(*c*) To teach barrier nursing of the case, and segregation within the home, either in a separate room, out on a porch or veranda, or, failing that, in a one-room home, at one end of the room, or, better still, in a tent outside. Separate bed and bedding, towels, clothes, separate dishes, and personal hygiene requirements were taught, together with the correct sterilization and separate washing of these. All of this was new ground to the Maori, who lives a communal form of life, crowded together, and sharing common food utensils, clothes, towels, and bedding.

(*d*) To demonstrate to the healthy Natives in the county, by means of his constant visiting, exactly which homes were tuberculous, and as the knowledge of germ-spread of tuberculosis gradually disseminated throughout the county, thus lead to less visiting of dangerous households. House-to-house visitation is a daily habit in Natives living a communal form of life, and the Maori has a custom called " hongi " of flattening nose against nose as a salutation. The regular visitation by the nurse did have a wonderful effect in advertising tuberculous homes, so much so that some of the patients complained of being segregated too much, and the nurse had to teach that it was possible to visit cases in a safe manner.

2. Constant watchfulness was maintained for new cases :—

Throughout the county the tuberculosis nurse formed a new interest for the Natives, and the Maoris themselves sought her out with information of suspected cases, when chest troubles arose. There was working in the county as well the usual district nurse to Natives, who also reported to the special nurse any suspicious chest cases. All suspicious cases were taken to the base hospital for clinical examination, radiograms, and sputum tests. If proven tuberculous, these new cases were added to the list of the special nurse. If the base hospital considered advisable, they were hospitalized until considered fit to come under the care of the nurse in their own homes. Occasionally unsuspected cases were reported from the hospital from admissions for other complaints, and these were later brought under the scheme.

3. Regular check was kept of the health of all contacts, adults and children, in the tuberculous households :—

(*a*) Physical examinations were arranged if normal health failed, and in these circumstances special X-ray check was made at the base hospital.

(*b*) Annual X-ray pictures of the children contacts were made, to detect any possible early active infection.

(*c*) In some cases of poverty, extra food or clothes were arranged for the contacts.

4. It was expected that this tuberculous home supervision would fail to achieve the necessary response in some cases, that there would be some unteachables, and some incorrigibles. Where the teaching could not or would not be assimilated, some further form of segregation would be required. It was planned originally to have a farm colony or settlement for these cases. So far it has not been necessary to proceed with this part of the scheme, although the necessary land has been given by the Maoris within the county.

Results and Future Plans.

The field follow-up work described above has now been in operation three complete years. The educational process was a slow one, but surprisingly successful as the Maori population came to understand the nature of tuberculosis, its cause, and its method of spread. The first year was one of uphill struggle, with failures, but enough teaching successes to justify decided optimism. The second year was one of rapid Maori comprehension, of consolidation, and universal acceptance. The third year has shown the scheme grafted into the normal life of the community. Tuberculous cases are being segregated within their own homes, with occasional use of the base hospital in particular cases for special reasons. They are being barrier nursed, and contacts know how to protect themselves as far as is possible without absolute isolation from the case. It has been a surprisingly but happy feature, in the poor and overcrowded tuberculous homes, to find the teaching assimilated and carried out, with double sets of everything, one for the patient looked after separately, and another communal set shared by all the contacts. As the economic standard improves, as it has done generally lately, the teaching is having a wider influence and bearing fruit in individualism in personal and family hygiene.

It is somewhat early to attempt to evaluate this field demonstration of tuberculous care and contact supervision. There are most encouraging signs, however. The mortality in the demonstration area during 1933 was 49·4 per 10,000 for all forms of tuberculosis. The rates for the following years have been—1934, 49·4 per 10,000 ; 1935, 54·4 per 10,000 ; 1936, 24·7 per 10,000.

The morbidity of tuberculosis in the demonstration area was for all forms in 1933, the year of the survey, 56·8 per 1,000. After the next three years of watchfulness and progressive X-rays, 13 cases have been written off the scheme list as cured, and are in normal occupations. During the same three years 23 old cases have died, and 7 new ones developed, two of these being fatal. The morbidity-rate for all forms of tuberculosis at the close of 1936 was 32·1 per 1,000.

Of the seven new cases one was an adult chronic case and six were children, four of these in their teens, with chronic phthisis with rapid death. This is the new case incidence for the past three years 1934–36. There has been an encouraging and welcome fall in the acute fatal tuberculosis in children, from direct contact. During 1933, while the survey was in progress, five previously healthy children, the eldest of whom was fourteen years, contracted acute or miliary tuberculosis, with rapidly fatal termination. In the subsequent three years there were the above-mentioned two cases only.

The demonstration of tuberculous care among Maoris in this county appears to be successful in reducing the mortality and morbidity of the disease. This year, 1937, it is planned to provide a separate tuberculosis shelter in those cases where there is very poor housing, and where the teaching has not been assimilated as well as elsewhere. These shelters will replace tent and exposed veranda segregation, and be a great help in those one-roomed homes where the case has to be barrier-nursed at one end. They will be of permanent material, with three-way ventilation, of the " knock-down " type bolted together, readily transported on a lorry, and easily set up by the Maoris themselves on their own plot of land close to the house. When no longer required in that household, they will be disinfected, and removed for use elsewhere. Should this work successfully, it is planned thereafter to widen the scope of this tuberculous-care demonstration, from the county where it now operates, to cover and care for tuberculous Maoris throughout New Zealand. This particular form of tuberculous care seems psychologically suited to the Maori.