

Guidance on Ammunition That Has Been Submerged in Water

The Sporting Arms and Ammunition Manufacturers' Institute, Inc (SAAMI[®]) has prepared this informational document to provide guidance for the consumer regarding ammunition that has been submerged or exposed to water. The intent is to help the consumer understand the steps that should be taken in the event of such exposure.

WARNING: Failure to follow these recommendations can result in property damage, personal injury and death.

Torrential rains and storm surges that can result in flooding in areas of the United States bring about several interesting questions. Is it possible to salvage ammunition that has been exposed to water? Can ammunition that has been submerged in water for a period of time be salvaged? Should one set it out and attempt to dry it? What are the potential hazards?

To supply answers to these questions, one should look at the situation from two perspectives:

First, ammunition that has been exposed to rain or moisture as could be normally encountered when hunting or shooting; and, secondly, ammunition that has been, for whatever reason, totally submerged for any length of time.

Centerfire rifle, handgun and shotshell ammunition is reasonably tolerant of exposure to light rain or dropping in the snow or on damp ground as long as the exposure is limited, and the cartridges are wiped dry immediately. Ammunition should not be carried or stored in any manner that may collect and trap water, further increasing the exposure of the ammunition to moisture.

Rimfire ammunition is much more susceptible than other ammunition types to moisture damage from exposure to the elements, due to the unique construction of the cartridges. Every effort should be made to prevent rimfire ammunition from being exposed to rain or dropped in the snow or on water-soaked ground.

The second scenario to consider is ammunition that has been submerged in water for any period of time. In such scenarios, there are many variables that would need to be considered, such as:

- cartridge type (e.g., rimfire, shotshell, centerfire rifle, centerfire handgun);
- depth of the water;
- length of time the cartridges were submerged;

- sealing of the primers on the cartridges; and
- presence of contaminants in the water that might affect the powder charge or priming compound.

Due to these myriad factors, it is impossible to ascertain for certain the extent of the deteriorating effect, if any, the water may have had on each individual cartridge which has been submerged in water. **Therefore, the safe answer is to NOT attempt to salvage or otherwise use previously submerged ammunition.**

Some of the potential hazards of attempting to salvage or use previously submerged ammunition include, but are not limited to:

- Potential safety hazards in attempting to “dry out” the cartridges by using direct heat on the cartridges, which can degrade the smokeless propellant inside the case, potentially changing its burning characteristics in such a way as to make the round unsafe to fire;
- Possible self-initiation of rounds if exposed to excessively high temperatures in the drying process, which could lead
- to severe injury or death to bystanders, as well as property damage;
- Failure of the cartridge to fire due to deterioration or damage to the primer, which could have life-threatening ramifications in defensive-use situations; and
- Initiation of only the priming compound or ignition of only a proportion of the propellant powder charge, resulting in insufficient pressure to push the projectile clear of the barrel and creating a bore obstruction. Firing a subsequent round through an obstructed barrel could lead to catastrophic failure and severe injury or death to the user or bystanders, as well as property damage.

Any ammunition which has been submerged in water should be disposed of in a safe and responsible manner in accordance with all applicable local, state and federal regulations. Do not ship the ammunition back to the manufacturer. Contact your local law enforcement agency for guidance on disposal instructions in your area.