

## 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)  |
|           |       | Diphtheria-tetanus-whole-cell pertussis vaccine (DTPw) introduced  |
| 1953      |       | Infant-based schedule involving 3 doses of DTPw vaccine introduced (in addition to school-based programs); schedule varied by state/territory                                      |
|           |       | First national vaccination schedule recommended and funded 3 DTPw doses for infants at 3, 4 and 5 months of age  |
| 4075      |       | 4th dose of DTPw recommended and funded for infants aged 15–18 months  |
| 1975      |       | Booster doses with combined diphtheria-tetanus (DT) vaccine recommended and funded for children aged 5–6 years or prior to school entry  |
|           |       | Booster doses of tetanus toxoid recommended every 5 years  |
| 1978      |       | 4th dose of DTPw removed from schedule   |
|           |       | 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  |
| 1982      |       | 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 reintroduced and funded at 18 months of age due to an increased number of pertussis cases in children aged 4–5 years  |
| 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 to 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 to 8 years  |
| 1000 | February  | DTPa nationally recommended and funded for all 5 childhood DTP doses (Qld did not commence funding until April)  |
| 1999 | February  | Combined DTPa-hepB vaccine registered for primary immunisation and as a booster in children  |
|      | March     | 2nd booster dose of DTPa scheduled at 4 years of age instead of at 4–5 years of age  |
| 2000 | 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 ≥10 years   |
| 2001 | April     | Combined DTPa-hepB-IPV and DTPa-hepB-IPV-Hib vaccines registered for primary immunisation in infants aged ≥6 weeks and as a booster in children aged 18 months   |
|      | April     | First combined DTPa-IPV vaccine registered for primary immunisation in infants aged ≥6 weeks and as a booster in children aged 15 months to 6 years  |
| 2002 | 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 to 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   |
|      | September | Booster dose of DTPa at 18 months of age removed from schedule   |
| 2003 |           | Adolescent dTpa booster recommended at 15–17 years of age, replacing dT  |
| 2000 |           | 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  |
| 2004 | June      | First combined dTpa-IPV vaccine registered for use in individuals aged ≥4 years  |
|      | October   | Second dTpa vaccine registered for use in individuals aged ≥10 years   |
| 2005 | November  | Combined DTPa vaccines funded for use at 2, 4 and 6 months of age<br>Combined DTPa-hepB-IPV-Hib vaccine used in ACT, NSW, Tas and WA (for non-<br>Indigenous children); DTPa-IPV vaccine used in other jurisdictions and in<br>Aboriginal and Torres Strait Islander infants in WA |



| Year         | Month    | Intervention  |
|--------------|----------|---|
| 2005 (cont.) | 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 ≥4 years  |
| 2008         | March    | Combined DTPa-hepB-IPV-Hib vaccine used in Qld, SA and Vic  |
|              | October  | dTpa funded by NT for mothers of newborn infants under cocoon strategy  |
|              | February | Combined DTPa-hepB-IPV-Hib vaccine used in Aboriginal and Torres Strait Islander infants in WA  |
|              | March    | dTpa funded by NSW for parents, grandparents and carers of infants aged <12 months under cocoon strategy  |
|              | March    | Advice provided in NSW that 1st dose of DTPa-hepB-IPV-Hib vaccine could be given as early as 6 weeks of age                                       |
|              | April    | dTpa funded by ACT for parents and grandparents of infants aged <12 months under cocoon strategy  |
| 2009         | May      | dTpa funded by NT for parents and carers of infants aged <7 months living in the same household under cocoon strategy                             |
|              | June     | dTpa funded by Vic for parents of infants aged <6 months under cocoon strategy  |
|              | June     | Adolescent booster dose of dTpa scheduled at 11 years instead of 15–17 years of age   |
|              | August   | dTpa funded by Qld for parents of infants aged <6 months under cocoon strategy  |
|              | October  | Pre-school booster dose of DTPa-IPV scheduled at 3.5–4 years instead of 4 years of age  |
|              | October  | Combined DTPa-hepB-IPV-Hib vaccine used in NT   |
|              | March    | dTpa funded by Tas for parents and grandparents of infants aged <6 months under cocoon strategy   |
| 2010         | June     | Tas ceased funding of dTpa under cocoon strategy  |
| 2010         | October  | dTpa funded by SA for parents and grandparents of infants aged <6 months who hold a healthcare or pensioner concession card under cocoon strategy |
|              | December | SA ceased funding of dTpa under cocoon strategy   |
|              | January  | dTpa funded by WA for parents, grandparents and carers of infants aged <7 months under cocoon strategy  |
| 2011         | February | Recommendation nationally that 1st dose of DTPa-hepB-IPV-Hib vaccine could be given as early as 6 weeks of age                                    |
|              | March    | dTpa funded by Qld for parents and carers of infants aged <6 months under cocoon strategy   |
|              | December | ACT ceased funding of dTpa under cocoon strategy  |
|              | June     | Qld and Vic ceased funding of dTpa under cocoon strategy  |
| 2012         | July     | dTpa funding by NSW restricted to new mothers in maternity units (or GP within 2 weeks of giving birth) under cocoon strategy                     |
|              | December | WA ceased funding of dTpa under cocoon strategy   |



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| 2013         | March     | A dose of dTpa recommended for adults aged ≥65 years if 10 years or more since the last dose   |
|              | March     | 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   |
|              | March     | A booster dose of dTpa recommended for healthcare workers and infant close contacts if 10 years or more since the last dose  |
|              | 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 |
| 2013 (cont.) | 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  |
|              | July      | dTpa funded by Qld for women during the third trimester of pregnancy   |
| 2014         | September | Second combined DTPa-hepB-IPV-Hib vaccine registered for use in infants aged<br>≥6 weeks   |
|              | 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 postpartum if antenatal vaccination did not occur)  |
| 2015         | March     | dTpa funded by NSW for women during the third trimester of pregnancy and for<br>new mothers in maternity units of public hospitals (if not vaccinated in the third<br>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   |
|              | June      | dTpa funded by Tas for women during the third trimester of pregnancy   |
| 2016         | March     | Booster dose of DTPa funded at 18 months of age  |
|              | July      | A 2+1 dose schedule approved for first combined DTPa-hepB-IPV-Hib vaccine  |
| 2017         | January   | One adult/adolescent formulation dTpa vaccine expanded age of registration from ≥10 years to 4 years of age  |
|              | August    | DTPa-IPV-Hib vaccine ceased to be available in Australia   |
|              | April     | A 2+1 dose schedule approved for second combined DTPa-hepB-IPV-Hib vaccine   |
| 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  |
| 2022         | March     | Combined DT5aP-hepB-IPV-Hib(PRP-OMP) vaccine (Vaxelis) registered for use for primary and booster vaccination in infants and toddlers from 6 weeks of age  |
| 2023         | July      | Vaxelis funded under NIP as an alternative vaccine to Infanrix hexa.   |