

## Meningitis vaccine developed

Researchers in Ottawa have developed a new vaccine which, they hope, will rid the world of bacterial meningitis, one of the last major childhood illnesses.

According to the *Ottawa Citizen*, there is now a vaccine against bacterial meningitis for adults and older children, but nothing to protect children under about two, who are most susceptible to the potentially fatal disease.

"Theoretically, we could wipe out bacterial meningitis around the world with this vaccine," said Dr. Harry Jennings, a National Research Council scientist who has been studying meningitis for 13 years and developing the vaccine for the past three.

Jennings says it is impossible to tell when the vaccine will be ready for distribution, but says if tests go well in the next year, "I would say it should be a viable product within ten years".

## Youngest most susceptible

Babies and young children are most susceptible to meningitis — an infection and inflammation of the membranes that envelop the brain and spinal chord — because they haven't yet developed natural immunities.

In Canada last year, there were 764 cases of bacterial meningitis, 510 of them in children younger than four and 258 of them in babies younger than a year. And the situation is much worse in countries with lower standards of hygiene, Jennings said.

"Even though the numbers may not sound very big, it's a very devastating illness," said Dr. Ronald Gold, Chief, Infectious Diseases, Toronto Hospital for Sick Children. "Five to 10 per cent of the children who get it will die and another 10 to 20 per cent will sustain some kind of brain damage."

It was meningitis that left six-year-old Stephen Dawson of Vancouver blind, deaf, severely retarded and in need of a shunt to drain fluid accumulating inside his skull. His parents lost a court battle to let him die by not having the shunt implanted.

Dr. Gold said treatment of meningitis has not improved significantly in the last 40 years, since new antibiotics were discovered.

Trials have already shown the vaccine Dr. Jennings helped develop can immunize mice and rabbits against bacterial meningitis.

## Canadian robot scores in US

The New York Police Department recently received a call about a suspicious-looking briefcase outside a restaurant in Manhattan. It called in its new bomb-disposing robot from Canada, the Remote Mobile Investigations Unit (RMI-3).

With dextrous ease, the remote-controlled device picked up the case and deposited it in an explosion-proof box at the rear of the bomb squad's truck. The case was found to be harmless, but the robot's performance was a confirmed success.



Bomb-disposing robot a proven success.

"It's like buying life insurance for bomb squads," says Robert Pederson, president of Pedesco (Canada) Ltd., the robot inventor. His firm has been manufacturing the units at its Scarborough location for six years.

With contacts and encouragement supplied by the Ontario Ministry of Industry and Trade field offices in both New York and Willowdale, the company has been able to expand its international profile. Approximately 90 RMI-3 models now can be found in the service of law enforcement agencies overseas and throughout the United States, as well as across Canada.

The robot has won widespread publicity. In New York, the briefcase incident brought news hounds scrambling for details. Major newspapers, including *The New York Times*, and three of the biggest television networks covered the event.

The robot most recently demonstrated its strength in Arizona during a hostage-taking incident. Complete with two-way radio and mounted guns, it confronted

the criminal and forced his surrender, while the police kept vigil a safe 91.44 metres away.

The basic robot sells for \$20 000 (US) with extra options available on a made-to-order basis. These include radio control, x-ray vision, blasting water guns used to defuse bombs, and firefighting equipment.

When assembled, the New York Police Department's model cost \$64 000 (US), weighed in at 104.3 kilograms and stood 46 centimetres high when folded.

## Videotapes help expectant immigrant mothers

A Vancouver doctor is doing something about the problems immigrant women face as they prepare to give birth in a foreign society when they do not speak English, reports the *Canadian Press*.

Dr. Perry Kendall of the Vancouver Health Department has prepared a set of one-hour videotapes available across Canada for women who speak Hindi, Punjabi, Cantonese and Vietnamese. The tapes explain how Canada's maternal health system works and provide tips on ensuring a healthy pregnancy.

## Smaller babies

Dr. Kendall said he was giving pre-natal classes mainly to English-speaking women, but it was the non-English-speaking women who were producing babies with low birth weight.

"We decided to focus on the Punjabi group because they're producing a higher proportion of low weight babies."

Babies with low birth weight, sometimes the result of poor nutrition or stress during pregnancy, are more susceptible to handicaps or early death, he said.

With help from Health and Welfare Canada and the British Columbia Prenatal Health Society, Dr. Kendall produced tapes aimed at various groups of women.

The tapes, which have soundtracks in English to go with the other languages, are being sold to health departments across Canada and to doctors in the Vancouver area.

He said the tapes encourage balanced, nutritious diets and acquaint women with health services available to them. The tapes, which take into account the cultural background of the viewers, also encourage husbands to play an active role during pregnancy and delivery.