## The 1992 IAS Survey of Vaccinated and Unvaccinated Children

In 1992 IAS conducted a survey on the health and vaccination status of New Zealand children. The questionnaires were distributed through IAS members and members friends and associates. Such studies normally have inherent biases. In this study almost all the children were breastfed and babies were generally breastfed for longer than the majority of New Zealand babies. Many of the families surveyed included both vaccinated and unvaccinated children, suggesting that the parents developed an awareness of vaccination issues over time. However, many of the respondents were not members of IAS and the split between vaccinated and unvaccinated children was remarkably even. A total of 245 surveys were returned, representing 245 families, with a total of 495 children surveyed. There were 226 vaccinated children and 269 unvaccinated children. The ages ranged from two weeks to 46 years. There were 273 males and 216 females. Families from throughout the country responded.

Respondents were asked to provide the year of birth, gender, vaccinations received, whether or not the child suffered from a range of chronic conditions (asthma, eczema, ear infections/glue ear, recurring tonsillitis, hyperactivity, diabetes and epilepsy) whether or not he or she had needed grommets, had had a tonsillectomy, or were slow to develop motor skills (walking, crawling, sitting-up, etc.). Parents also provided information on breastfeeding and bottle feeding and when the child was weaned if breastfed.

Eighty-one families had both vaccinated and unvaccinated children. The vast majority of these were two child families in which the elder child was vaccinated and the younger unvaccinated. There were also a large number of three and four child families in which the youngest child was unvaccinated and the older siblings were vaccinated.

The age distribution of vaccinated versus unvaccinated showed an increasing awareness of vaccination issues and reluctance to vaccinate with time. Only 9% of the people born before 1970 (1 out of 11) were unvaccinated compared to 89% of the children born since 1990 (103 out of 116). For births between 1986 and 1990 the percentage of unvaccinated children was 55. These figures suffer from what is probably the strongest bias in the survey. Parents are most concerned about the risks of vaccination when their children are young and receiving more vaccines. Membership of IAS typically lapses as children get older and the period of childhood in which the bulk of vaccinations are administered passes. As the questionnaire was distributed through current members it is logical that the members and their associates had children more recently and were at a time in parenthood in which vaccinations were of greatest concern. However, the figures can be seen to reflect a trend of increasing concern about the number of vaccines administered to children and the associated safety risks, together with an increasing refusal of parents to allow their children to be vaccinated.

The results overwhelmingly showed that unvaccinated children suffer far less from chronic childhood conditions than vaccinated children. The results are summarised in the table and graph below.

The incidence of each of eleven chronic childhood conditions in vaccinated and unvaccinated children expressed as actual incidence and as a percentage of the total vaccinated and unvaccinated children surveyed.

	VACCINATED CHILDREN (n=226)		UNVACCINATED CHILDREN (n=269)	
	Numbers of children with condition	% of total vaccinated children	Numbers of children with condition	% of total unvaccinated children
Asthma	34	15.04	8	2.97
Eczema	63	27.88	34	12.64
Ear Infection/ Glue Ear	56	24.78	16	5.95
Grommets	14	6.19	2	0.74
Tonsillitis	26	11.50	3	1.12
Tonsillectomy	12	5.31	0	0.00
Apnoea	14	6.19	4	1.49
Hyperactivity	13	5.75	4	1.49
Diabetes	0	0.00	0	0.00
Epilepsy	4	1.77	0	0.00
Slow Development of Motor Skills	6	2.65	4	1.49

A graph of the incidence of each of eleven chronic childhood conditions in vaccinated and unvaccinated children expressed as a percentage of the total vaccinated and unvaccinated children surveyed.

The survey results showed that there was a significant difference in the incidence of asthma, eczema, and ear infections in vaccinated and unvaccinated children. While overall the incidence of grommets, tonsillitis, tonsillectomies, apnoea and hyperactivity were lower the trend is similar. Note the ten-fold increase in tonsillitis in vaccinated children and the complete lack of tonsillectomies in unvaccinated children. In the vaccinated, 73% of the cases of tonsillitis and 92% of the tonsillectomies were in children who had received the measles vaccines. As only 52% of the total vaccinated children received a measles vaccine, one would expect about 52% of the tonsillitis/tonsillectomies to occur in children to have had the vaccine suggesting that the vaccine made some children more susceptible to tonsillitis.

## the role of breastfeeding

An interesting feature of the survey was the high level of breastfeeding among mothers of both vaccinated and unvaccinated children. Breastfeeding, or the lack of it, has often been associated with the incidence of chronic childhood conditions and illhealth. It is important when considering the health of vaccinated versus unvaccinated children to correct for bottlefed babies and also for the length of time that children are breastfed. However, there was essentially no difference in the distribution of age at weaning between the two groups and therefore no need to make any corrective calculations.

There were marginally more bottle fed babies in the vaccinated group (ten vaccinated and two unvaccinated). While the percentage of babies in each "age-at-weaning" group over

three months was slightly greater in the unvaccinated, the distribution is comparable and both the vaccinated and unvaccinated groups showed greater percentages in each age group than the national averages. For example, 91% of vaccinated and 97% of unvaccinated children in the survey were being breastfed at three months compared to 69% in the general population; 79% of vaccinated children and 88% of unvaccinated children were still being breastfed at six months - the national average is 60%; at twelve months 50% of vaccinated and 65% of unvaccinated children were still being breastfed - the national average is 39%; and over twelve months of age 27% of vaccinated and 35% of unvaccinated were still getting breastmilk while the national average had plummeted to just 6% (Plunket Society, Pers. comm., June 2001).

In an analysis of the role that breastfeeding and age-at-weaning played in the incidence of chronic childhood conditions in both the vaccinated and unvaccinated children surveyed, the data showed that there was no breastfeeding factor that could account for the difference in incidence between the two groups.

## a more recent, independent survey of vaccinated and unvaccinated children

In 1999 Dr Mike Godfrey, a New Zealand specialist in preventive and environmental medicine, conducted a similar survey comparing the health of vaccinated and unvaccinated children. Dr Godfrey surveyed 864 children, 260 of whom were unvaccinated and 604 of whom were vaccinated. His results were remarkably similar and are graphed below. The incidence of asthma, eczema and tonsillitis were significantly higher in vaccinated children. As with the IAS survey, although the overall incidence of the other conditions was somewhat lower, there was the same trend for the incidence to be higher in vaccinated children. The only exception was in the incidence of diabetes which was similar in the vaccinated and unvaccinated children. However, the numbers of individuals with diabetes were so small that any association with vaccination status is impossible to determine.

A comparison of the IAS results with Dr Godfrey's results are also tabulated below.

Table showing the percentage of vaccinated and unvaccinated children to suffer from each of six chronic conditions in both the IAS and Godfrey surveys.

	VACCINATED		UNVACCINATED	
	IAS (%)	Godfrey (%)	IAS (%)	Godfrey (%)
Asthma	15.0	16.2	2.9	8.3
Eczema	27.9	24.8	12.6	15.0
Tonsillitis	11.5	18.4	1.12	4.4
ADHD/Hyperactivity	5.75	3.0	1.5	1.0
Diabetes	0.0	0.5	0.0	0.5
Epilepsy	1.8	2.0	0.0	0.0