

## Lessons Canada learned in Swissair crash being applied in New York

The 1998 Swissair crash in Nova Scotia gave Canadians the expertise needed to help relatives of those killed in the terrorist assaults on the World Trade Center, and within days of those Sept. 11 attacks that expertise was on its way to New York City.

"Two lessons we learned from Swissair were the need to get the right information to families and to work with families," Dr. James Young, Ontario's chief coroner, said in a telephone interview from New York at the end of September. Young, who arrived in New York City Sept. 16, said this close connection with the bereaved is needed not only for humanitarian reasons but also to compile the highest quality antemortem information for identifying bodies and body parts.

After Swissair Flight 111 crashed into Peggy's Cove Sept. 2, 1998, killing everyone on board, the Ontario coroner spent 3 weeks in Halifax, working with Nova Scotia medical examiner John Butt in the most massive body-identification job in Canadian history.

Young has now met with American officials to explain some of the procedures developed in the wake of that crash, since the same challenges will face New York's medical examiners.

Of the 229 people on the Swissair plane, only 1 intact body was found; 100 victims were identifiable only through DNA analysis, the balance through dental records, finger prints and antemortem radiographs.

Identifying the approximately 6000 dead in the World Trade Center attacks will likely present the greatest challenge forensic medicine has ever faced, since the bodies of most victims were charred and pulverized as the building burned and collapsed.

Butt, who dealt extensively with traumatized families in the wake of the Swissair crash, suggested another lesson from that disaster: establish a protocol for dealing with human remains — the extent and type of DNA testing that will be conducted and what will be done with the remains — and then publicize it.

"It may be too early to do this in New York because they may not know

the state of the remains," acknowledged Butt, now a private consultant in Vancouver. "But there will be people who will want [officials] to go all the way and test every bit of remains. You have to be clear about your intentions, do it wisely and then stick to your guns."

Canadian officials have not been asked to help with the identification of human remains in New York. Instead, Young and his Ontario colleagues have concentrated on working with relatives and collecting personal information about victims through dental and medical records and DNA samples in order to compile the best data to link with information extracted from remains.

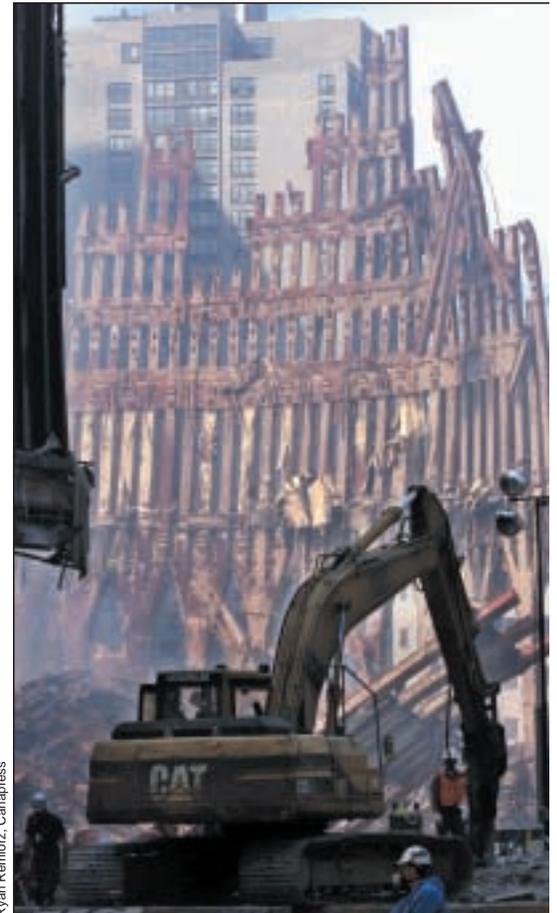
The first task was trying to determine who might be dead. "It wasn't like an airplane crash," said Young. "There was no manifest [of people in the building], and a lot of company records were wiped out. Often the office staff who would know who was expected at work were themselves dead."

Officials with the Canadian Consulate and Canadian UN staff were sifting through information and reports from families and knocking on doors and leaving messages in order to determine how many Canadians died.

The coroner and his staff offered advice on ranking the list of missing and began holding meetings with relatives. The Canadian death toll is expected to be between 25 and 35 people.

When advising relatives, said Young, "we told them what we knew about the situation, explained the process and suggested the best things to submit [for identification purposes]. A good number of relatives did not come to New York, and we made sure that it was not necessary for people to come."

Young says US officials estimate that about 25% of the dead will never be officially identified through DNA or other means. Standard DNA testing will likely not be possible on all remains, he noted, because many victims were burned and because of the degradation of remains over time. "There is talk of mitochondrial DNA testing, because this DNA is more viable in such situations, but it has never been used on a large-scale forensic basis ... Also, it is highly sensitive to



Ryan Remiorz, Canapress

**The job of removing debris and recovering body parts at the World Trade Center may take a year**

contamination and less accurate than nuclear DNA testing."

Most Canadian families affected "are acknowledging what has happened and accepting the deaths of their relatives," added Young.

Butt applauded New York's decision to issue death certificates without waiting for positive identification of victims, a move that streamlined claim processes for life insurance and death benefits. "There is a lot to be said for this, for bypassing the scientific system. This may set a precedent that will change protocol for identification of the dead. We may not have to deal with as many parts."

And that could prove a major benefit. After the Swissair crash, divers recovered about 15 000 body parts. — *Anne Silversides, Toronto*