Section 1: Introduction

Victorian Perinatal Data Collection (VPDC) manual

Version 7.0

If you would like to receive this publication in an accessible format, please email:
HDSS.helpdesk@dhhs.vic.gov.au

This document is available as a PDF on the internet at:

https://www2.health.vic.gov.au/hospitals-and-health-services/quality-safety-service/consultative-councils/council-obstetric-paediatric-mortality/perinatal-data-collection

Contents

Foreword

The Consultative Council on Obstetric and Paediatric Mortality and Morbidity (CCOPMM) was established in 1962 under the *Health Act 1958* (Vic) as the advisory body to the Minister of Health on maternal, perinatal and paediatric deaths. The Health Act was repealed on 1 January 2010 and replaced by the *Public Health and Wellbeing Act 2008*.

The functions of CCOPMM are outlined in s. 46 of the Public Health and Wellbeing Act and include the establishment of a perinatal data collection. The Victorian Perinatal Data Collection (VPDC) was established in 1982 as a population-based surveillance system. The purpose of this collection is to enable analysis of information about the health of mothers and babies to contribute to improvements in their health.

Data collected includes information on obstetric conditions, procedures and outcomes, neonatal morbidity and congenital anomalies relating to births in Victoria.   The scope of which includes:

Live births: the complete expulsion or extraction from the mother, of a baby, irrespective of the duration of the pregnancy which, after such separation, breathes or shows any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of the voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached.

Stillbirth (occurring before or during labour): a fetal death prior to the complete expulsion or extraction from its mother of a product of conception of at least 20 completed weeks of gestation or at least 400 grams if gestation is unknown. The death is indicated by the fact that after such separation the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.

Information provided to the CCOPMM via the VPDC is privileged from access by any third party, including the courts. However, CCOPMM may, if it determines that it is in the public interest to do so, provide information to bodies specified in s. 41 of the Public Health and Wellbeing Act.

The VPDC is used to populate the National Perinatal Minimum Dataset, but it also contains additional items to enable more detailed analysis on the health of mothers and babies in Victoria. All states and territories must comply with the minimum dataset and submit their data to the National Perinatal Epidemiology and Statistics Unit (NPESU). CCOPMM provides the data for the NPESU under s. 41 of the Public Health and Wellbeing Act.

Data is collected from hospitals, birth centres or homebirth practitioners either via a computerised hospital system or via the on line birth report. Electronic data is submitted to the VPDC via a secure data exchange (SDE) portal.

This manual provides comprehensive information for hospitals and agencies on the VPDC, including data definitions and reporting requirements for all service types. The manual will be made available on the department's website: https://www2.health.vic.gov.au/hospitals-and-health-services/quality-safety-service/consultative-councils/council-obstetric-paediatric-mortality/perinatal-data-collection

Manual content summary

The VPDC manual is divided into five sections. A detailed contents list appears at the beginning of each section. A broad overview of each section is provided below.

Section 1   **Introduction**
Provides an overview of the Victorian Perinatal Data Collection (VPDC) and its function, the uses of data collected, contact details, useful references and publications, and a list of acronyms used in this manual.

Section 2   **Concept and derived item definitions**
Provides definitions of concepts and derived items that contribute to the VPDC.

Section 3   **Data definitions**
Presents the specifications of data items collected through the VPDC. The data items are arranged in alphabetical order.

For hospitals with an electronic system, this manual describes the data as it should be submitted to the VPDC. The hospital's software does not need to exactly replicate the VPDC system in all respects; however extracted data for submission to the VPDC must be formatted as specified in this section.

Section 4   **Business rules**
Details the business rules that apply to reporting VPDC data. Tabular business rules provide a quick reference to edits relating to multiple data items.

Section 5   **Compilation and submission**
Provides the specifications for compiling a VPDC submission, including summary statistics and technical specifications.

Overview of the VPDC

The Victorian Perinatal Data Collection (VPDC) was established in 1982, by an amendment to the Health Act under the functions of the Consultative Council on Obstetric and Paediatric Mortality and Morbidity (CCOPMM). The CCOPMM is the advisory body to the Minister of Health on maternal, perinatal and paediatric deaths.

The collection was established as a population-based surveillance system to collect and analyse information on, and in relation to, the health of mothers and babies in order to contribute to improvements in their health.

