

## Significant events in diphtheria, tetanus and pertussis vaccination practice in Australia

Year	Month	Intervention
1892		Antitoxin first used to treat diphtheria
1920		CSL began manufacturing diphtheria and tetanus antitoxins (for treatment of cases) and whole-cell pertussis vaccine Limited use of pertussis vaccine
1921–1928		Limited introduction of diphtheria toxin–antitoxin vaccine
1929		Diphtheria toxoid vaccine introduced for vaccinating case contacts
1932		School-based diphtheria vaccination programs commenced
1939		Tetanus toxoid vaccine introduced – used mainly to vaccinate the Armed Forces
1940		Diphtheria vaccination programs introduced for infants at welfare centres
1942		Pertussis vaccination programs started in most states/territories using whole-cell pertussis vaccine (Pw)
1953		Diphtheria-tetanus-whole-cell pertussis vaccine (DTPw) introduced Infant-based schedule involving 3 doses of DTPw vaccine introduced (in addition to school-based programs); schedule varied by state/territory
1975		First national vaccination schedule recommended and funded 3 DTPw doses for infants at 3, 4 and 5 months of age 4th dose of DTPw recommended and funded for infants aged 15–18 months Booster doses with combined diphtheria-tetanus (DT) vaccine recommended and funded for 5–6 year olds or prior to school entry Booster doses of tetanus toxoid recommended every 5 years
1978		4th dose of DTPw removed from schedule
1982		National schedule changed to DTPw at 2, 4 and 6 months of age, with DT at 18 months of age and at 5–6-years of age or prior to school entry A booster dose of adult diphtheria-tetanus vaccine (dT) recommended at age 15 years or prior to leaving school Booster doses of tetanus toxoid recommended every 10 years
1984		Use of dT in place of tetanus toxoid recommended for adult booster vaccinations at 10-year intervals Aluminium adjuvant added to DTPw vaccine to improve potency
1985		4th dose of DTPw re-introduced and funded at 18 months of age due to an increased number of pertussis cases in 4–5-year olds
1991		3 doses of monovalent pertussis vaccine recommended for children aged <4 years who had received primary immunisation with DT
1994	July	5th dose of DTPw at 4–5 years of age recommended and funded on the vaccination schedule (replacing DT) dT school vaccination programs commenced in some states for 15–19 year olds
1996		First diphtheria-tetanus-acellular pertussis (DTPa) vaccine registered for primary immunisation in infants aged 2–12 months and as a booster in children aged 15 months–6 years

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1997	February	DTPa recommended for 4th and 5th doses of DTP vaccination at 18 months and 4–5 years of age
	February	Monovalent pertussis vaccine no longer available
	August	DTPa funded for all 5 childhood DTP doses in NT and SA
	September	DTPa nationally funded for 4th and 5th doses of DTP vaccination at 18 months and 4–5 years of age (QLD did not commence funding until December)
1998	April	Second diphtheria-tetanus-acellular pertussis (DTPa) vaccine registered for primary immunisation in infants aged 2–12 months and as a booster in children aged 15 months–8 years
1999	February	DTPa nationally recommended and funded for all 5 childhood DTP doses (QLD did not commence funding until April)
	February	Combined DTPa-hepB vaccine registered for primary immunisation and as a booster in children
2000	March	2nd booster dose of DTPa scheduled at 4 years of age instead of 4–5 years
	March	A single dT booster dose recommended at 50 years of age (unless a dT dose has been documented within the last 10 years), replacing the recommendation for dT booster doses every 10 years
	March	DTPa-hepB vaccine used at 2, 4 and 6 months of age (in ACT, NSW, NT, QLD and SA)
	June	First adult/adolescent formulation dTpa (reduced antigen content) vaccine registered for use in individuals aged $\geq 10$ years
2001	April	Combined DTPa-hepB-IPV and DTPa-hepB-IPV-Hib vaccines registered for primary immunisation in infants aged $\geq 6$ weeks and as a booster in children aged 18 months
2002	April	First combined DTPa-IPV vaccine registered for primary immunisation in infants aged $\geq 6$ weeks and as a booster in children aged 15 months–6 years
	August	Second combined DTPa-IPV vaccine registered for primary immunisation in infants aged 2–12 months and as a booster in children aged 15 months–6 years
	October	Combined DTPa-IPV-Hib vaccine registered for primary immunisation in infants aged 2–12 months and as a booster in children aged 15–20 months
2003	September	Booster dose of DTPa at 18 months of age removed from schedule
	September	Adolescent dTpa booster recommended at 15–17 years of age, replacing dT
	September	Single dose of dTpa recommended for healthcare workers and infant close contacts
2004	January	dTpa funded for adolescents; the eligible age group varied in different jurisdictions
	June	First combined dTpa-IPV vaccine registered for use in individuals aged $\geq 4$ years
2005	October	Second dTpa vaccine registered for use in individuals aged $\geq 10$ years
	November	Combined DTPa vaccines funded for use at 2, 4 and 6 months of age Combined DTPa-hepB-IPV-Hib vaccine used in ACT, NSW, TAS and WA (for non-Indigenous children); DTPa-IPV vaccine used in other jurisdictions and in Aboriginal and Torres Strait Islander infants in WA
	November	DTPa-IPV funded for use as a booster in children aged 4 years
2006	February	Tetanus toxoid vaccine ceased to be available in Australia
	March	Second combined dTpa-IPV vaccine registered for use in individuals aged $\geq 4$ years

