

Table 1. Impacts of paediatric surveillance unit studies

Study	Impact	Participating PSU
Acute flaccid paralysis	Confirms absence of wild poliovirus; Contributes to WHO eradication program.	APSU, BPSU CPSP, NZPSU, SPSU
<i>Haemophilus influenzae</i> type B infection	Documented success of Hib vaccination programs including combined pentavalent vaccine	APSU, ESPED, NSCK
Pertussis infection in infants	Informed changes to vaccination schedules; Identified need to review age of first vaccination and for targeted adult/adolescent vaccination.	APSU, BPSU CGPSU, NSCK
Congenital rubella syndrome (CRS)	Document persistence of CRS despite good vaccine coverage; and identify need for targeted vaccination for susceptible women including immigrants, non-immune, pre-conception and postpartum	APSU, BPSU, CPSP, NZPSU, SPSU, NSCK
Subacute sclerosing panencephalitis	Confirms disease is rare in countries with well implemented measles vaccination programs and is associated with wild measles virus infection	APSU, BPSU CPSP, ESPED,
Congenital Varicella; neonatal varicella; complications.	Confirms need for universal vaccination; and education for community and health professionals regarding infection in pregnancy.	APSU, BPSU, CPSP, ESPED, SPSU
Neonatal herpes simplex virus infection	Confirms HSV-1 most prevalent in Australia and Canada; incidences is lower than in USA; disease is often severe. Identifies need for effective screening, vaccine against HSV-1 & 2.	APSU, BPSU, CPSP, SPSU
HIV/AIDS, perinatal exposure to HIV	Support recommendation for Anti-retroviral agents, caesarian section, bottle feeding in infected mothers; supported recommendation for universal prenatal screening in some countries	APSU, BPSU, LPSU, NSCK, NZPSU
Invasive group B streptococcal disease	National prevention guidelines recommended, either based on risk factors or through universal screening in late pregnancy	BPSU, CPSP, ESPED, NSCK, PPSU
Progressive intellectual and neurological deterioration (PIND) and Childhood dementia.	Identified variant CJD in Britain but not Canada but no trend to increased rate. Identified PIND has many aetiologies; many cases idiopathic; all highly demanding of health services.	APSU, BPSU, CPSP
Early onset eating disorder (<13y)	Confirms need for pre-adolescent diagnostic criteria; substantial proportion of boys age ≤ 9y.	APSU, BPSU CPSP, NSCK
Munchausen syndrome by proxy	Identified large disease burden; feelings of isolation in clinicians; and need for multidisciplinary support.	APSU, BPSU
Rett Syndrome; Prader Willi Syndrome; SLOS	Describe molecular epidemiology and genotype-phenotype correlations; establish research cohorts for longitudinal and other studies	APSU, BPSU, CPSP
CHARGE association	Identified the complexity of CHARGE; overlap with other syndromes; need for future health resources plan; facilitated genetic studies.	APSU, CPSP
Vitamin K deficiency bleeding	Confirms most cases are late onset and related to underlying liver disease; high proportion of cases receive none or incomplete prophylaxis	APSU, BPSU, CPSP, ESPED, NZPSU, SPSU, NSCK
Haemolytic uraemic syndrome	Described geographic variation in aetiology, highlighting the need for new diagnostic tests. Supported preventative measures eg education; hygiene recommendations for kindy farms; legislation regarding food production.	APSU, BPSU, CPSP, LPSU, NZPSU, PPSU, SPSU
Reye syndrome	Ban of aspirin in paediatric/youth populations	BPSU, ESPED