Data collected includes information on obstetric conditions, procedures and outcomes, neonatal morbidity and birth defects relating to births in Victoria. The scope of the collection includes:

- Live births: the complete expulsion or extraction from the mother, of a baby, irrespective of the duration of the pregnancy which, after such separation, breathes or shows any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of the voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached.

- Stillbirth (occurring before or during labour): a fetal death prior to the complete expulsion or extraction from its mother of a product of conception of at least 20 completed weeks of gestation or at least 400 grams if gestation is unknown. The death is indicated by the fact that after such separation the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.

The majority of data items, of which there are nearly 140, comply with the National Perinatal Minimum Data Set, which are collected by all states and territories (all other states have a similar collection to the VPDC), and are sent to the National Perinatal Statistics Unit for the production of the annual report on Australia's mothers and babies.

The VPDC is responsible to the CCOPMM, which also reviews all perinatal, maternal and child (less than 18 years old) deaths. Information provided to the CCOPMM is privileged from access by any third party, including the courts.

However, CCOPMM may, if it determines that it is in the public interest to do so, provide information to bodies specified in s. 41 of the Public Health and Wellbeing Act.

Functions of CCOPMM

The primary function of the VPDC is to provide data to CCOPMM. The functions of CCOPMM are outlined in s. 46 of the Public Health and Wellbeing Act, and include:

- conducting study, research and analysis into the incidence and causes in Victoria of maternal deaths, stillbirths and the deaths of children
- conducting study, research and analysis into the incidence and causes of obstetric and paediatric morbidity
- collecting, studying, researching and interpreting information on and in relation to births in Victoria
- identifying and monitoring trends in respect of perinatal health including congenital anomalies and disabilities
- providing information to the Secretary on the requirements for and planning of neonatal care units
- providing information for research into the epidemiology of perinatal health including congenital anomalies and disabilities
- establishing and maintaining a register of congenital anomalies and disabilities

- providing to health service providers:
  - information on obstetrics and paediatrics
  - strategies to improve obstetric and paediatric care.

Purpose of the data

The collection held by the CCOPMM, within the Clinical Councils Unit (CCU), are clinical data collection and include identified individual-level data provided by hospitals and individual medical practitioners. All public and private hospitals (including private day procedure centres) provide data to the CCOPMM as is required by the Public Health and Wellbeing Act.

The purpose of these data collection is to conduct study and research into the health of mothers and babies in Victoria, to support health service planning and develop government policy with the aim of preventing avoidable deaths and promoting healthy outcomes. The data collection also support Victoria's reporting obligations under the National Health and Hospitals Agreement and the National Health Agreement.

Data is also made available, on application, to researchers wanting to undertake research in areas of maternal and perinatal health.[1] The information collected through the VPDC is distributed to health services and practitioners by CCOPMM through a variety of publications, including *Births in Victoria*, hospital profiles and the CCOPMM annual report. The VPDC is also used to inform the planning of health services across Victoria and to meet reporting requirements to the NPESU.

Notification to the VPDC

The hospital, birthing centre (or private practitioner in cases of home birth) where the birth occurs is responsible for submitting the data to the VPDC as part of the mandatory reporting requirement.[2] The definition of a birth for this purpose means a birth or stillbirth that is required to be registered under the *Births, Deaths and Marriages Registration Act 1996*.

The midwife or practitioner attending each birth must supply all the required data to the VPDC either via the online birth report or the hospital's electronic system. Due to the detailed nature of the information captured in the VPDC, electronic submission is only permitted via a secure data exchange (SDE).

Roles and information capture and flow

The information below provides an outline of the sequence of data capture at the hospital and subsequent flow of information to the VPDC.

At the hospital/agency

The capture of information for the VPDC begins at the hospital/agency, generally when the mother is admitted. Registration and administrative information is captured in the hospital's patient administration system (PAS), and clinical details about the woman's pregnancy and birth are captured in the hospital's perinatal electronic system when she is admitted to the birthing suite. At the time of separation, the hospital/agency enters separation information on the PAS and the perinatal electronic system.

Each Victorian hospital/agency selects its own PAS and perinatal electronic system for collection of perinatal data from commercial software suppliers operating in Victoria. The hospital/agency is responsible for mapping or deriving (where necessary) the fields and codes used in their system to the fields and codes defined for the VPDC.

