



## **BEYOND NUCLEAR BACKGROUNDER TMI TRUTH**

### **The Unlearned Lessons from TMI on Emergency Planning**

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#### **Emergency Plans Ignore Human Behavior**

During the licensing phase for the construction and operation of Three Mile Island, a nuclear disaster was considered “unthinkable.” As such, emergency plans were practically non-existent when the reactor core began its March 28 meltdown toward a hydrogen detonation.

Emergency planning officials were repeatedly misinformed by Met Ed on the accident progression and kept in the dark about the need for public protective actions early in the TMI accident.

On March 30, 1979, Pennsylvania Governor Richard Thornburgh finally “advised” that pregnant women and pre-school age children voluntarily evacuate a five-mile perimeter around TMI, a anticipated target population of 3,500 people. Approximately 200,000 people spontaneously evacuated from a 25-mile perimeter.

The Three Mile Island accident demonstrated that managing human behavior during a nuclear catastrophe is not realistic. Nuclear catastrophe provokes a unique human behavior not comparable to any other hazard. The public perception of the invisible long-term harm that can come from radiation exposure (clinically shown to be carcinogenic, teratogenic and mutagenic) sets the human response to a nuclear accident dramatically apart from other technological and natural disasters.

Current emergency plans continue to ignore predictable human behavior. During the TMI disaster, competing loyalties between work duty and personal family caused a significant number of staffing problems for various emergency response roles.

As the crisis intensified, more emergency workers reported late or not at all. Doctors, nurses and technicians in hospitals beyond the five-mile perimeter and out to 25 miles spontaneously evacuated emergency rooms and their patients.

Pennsylvania National Guard, nuclear power plant workers, school teachers and bus drivers assigned to accompany their students, abandoned their roles for their own family obligations. Similarly, in the aftermath of Japan’s Fukushima meltdowns in 2011, victims

trapped in the wreckage earthquake and tsunami were abandoned and died because emergency responders feared the threat from the radiation hazard.

### **“Too little information too late”**

“Too little information too late” persisted throughout the TMI accident so that state or federal NRC officials had no precise data on time, direction and amount of radioactivity releases.

Similarly, at the start of the Fukushima disaster, with no official guidance, thousands of people from the nearby town of Namie spontaneously evacuated, camping for three nights in the open, little knowing that the wind was blowing radiation released from Fukushima-Daiichi straight into their camp.

The Japanese government had in fact deliberately withheld computer weather modeling data that showed the radioactive plume was traveling directly toward the area into which the Namie community had evacuated. Government officials suppressed this crucial information, worried that expanding the evacuation zone would necessitate an acknowledgment about the growing severity of the disaster.

### **No Thyroid Protection Then, No Protection Now**

In 1979, potassium iodide (KI) was not available for distribution to populations downwind of the TMI disaster to protect populations, particularly children, from the radioactive iodine that was venting from the reactor.

The USDA set out to immediately deliver 237,013 doses to the TMI area. These doses arrived six days after the accident began.

However, the hastily fashioned KI solution was never distributed because the individual dosage bottles did not have matching screw top caps.

The U.S. Nuclear Regulatory Commission initially supported a recommendation from President Carter’s Kemeny Commission report to stockpile KI around all U.S. reactors.

However, the nuclear industry has successfully resisted the implementation for KI planning which they view as a detriment to “public confidence” in nuclear safety.

The passage of a Congressional law in 2002, in response to the 9/11 terrorist attacks on New York City and Washington, DC, required KI stockpiles within 20 miles of reactors. Yet U.S. populations remain unprepared to protect against highly mobile radioactive iodine releases in the event of an accident or attack on a nuclear power station.

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