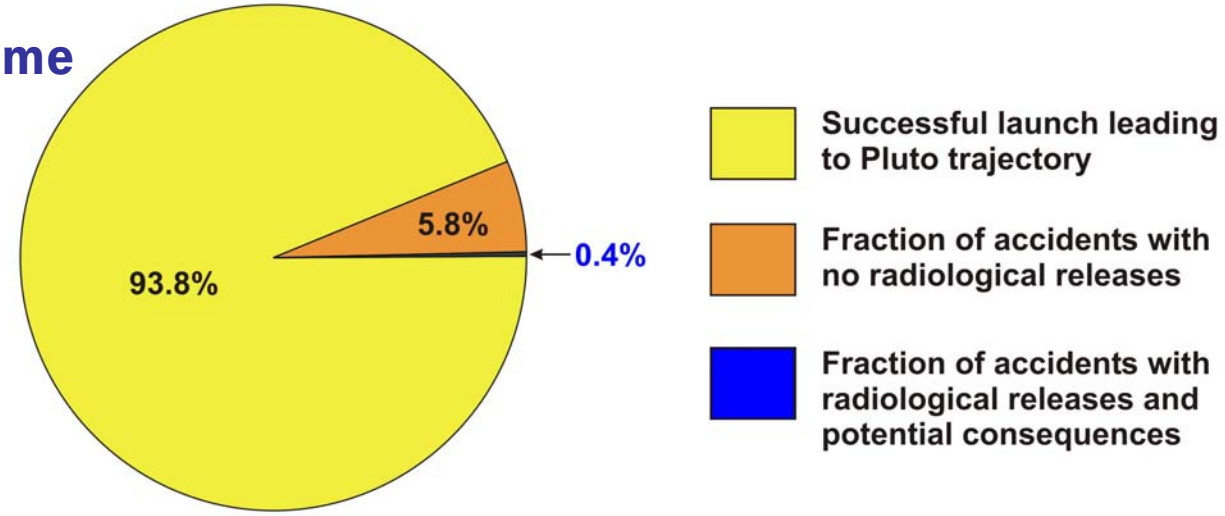
These impacts are common for many launch vehicles that use solid propellant boosters.

Draft EIS Summary of Results

- Unlikely accidents could occur during preparation for and launch of the spacecraft. The two accidents of principal concern are:
  - A liquid propellant spill during fueling operations, which would be minimized via remotely operated actions that would shut down the system.
  - A vehicle failure in or near the launch area during the first few seconds of flight, resulting in:
    - Emissions of combusted propellants that chemically resemble those from a normal launch and would not reach levels that threaten public health.
    - Debris that would likely fall on or near the launch pad or into the Atlantic Ocean.
  - Very unlikely accidents are also addressed.

Draft EIS Summary of Results

The most likely outcome (938 out of 1,000) is a successful launch to Pluto



- There is a 99.6% probability that the mission will result in no release of radiological material.
- Less than half of accidents with a release (0.16%) would result in more than 0.1 latent cancer fatalities
- There is a 1 in 1.1 million chance of an accident with a release that would result in more than 0.5 latent cancer fatalities