Year	Month	Intervention
2008	March October	Combined DTPa-hepB-IPV-Hib vaccine used in QLD, SA and VIC dTpa funded by NT for mothers of newborn infants under cocoon strategy
2009	February March March April May June June August October October	Combined DTPa-hepB-IPV-Hib vaccine used in Aboriginal and Torres Strait Islander infants in WA dTpa funded by NSW for parents, grandparents and carers of infants aged <12 months under cocoon strategy Advice provided in NSW that 1st dose of DTPa-hepB-IPV-Hib vaccine could be given as early as 6 weeks of age dTpa funded by ACT for parents and grandparents of infants aged <12 months under cocoon strategy dTpa funded by NT for parents and carers of infants aged <7 months living in the same household under cocoon strategy dTpa funded by VIC for parents of infants aged <6 months under cocoon strategy Adolescent booster dose of dTpa scheduled at 11 years instead of 15–17 years of age dTpa funded by QLD for parents of infants aged <6 months under cocoon strategy Pre-school booster dose of DTPa-IPV scheduled at 3.5–4 years instead of 4 years of age Combined DTPa-hepB-IPV-Hib vaccine used in NT
2010	March June October December	dTpa funded by TAS for parents and grandparents of infants aged <6 months under cocoon strategy TAS ceased funding of dTpa under cocoon strategy dTpa funded by SA for parents and grandparents of infants aged <6 months, who hold a health care or pensioner concession card under cocoon strategy SA ceased funding of dTpa under cocoon strategy
2011	January February March December	dTpa funded by WA for parents, grandparents and carers of infants aged <7 months under cocoon strategy Recommendation nationally that 1st dose of DTPa-hepB-IPV-Hib vaccine could be given as early as 6 weeks of age dTpa funded by QLD for parents and carers of infants aged <6 months under cocoon strategy ACT ceased funding of dTpa under cocoon strategy
2012	June July December	QLD and VIC ceased funding of dTpa under cocoon strategy dTpa funding by NSW restricted to new mothers in maternity units (or GP within 2 weeks of giving birth) under cocoon strategy WA ceased funding of dTpa under cocoon strategy
2013	March March March	A dose of dTpa recommended for adults aged $\geq 65$ years, if 10 years or more since the last dose A single dT booster dose recommended for overseas travellers if 10 years or more since the last dose (5 years or more if travel is high risk) (dTpa recommended if not previously received) A booster dose of dTpa recommended for healthcare workers and infant close contacts if 10 years or more since the last dose

Year	Month	Intervention
2013 (cont.)	March	dTpa recommended for women, either during pre-pregnancy planning, during the third trimester or as soon as possible after delivery (preferably before hospital discharge). A booster dose of dTpa recommended if 5 years or more between a previous dose and the expected delivery date for a subsequent pregnancy.
	July	dTpa funding by NSW restricted to new mothers in maternity units of public hospitals only under cocoon strategy
	September	dTpa funded by NT for women during the third trimester of pregnancy and for parents of infants aged <7 months under cocoon strategy
2014	July	dTpa funded by QLD for women during the third trimester of pregnancy
	September	Second combined DTPa-hepB-IPV-Hib vaccine registered for use in infants aged ≥6 weeks
2015	March	Booster dose of DTPa recommended at 18 months of age
	March	dTpa recommended for women as a single dose during the third trimester of each pregnancy (or as soon as possible post partum if antenatal vaccination did not occur)
	March	dTpa funded by NSW for women during the third trimester of pregnancy and for new mothers in maternity units of public hospitals (if not vaccinated in the third trimester) under cocoon strategy
	March	dTpa funded by SA and WA for women during the third trimester of pregnancy
	April	dTpa funded by ACT for women during the third trimester of pregnancy
	June	dTpa funded by VIC for women during the third trimester of pregnancy and for parents of infants aged <6 months under cocoon strategy
2016	June	dTpa funded by TAS for women during the third trimester of pregnancy
	March	Booster dose of DTPa funded at 18 months of age
2017	January	Age for which one adult/adolescent formulation dTpa vaccine registered for use lowered from ≥10 years to 4 years of age
	August	DTPa-IPV-Hib vaccine ceased to be available in Australia
2018	July	dTpa funded under the NIP for all women during the third trimester of pregnancy
	July	All states and territories ceased funding of dTpa for women during the third trimester of pregnancy