The information required by the VPDC is submitted electronically in an extract generated by the hospital's perinatal electronic system as per the file structure specifications (refer to Section 5: Compilation and submission) via secure data exchange.

---

[1] Identifying information cannot be provided for research purpose to third parties without the informed consent of the subject of the information (refer to Regulation 10 of Part 3, Public Health and Wellbeing Regulations 2009)
[2] Refer to s. 48 of the Public Health and Wellbeing Act

At the department:

The information submitted by hospitals/agencies is loaded into the VPDC database. The submission file and the records within the file are validated against the VPDC business rules and edits (refer to Section 4: Business rules).

Any records triggering edits will be directed back to the hospital/agency for correction or confirmation. Once the corrections or confirmations have been made by the hospital/agency, the records are resubmitted to the VPDC where the updated data will be loaded into the VPDC database.

Software selection and minimum features

Hospitals/agencies must select software that has the ability to collect all data items required for submission to the VPDC, and can create a submission file that complies with the required file format detailed in Section 5: Compilation and submission. At a minimum, software must be able to:

- collect all data items required for the perinatal data collection, as specified in this manual
- provide user-selected values for all coded items – no data items should be transmitted with 'default' values
- provide values that can be mapped correctly to perinatal data collection code values
- create a transmission file in the required format
- be supported so that it can be updated when perinatal data collection specifications are modified
- send updated or corrected records
- send deletion records as a function of the software – that is, deletion records do not need to be created manually by the software supplier
- resend header dates ('data submission identifier') as a function of the software – that is, without the software supplier's intervention to 'roll back' header dates
- perform at least a minimum level of editing to reduce errors produced during processing.

Data quality statement

Accuracy

DCU publish the VPDC manual on the HDSS website to provide clarity on reporting requirements for health services and information for data users. There are lists of valid codes in the manual and reference files on the HDSS website.

Data submitted by health services is subject to a validation process, checking for valid values and compliance with VPDC rules.

DCU performs monthly data quality checks:
- data is checked for valid value combinations
- data is checked for logical consistency

Where anomalies are detected DCU requests that the health service correct the data.

Validity

The VPDC validation process provides reports for health services to verify data submitted, reconcile data accepted in the processing database with data in the hospital system, and make appropriate corrections and resubmissions.

Completeness

The unit monitors through regular analyses of the VPDC, sending out compliance emails to health services when a reporting deadline is missed or records are outstanding.

Coherence

Each year the department reviews the VPDC to ensure the data collection:

- supports the department's state and national reporting obligations
- support health service planning
- supports the development of government policy with the aim of preventing avoidable deaths
- assists planning and policy development
- incorporates appropriate feedback from data providers on improvements

Definitions for common data items are consistent across data collections.

Interpretability

The VPDC manual provides definitions of concepts, data items, reporting guides and business rules relating to more than one data item.

Changes to the data collection during the year are published in the HDSS Bulletin.

DCU provide data reporting advice and support to health services via the HDSS help desk.

Timeliness

The VPDC is updated each week from the data held in the VPDC processing database.

Health services must submit data to the VPDC within 30 days from the Date of birth – baby. At least one submission is required for each calendar month.

Data reporting for the calendar year must be completed by the annual consolidation date published in the *Department of Health and Human Services policy and funding guidelines.*

Accessibility

The department makes available a suite of reports that enables health services to verify the data submitted has been received and to facilitate the addition or amendment of missing or incorrect information.

VPDC update cycle

The VPDC is a legislated data collection; as such, only CCOPMM has the statutory authority to make changes to the items collected. In the first four months of each calendar year, the CCU, on behalf of CCOPMM, calls for submissions for revisions to the VPDC to take effect from the following 1 January. CCOPMM may elect to make changes to the VPDC to provide data for a change in reporting requirements to the NPESU, to monitor a new policy or research areas of interest, or to follow changes to the *National health data dictionary*. External submissions received are provided to CCOPMM for consideration. Only those approved by CCOPMM proceed to implementation.

Implementation

The call for Proposal for Revisions document is circulated in early January and interested parties have the opportunity to comment on, or question, the proposals. Following this, the Specifications for Revisions document is released providing full specifications of changes to the data collection.

Health services and reporting agents are responsible for implementing changes in accordance with the Specifications for Revisions and the VPDC Manual.

