# Background

Health Protection NSW

Under the [*Public Health Act 2010*,](https://www.legislation.nsw.gov.au/#/view/act/2010/127/full) laboratories, hospitals, medical practitioners, schools, and child care centres must notify NSW Health or their local public health unit of diagnoses of certain infectious diseases and adverse events following immunisation. These notifications are compiled into the Notifiable Conditions Information Management System (NCIMS), which is managed by the Communicable Diseases Branch of Health Protection NSW. A full list of conditions that are notifiable is available at: http://www.health.nsw.gov.au/Infectious/Pages/notification.aspx

For a condition to be notified, a patient must seek medical help, be diagnosed with the condition, have the appropriate laboratory tests, and then the diagnosis must be reported to the local public health unit or the Ministry of Health.

# Limitations

For most diseases, the notification data represent only a proportion of the total cases occurring in the community, that is, only those cases for which health care was sought, a test conducted and a diagnosis made, followed by a notification to health authorities. The degree of under-representation of all cases is unknown and may vary by disease and geographic location.

In interpreting these data it is important to note that changes in notifications over time may not solely reflect changes in disease prevalence or incidence. Changes in testing policies; screening programs, including the preferential testing of high risk populations; the use of less invasive and more sensitive diagnostic tests; and periodic awareness campaigns may influence the number of notifications that occur over time.

# Tips for using NCIMS data in linkage studies

Notification data from 1993 has been incorporated into the Master Linkage Key.

HIV/AIDS data are not included in the NCIMS data. Investigators wishing to carry out research in HIV/AIDS should seek approval from the NCIMS data custodian for access to the HIV/AIDS database.

A small proportion (<0.2%) of NCIMS records do not have sufficient identifying information for linkage. Records that are unlinkable will be flagged and provided to researchers where selected as part of a cohort definition.

**Notifiable Conditions Information Management System**

COVID-19 data are not included in the standard NCIMS data available for linkage. Investigators wishing to carry out research on COVID-19 should request the NCIMS COVID-19 confirmed case dataset which requires separate approval from NCIMS as it contains different content variables. See the NCIMS COVID-19 Case data dictionary and variable list for more detail.

## Changes to NCIMS variable list

From 2019 an updated list of extended variables will be available to researchers.

# Access to information on Aboriginal and Torres Strait Islander peoples

An application to the Aboriginal Health and Medical Research Council (AH&MRC) ethics committee should be made for research projects for which one or more of the following apply:

The experience of Aboriginal people is an explicit focus of all or part of the research

Data collection is explicitly directed at Aboriginal peoples

Aboriginal peoples, as a group, are to be examined in the results

The information has an impact on one or more Aboriginal communities

Aboriginal health funds are a source of funding

Information on making applications to the AH&MRC Ethics Committee may be found at the AH&MRC website at: [www.ahmrc.org.au](http://www.ahmrc.org.au). Further advice regarding release of Aboriginal Health Information can be obtained from the Centre for Aboriginal Health, NSW Ministry of Health.

