

LEGISLATIVE ASSEMBLY OF THE
NORTHWEST TERRITORIES
6TH COUNCIL, 38TH SESSION

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Return to Oral Question by Mr. Williamson - January 15, 1969

MENINGITIS IN BAKER LAKE, NORTHWEST TERRITORIES

Request by N.W.T. Council for Report

Seven cases of meningitis with three deaths have occurred in Baker Lake since May, 1968. Details are as follows:-

- May 1968 - 28 year old Eskimo Male - Meningococcal meningitis - recovered
- June 1968 - 10 year old Eskimo boy - unspecified meningitis recovered
- June 1968 - 9 month old Eskimo girl - unspecified meningitis - died
- October 1968 - 5 year old non-native girl - unspecified meningitis - died
- November 1968 - 19 month old Eskimo girl - Meningococcal meningitis - recovered
- December 1968 - 11 month old Eskimo girl - unspecified meningitis - died
- December 1968 - 30 year old non-native mail - Meningococcal meningitis - recovered

On the occurrence of the cases in October and November within a week of one another, we discussed the situation with specialists and gave prophylactic sulphonamides to the total population of the settlement in an attempt to clear Meningococci from the throats of the population. On the occurrence of two cases at the end of December, we further discussed the situation with Dr. Hildes, Professor of Medicine University of Manitoba, Dr. Wilks, bacteriologist and Dr. Schaefer, Specialist in Charge, Northern Medical Research Unit, and it was agreed that

- (a) We should give sulphonamide prophylaxis to all children of six years of age and under and
- (b) that we should try and isolate the meningococcus to determine its type and sensitivity to drugs.

Doctors Hildes, Schaefer and Wilks and two laboratory technicians went to Baker Lake on the week-end of 11 January, 1969 and collected swabs from the throats of the total population and also blood samples for estimation of antibodies.

The swabs were immediately cultured and brought back to Winnipeg for typing and drug sensitivity.

Twelve per cent of the population were found to be harbouring Meningococci in their throats and the children who had received sulphonamide prophylaxis a few weeks previously had a nine per cent carrier rate. The germ was found to be resistant to sulphonamide but sensitive to penicillin. The total population of the settlement is therefore being given prophylactic penicillin as are also all persons visiting the settlement.

However, penicillin prophylaxis can only be expected to protect the population for about four to six weeks and it is possible that more cases will occur after that period.

There is a vaccine which has been developed against the "A" strain of Meningococci and there is some evidence that this may also be effective against the "B" strain which we suspect is the strain prevalent in Baker Lake. We are requesting permission from the Food and Drugs Directorate to use this vaccine on an experimental trial basis as this seems to be the only real answer to the problem.

We should have confirmation within the next ten days as to the type of Meningococcus involved in the Baker Lake cases - type "A" or type "B".

Some of the meningitis cases are probably due to germs other than the Meningococcus but as this is such a serious disease, we order our nurses to treat the cases immediately on diagnosis with the result that when the patients are evacuated to Churchill where lumbar puncture can be carried out, the organisms are dead and cannot be recognized. Constant surveillance is being maintained and further studies plus a vaccine trial are contemplated.

G. C. Butler,
Chief Medical and Health Officer