Health services and reporting agents unable to meet revisions by the implementation date are required to contact the department immediately to discuss strategies for managing the situation and with the

anticipated implementation date. The department will negotiate interim reporting requirements with health services and reporting agents on a case by case basis.

Updates to reference data, such as updates to postcode/locality reference, may occur throughout the year to enable hospitals/agencies to submit accurate data. These updates will be published by the department.

Accessing VPDC data

The release of identifiable information to any persons not listed in s. 41 of the Public Health and Wellbeing Act is only permitted for the purpose of research. It requires the consent of the mother, the health service where the child was born and, where possible, the medical practitioner or midwife present at the birth. Non-identifiable information may be released by the CCOPMM under s. 10(2) of the Public Health and Wellbeing Regulations 2009.

Applications for the release of de-identified aggregate data can be submitted online to CCOPMM. Applications will be assessed against the mandatory criteria that the data requested is de-identified and statistical in nature, and that the release of the data satisfies current operational and legal considerations, including the Health Privacy Principles (HPPs) contained in the *Health Records Act 2001*. A public interest assessment will also be undertaken on a case-by-case basis to ensure consideration of all relevant circumstances.

Health services, after sending their information to the CCOPMM, can request access to that information. Health services' requisition of data is usually to review practices and improve quality; there is a significant public interest in making this information available to them.

To submit a request for data, visit our website and complete the request for data form: https://www2.health.vic.gov.au/hospitals-and-health-services/quality-safety-service/consultative-councils/council-obstetric-paediatric-mortality/access-to-ccopmm-data

VPDC policy on data manipulation

Manipulation of data extracts

In the normal course of business VPDC will not condone manipulation of any data extracts (for example, with Microsoft Excel, Notepad or any other data manipulation tool) that causes change in data values prior to submission to the department. The reasons for this are outlined below:

- It is expected that hospitals/agencies have a contractual arrangement with software vendors that obliges the vendors to provide software to hospitals/agencies that allows them to meet their reporting requirements. In effect, the vendor's software should be capable of producing an extract in the format required by the VPDC. Software vendors and hospitals/agencies should work together to ensure that, where 'rejection' edits are triggered, data can be and is corrected via the hospital's/agency's relevant operational database, thereby eliminating the need for secondary data manipulation.
- Correcting errors in the extract, but not in the hospital's operational database, can lead to a misrepresentation of the hospital's true position.
- There is an audit requirement that data received by the VPDC is an accurate reflection of the hospital's medicolegal system of record.

Responsibilities of the hospital

In situations where software does not allow the hospital to meet its reporting obligations, hospitals/agencies should, in the first instance, report the problem to their software vendor. The terms of the contract should ensure that these problems are addressed as a priority. In such cases the hospital/agency must:

- notify the VPDC in writing of the specific problem, including the affected fields
- specify the plan and timeframe negotiated between the hospital/agency and the vendor for the resolution of the problem
- receive written permission from the VPDC before proceeding with any proposed data manipulation.

The VPDC will maintain a register of such occurrences. The written permission advice will include a date by which the VPDC expects the problem to be resolved. If the problem has not been resolved by this date hospitals/agencies need to advise the VPDC again of progress.

Responsibilities of the VPDC

In rare circumstances a hospital/agency may prefer the VPDC adjust an extract in order to address a specific data-quality issue. The VPDC will only consider this where:

- it believes that all other avenues have been exhausted
- the hospital/agency requests the changes in writing, confirming that it has made the changes to its own data (or indicating that this is not possible)
- the changes accurately reflect the hospital's medicolegal system of record.

The VPDC will maintain a register of such occurrences.

Further information

Department of Health and Human Services

Aboriginal health website

http://www.health.vic.gov.au/aboriginalhealth/

Hospital circulars website

http://www.health.vic.gov.au/hospitalcirculars/

Reference file data

https://www2.health.vic.gov.au/hospitals-and-health-services/data-reporting/health-data-standards-systems/reference-files

Protection and use of your health care records

Provides information to patients about the privacy and confidentiality of their health care records, their rights to access their records, and the rules about the use and disposal of their records
http://www.health.vic.gov.au/healthrecords/regs.htm

Victorian hospital health information

Includes addresses and contact numbers
https://www2.health.vic.gov.au/hospitals-and-health-services