# Data custodian

Manager, Surveillance

Health Protection NSW

NSW Ministry of Health

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ST LEONARDS NSW 2065

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NORTH SYDNEY NSW 2059

Phone: 02 9391 9869

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# Variable information

## Case-level information

|  |  |  |
| --- | --- | --- |
| Variable Name: | Description | Notes / Categories |
| gender | Gender | Male | Female | Not stated | Transgender | Unknown |
| state | State  |   |
| postcode (derived) | Postcode |   |
| age\_at\_event\_years | Age at event in years |  |
| agegrp  | Five year age group |  |
| agegrp\_pediatric | Pediatric age group  |   |
| classification | Classification  |  |
| condition\_reportable  | Condition reportable  | calculated based on condition code, organism, organism serogroup, principal anatomic site, classification. See Codes: Condition codes |
| condition | Condition |  See Codes: Condition codes |
| condition\_code | Condition code | See Codes: Condition codes |
| organism | Organism  |   |
| organism\_serogroup | Organism serogroup |   |
| organism\_serotype | Organism serotype |   |
| organism\_subtype | Organism subtype |   |
| earliest\_notification\_date  | Earliest notification Date | Date notification received  |
| earliest\_received\_or\_create\_date  | Earliest of received or create date |  |
| calculated\_onset\_date | Calculated onset date |   |
| symptom\_onset\_date | Symptom onset date |   |
| pregancy\_status | pregancy status (Not collected for all conditions) | Yes - currently pregnant | Yes - pregnant during illness | not currently pregnant | No | Unknown |
| case\_hospitalised | case\_hospitalised | Yes|No|Unknown |
| date\_hospitalised (derived) | Earliest hospitalised\_date | DATE |
| date\_discharged (derived) | Latest discharge\_date | DATE |
| outcome | Outcome  | Alive|Died|Unknown |
| outcome\_death\_cause\_of\_death | outcome death cause of death | Yes|No|Unknown |
| clinical\_date\_of\_death | Clinical date of death | DATE |
| indigenous\_status | Indigenous status |   |
| country\_of\_birth | Country of birth |   |
| occupation  | First listed occupation |   |
| hr\_occupation  | High risk occupation  |   |
| hr\_occupation\_household  | High risk occupation household  |   |
| place\_acquisition | Place of acquisition |   |
| place\_acquisition\_country | Place of acquisition (country) |   |
| place\_acquisition\_outside\_nsw | Place of acquisition outside nsw |   |
| place\_acquisition\_postcode | Place of acquisition (postcode) |   |
| identification\_method | Identification method | Clinical|Laboratory|Laboratory and Clinical |
| earliest\_specimen\_date  | Earliest specimen date | DATE |
| latest\_specimen\_date  | Latest specimen date | DATE |
| principal\_anatomic\_site  | Principal anatomic site  |   |
| reporter\_type\_first\_notification  | Reporter type first notification | ealiest reporter type |
| reporter\_type  | Reporter type  | Concatenate unique values of REPORTER\_TYPE using |  |
| vaccinated | Vaccinated | Yes|No\Not Known by case or doctor|missing |
| vaccinated\_fully | Vaccinated fully |   |
| vaccine\_number\_doses | Vaccine number doses |   |
| lhd\_2010\_code  | Local health district code 2010 |  |
| lhd\_2010\_name  | Local health district name 2010 |  |
| nsw\_residency  | NSW residency |  |
| lga\_2016\_code  | Local government area code 2016 |  |
| sa2\_2011\_code  | Statistical Area 2 2011 code |  |
| phn\_2015\_code  | Public health network 2015 |  |
| RA\_2016 | Remoteness area (2016) |  |

## Laboratory Results

|  |  |  |
| --- | --- | --- |
| Variable Name: | Description | Notes / Categories |
| result | Result |   |
| result\_value | Result value |   |
| specimen\_date | Specimen date |   |
| specimen\_site | Specimen site |   |
| specimen\_type | Specimen type |  See Codes: Specimen types |
| test | Test | Condition specific test type |

## Vaccination Results

|  |  |  |
| --- | --- | --- |
| Variable Name: | Description | Notes / Categories |
| vaccine | vaccine |   |
| vaccine\_dose\_date\_full | Vaccine dose date full |   |
| vaccine\_dose\_number | Vaccine dose number |   |
| vaccine\_not\_done | vaccine not done |   |
| vaccine\_not\_done\_other\_desc | Vaccine not done other desc |   |

