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Inquiry Sees Chaos in Evacuations After Japan Tsunami

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TOKYO — Chaotic evacuations after a tsunami struck the Fukushima Daiichi nuclear power plant left children in areas where radiation levels were deemed dangerously high, while causing unnecessary deaths among sickly patients who were hastily removed from their hospitals, a government-sponsored inquiry reported on Monday.

The inquiry, the latest in a series of investigations into the worst nuclear disaster since Chernobyl, came amid intensifying debate over the human toll of the disaster. The 450-page report on the inquiry, released on Monday, also said that the government's failure to act on computer-aided predictions of radioactive releases as the disaster unfolded might have caused residents of at least two communities to be led straight into the radioactive plume.

The inquiry's chairman, Yotaro Hatamura, an engineering professor at the University of Tokyo and an expert on the study of large-scale failure, stressed that he had made it a point to study the disaster from the point of view of communities affected by it.

"An analysis from the victims' perspective takes you beyond studying what equipment or systems broke down," Mr. Hatamura said at a news conference. "Instead, we begin to consider the suffering brought upon local communities and whether that suffering could have been minimized."

Mr. Hatamura and his 10-member panel detailed how miscommunication among the nuclear site's operator — the Tokyo Electric Power Company, or Tepco — local officials, the police and the Japan Self-Defense Forces set off chaos as about 340 patients, most of them elderly, were evacuated from a hospital facility near the plant. Eight patients who spent almost 12 hours on a bus died on board, while about 35 were mistakenly left behind at the hospital for two extra days. By the end of March, 40 patients had died, either from medical complications or from the fatigue of staying at evacuation centers, according to the hospital.

Local governments in the 13 municipalities affected by the Fukushima crisis have certified nearly 600 deaths as "disaster-related," meaning caused by fatigue or by medical conditions made worse by evacuation. Experts say it is difficult to separate out the effects of the nuclear disaster, however, because many of the evacuees were also driven from their homes by the tsunami.

The report detailed how the government decided not to act on the computer-aided estimates, available 12 days into the disaster, which showed radiation levels dangerous for small children in areas to the northwest and to the south of the plant beyond the 12-mile evacuation zone.

The report said that Japan's Nuclear Safety Commission, considering those projections "grave," brought the data to the prime minister at the time, Naoto Kan, who eventually decided that they were overblown and elected not to widen the evacuation zone. Instead, he ordered that all children in those areas undergo medical tests "to confirm thyroid exposure through actual test results," the report said.

Those tests so far have not revealed exposure above government limits, the report said. However, some experts have warned that the health effects of longer-term exposure to low levels of radiation are not well understood. Some of these areas — like Iitate village, northwest of the plant — were not evacuated for over a month.

Earlier, government scientists had used the same estimates — made by a computer program known as the System for Prediction of Environmental Emergency Dose Information, or Speedi — to discover that plumes that had been blowing eastward from the plant out to sea were starting to head inland, in a northwesterly direction.

Japan's nuclear regulator relayed the predictions to Mr. Kan's office, which raised no alarm, the report said.

As a result, in one town near the stricken plant, Namie, the mayor might have inadvertently led evacuees northwest into the radioactive plume, the report confirms. And in Minamisoma, north of the plant, local officials probably organized evacuations by bus on the very day — March 15 — that a radioactive plume swung into their path, the report said.

Mr. Kan, who stepped down as prime minister in September, was not immediately available for comment. At the end of May, in testimony before a parliamentary inquiry into the disaster, Mr. Kan defended his handling of the disaster, saying that while he tried to divulge as much information as possible to the public, he was kept in the dark about crucial details by nuclear regulators and Tepco.

The report also faults Tepco for failing to give most workers dosimeters that would have kept track of their exposure to harmful radiation as they fought to contain meltdowns in the early days of the crisis. Tepco in fact had access to hundreds of dosimeters sent from other nuclear power plants across Japan, but managers failed to put them to use — a sign that the company paid little heed to worker safety, the report said.

The report came after a construction company based in Fukushima admitted that it forced workers at the Fukushima Daiichi plant to cover their dosimeters with lead plates last year, in a bid to stay under a government safety threshold for exposure. The case has underscored the lax safety standards at the plant, which the government has said is in a stable state but remains highly radioactive.

Teruo Sagara, an executive at the construction company, Build-Up, said that nine workers had agreed to put the lead coverings on their dosimeters. He said the company had thought it would be in their employees' interests to underreport exposure so they could work at the plant

longer.

“We judged mistakenly that we could bring peace of mind to the workers if we could somehow delay their dosimeters’ alarms’ going off,” Mr. Sagara said.

Japan’s Health Ministry said on Monday that it was investigating.

Makiko Inoue contributed reporting.