Maps and information

http://www.health.vic.gov.au/maps/index.htm

Clinical coding information

https://www2.health.vic.gov.au/hospitals-and-health-services/data-reporting/health-data-standards-systems/health-classifications

Legislation

Commonwealth

The following Commonwealth legislation is available online (under 'Commonwealth') at:
http://www.comlaw.gov.au/Browse/ByTitle/Acts/Current

- *National Health Act 1953*
- *Health Insurance Act 1973*
- *Privacy Act 1988*

Victorian

The following Victorian Legislation is available online and is directly related to the VPDC:
http://www.legislation.vic.gov.au/

- *Public Health and Wellbeing Act 2008*, *Births, Deaths and Marriages Registration Act* 1996

Other Victorian legislation of interest:

- *Aged or Disabled Persons Care Act 1954*
- *Annual Reporting Act 1983*
- *Health Legislation (Amendment) Act 2003*
- *Health Records Act 2001*
- *Health Services (Governance and Accountability) Act 2004*

- Health Services (Private Hospitals and Day Procedure Centre) Regulations 2002
- *Health Services Act 1988*
- Victorian Hospital & Charities Commission (Fees) Regulations 1986
- *Information Privacy Act 2000*

Other useful publications and websites:

Australian Consortium for Classification Development

https://www.accd.net.au/

Standard Australian Classification of Countries (SACC) 2016, Australian Bureau of Statistics (ABS), Catalogue No. 1269.0.

See the ABS website: http://www.abs.gov.au/

***National health data dictionary*, Australian Institute of Health and Welfare**
http://meteor.aihw.gov.au/content/index.phtml/itemId/268110

Contacts

For queries relating to VPDC data submissions, please contact the HDSS Helpdesk: HDSS.Helpdesk@dhhs.vic.gov.au or telephone (03) 9096 8595.

For queries or comments of a clinical nature, please contact the Clinical Councils Unit: perinatal.data@dhhs.vic.gov.au

Symbols used in this manual

<	Less than
>	Greater than
≤	Less than or equal to
≥	Greater than or equal to
=	Equal to

Acronyms used in this manual

A/N	antenatal
ABS	Australian Bureau of Statistics
ACHI	Australian Classification of Health Intervention
ACHS	Australian Council on Healthcare Standards
ACIR	Australian Childhood Immunisation Register
ACT	Australian Capital Territory
ARC	Australian Resuscitation Council
ARM	artificial rupture of membranes
ART	artificial reproductive technology
ASCII	American Standard Code for Information Interchange
ATSI	Aboriginal and Torres Strait Islander
BBA	born before arrival
BMI	body mass index
BPA	British Paediatric Association
CCOPMM	Consultative Council on Obstetric and Paediatric Mortality and Morbidity
CCU	Clinical Councils Unit
CPD	cephalopelvic disproportion
CS	caesarean section
CSE	combined spinal epidural
CTG	cardiotocography
DHHS	Department of Health and Human Services
DOB	date of birth
DRAM	diastasis rectus abdominis
DTA	deep transverse arrest
DVA	Department of Veterans' Affairs
DVT	deep vein thrombosis
ETOD	electronic transfer of data
FDIU	fetal death in-utero
GBS+	group B streptococcus positive
GIFT	gamete intra-fallopian transfer
HDSS	Health Data Standards and Systems
HDU	High Dependency Unit
HELLP	haemolysis, elevated liver enzymes and low platelet count
HIE	hypoxic ischaemic encephalopathy
HITH	hospital in the home
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian modification
ICSI	intracytoplasmic sperm injection
ICU	Intensive Care Unit
ID	identification
IPPR	intermittent positive pressure respiration
IUGR	intrauterine growth retardation
IVF	in vitro fertilisation
LFT	liver function test
LNMP	last normal menstrual period

LOS	length of stay
MROP	manual removal of placenta
NAS	neonatal abstinence syndrome
NHDD	*National health data dictionary*
NICU	Neonatal Intensive Care Unit
NIPS	National Immunisation Program Schedule
NPESU	National Perinatal Epidemiology and Statistics Unit
PMSS	Perinatal Morbidity Statistics System
PROM	pre-labour rupture of membranes
ROM	rupture of membranes
TENS	transcutaneous electrical nerve stimulation
VBAC	vaginal birth after caesarian