## **Appendix – Code lists**

## Codes: Condition codes

| Condition code | Name | Condition reportable |
| --- | --- | --- |
| AEFI | Adverse Event Following Immunisation | Adverse event after immunisation |
| ANTH | Anthrax | Anthrax |
| ARF\_INIT | Acute Rheumatic Fever - Initial | Acute Rheumatic Fever |
| ARF\_RECUR | Acute Rheumatic Fever - Recurrent or Unknown | Acute Rheumatic Fever |
| BF | Barmah Forest | Vector borne disease - Barmah Forest virus infection |
| BIOS | Human Biosecurity Report | Human Biosecurity Report |
| BOT | Botulism | Botulism |
| BRU | Brucellosis | Brucellosis |
| CAMPY | Campylobacter | Campylobacter |
| CHAN | Chancroid | Chancroid |
| CHIK | Chikungunya | Vector borne disease - Other |
| CHLAM | Chlamydia | Chlamydia - other |
| CHLAMCONG | Chlamydia - Congenital | Chlamydia trachomatis infection - Congenital |
| CHOL | Cholera | Cholera |
| CJDC | CJD (classic) | Creutzfeldt - Jakob disease |
| CRYPT | Cryptosporidiosis | Cryptosporidiosis |
| DENG | Dengue | Vector borne disease - Dengue |
| DIP | Diphtheria | Diphtheria |
| FLAV | Flavivirus - other & unspecified | Vector borne disease - Other |
| FLU | Influenza | Influenza - Type A |
| FLU | Influenza | Influenza - Type A&B |
| FLU | Influenza | Influenza - NOS |
| FLU | Influenza | Influenza - Type B |
| GIAR | Giardiasis | Giardiasis |
| GONOR | Gonorrhoea | Gonorrhoea |
| HEPA | Hepatitis A | Hepatitis A |
| HEPACUTE | Hepatitis - Acute Viral | Hepatitis - Acute Viral |
| HEPB | Hepatitis B - Unspecified | Hepatitis B - other |
| HEPBACUTE | Hepatitis B - Newly Acquired | Hepatitis B - acute viral |
| HEPC | Hepatitis C - Unspecified | Hepatitis C - other |
| HEPCACUTE | Hepatitis C - Newly Acquired | Hepatitis C - acute viral |
| HEPD | Hepatitis D | Hepatitis D |
| HEPE | Hepatitis E | Hepatitis E |
| HFLU | Haemophilus influenzae type b | H. influenzae type b |
| HUS | Haemolytic Uremic Syndrome | Haemolytic uraemic syndrome |
| IPD | Pneumococcal Disease (Invasive) | Pneumococcal disease (invasive) |
| JE | Japanese Encephalitis | Vector borne disease - Other |
| KUN | Kunjin | Vector borne disease - Other |
| LEAD | Lead Poisoning | Blood lead level - elevated |
| LEG | Legionellosis | Legionellosis pneumophila |
| LEG | Legionellosis | Legionnaires’ disease - other |
| LEG | Legionellosis | Legionellosis longbeachae |
| LEP | Leprosy | Leprosy |
| LEPTO | Leptospirosis | Leptospirosis |
| LGV | LGV | Lymphogranuloma venereum |
| LIST | Listeriosis | Listeriosis |
| MAL | Malaria | Vector borne disease - Malaria |
| MEAS | Measles | Measles |
| MEN | Meningococcal Disease | Meningococcal - serogroup B |
| MEN | Meningococcal Disease | Meningococcal - serogroup C |
| MEN | Meningococcal Disease | Meningococcal - other |
| MEN | Meningococcal Disease | Meningococcal - serogroup Y |
| MEN | Meningococcal Disease | Meningococcal - serogroup W |
| MUMPS | Mumps | Mumps |
| MVE | Murray Valley Encephalitis | Vector borne disease - Other |
| OTHER | Other | Other |
| PERT | Pertussis | Pertussis |
| PSTT | Psittacosis | Psittacosis |
| PTYPH | Paratyphoid | Paratyphoid |
| QF | Q fever | Q fever |
| RHD | Rheumatic Heart Disease | Rheumatic Heart Disease |
| ROSS | Ross River | Vector borne disease - Ross River virus infection |
| ROT | Rotavirus | Rotavirus |
| RUB | Rubella | Rubella - other |
| RUBCONG | Rubella - Congenital | Rubella - Congenital |
| SAL | Salmonellosis | Salmonella infection |
| SHIG | Shigellosis | Shigellosis |
| SIND | Sindbis | Vector borne disease - Other |
| STEC | STEC/VTEC | Verotoxin - producing Escherichia coli infections |
| SYPH | Syphilis - Infectious | Syphilis - infectious |
| SYPHCONG | Syphilis - Congenital | Syphilis - congenital |
| SYPHUN | Syphilis - >2 years or unk duration | Syphilis - other |
| TB | Tuberculosis | Tuberculosis |
| TET | Tetanus | Tetanus |
| TYPHOID | Typhoid | Typhoid |
| ZIKA | Zika virus | Vector borne disease - Zika |

## Codes: Specimen types

|  |
| --- |
| Description |
| Aspirate |
| Bile Specimen |
| Biopsy |
| Blood |
| Bone marrow specimen |
| Bone specimen |
| Bronchial Washing |
| CSF |
| Contents |
| Faeces/ Stool |
| Gastric brushing sample |
| Gastric lavage |
| Heart valve tissue |
| Not Specified |
| Parotid gland saliva sample |
| Pericardial fluid specimen |
| Peritoneal fluid sample |
| Plasma |
| Pleural fluid specimen |
| Saliva specimen |
| Scrapings |
| Serum |
| Slit skin smear |
| Specimen of pus |
| Sputum specimen |
| Swab |
| Synovial fluid specimen |
| Tissue specimen |
| Urine |