Title: Etiology of Respiratory Infections of Children

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Objective To determine types and relative prevalence of respiratory viruses present in Bangkok.

Description Surveillance was undertaken at the Din Dang Maternity and Child Health Clinic. This clinic serves the Din Dang area which consists mainly of families of workers for the Bangkok County Council. In general, it represents persons of a lower socioeconomic class situation, with corresponding living and sanitary conditions.

Each week 1 to 5 patients presenting with complaints referable to respiratory tract infections were sampled. Only children less than 12 years of age who had been symptomatic no more than four days were selected. Throat and rectal swabs were variously inoculated into human embryonic kidney, human embryonic lung, monkey kidney, BS—C—1 and/or HeLa—M cells.

Progress Over the course of one year, 186 patients were studied. From these, a total of 89 agents were isolated; 24 were isolated from throat swabs, and 65 from rectal swabs; 16 patients yielded agents from both specimens. On the basis of characteristics in cell culture or specific identification, these have been classified as in table 2.

The preponderance of enterovirus isolates presumably is indicative of: 1) the high enterovirus carrier rate, and 2) methods employed to bacteriologically sterilize specimens (filtration or centrifugation) which may have removed many of the larger viruses.

Thus far, serological testing has included only metabolic inhibition tests for Coxsackie B viruses on 66 serum pairs, although complete testing is anticipated. Seven pairs have shown serological response to B2, 3 to B3 and one each to B4, 5 and 6.

Table 2. Summary of virus isolations, respiratory disease study.

| Virus | Recovered from | |
|---|---|---|
| | Throat | Rectum |
| Enteroviruses: | | |
| Polio 2 | | 4 |
| Polio 3 | | 1 |
| Coxsackie A 9 | 2 | 1 |
| B 2 | 4 | 5 |
| B 3 | | 2 |
| Echo 1 | | 2 |
| 8 | | 1 |
| 12 | | 1 |
| Unknown | 10 | 41 |
| Rhinoviruses: | 2 | |
| Adenoviruses: | | |
| Type 7 | 1 | |
| ,, 14 | 1 | 1 |
| Unknown | | 4 |
| Herpes simplex | 3 | 2 |
| Myxovirus—mumps | 1 | 0 |