

***Section 5:
Compilation and
Submission***

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Introduction

This section specifies the format in which VPDC data must be reported to DH, the compilation of a transmission file and the file naming convention.

Each birth episode must be reported to the DH. All birth episodes require the data elements to be reported as a single file and in the structure defined in the table below.

Submissions can occur more than once a day.

A submission file to the VPDC has two components:

- Header Record
- Episode Record

Header Record

Identifies the source of the file, the period of time and the data items that the file relates to.

Episode Records

Provides data on individual birth episodes.

Complete Transmission Files

Each submission file to DH commences with a single Header Record followed by the appropriate Episode Records. There are also standards for naming these files and these are discussed under File Naming Convention.

Every submission file submitted must be:

- In the correct File Structure
- Named according to the File Naming Convention
- Submitted via the DH Secure Data Exchange webpage (SDE)

All dates in the submission file must be less than or equal to the Data Submission Identifier (submission end date).

File Naming Convention

To uniquely identify a submission file received by the VPDC the file has to be named following the format CCCC_NNNN_YYYYMMDDhhmm_TT.txt

File Naming Convention	CCCC_NNNN_YYYYMMDDhhmm_TT.txt	
Where:	CCCC	= Collection Identifier (always VPDC)
	NNNN	= Hospital Code (Agency Identifier)
	YYYYMMDDhhmm	= Data Submission Identifier
	TT	= Submission Number
	txt	= Submission file extension (always .txt)
Example:		
Hospital (with ID or Agency Identifier = 1234) submits a file at 10:30PM on 1 July 2009 (Data Submission ID = 200907012230, Submission number = 01)		
The submission file name =VPDC_1234_200907012230_01.txt		

The Data Submission Identifier should represent the end date used in selecting records for inclusion in the submission file.

The Data Submission Identifier (submission end date) cannot be greater than today's date and cannot be less than the previous Data Submission Identifier (submission end date).

If a particular period of data is submitted multiple times, for example, to remedy issues identified in a previous submission, the same Data Submission Identifier (submission end date) must be used but the Submission sequence number must be incremented by one each time. This is to ensure files are processed in the correct order.

Corrections and updates to data issues identified in one submission can be included in the subsequent submission rather than re-submitting the same period of data multiple times.

The incrementing submission number must cycle back to '01' each time the Data Submission Identifier (submission end date) changes.

Data Delimiters

All records are structured using the following delimiters:

Delimiter Type	Value	Usage
Record separator	Carriage Return	Records are separated by a carriage return (line feed permitted). ASCII character 13 (x0D) [10 (x0A)]
Field Separator		Data fields are separated by the 'pipe' character. ASCII character 124 (x7C)
Repetition Separator	^	The 'caret' character separates multiple occurrences of a field where allowed. ASCII character 94 (x5E)

File Structure Specifications

The file structure details the sequence, length, type and layout of data items to be transmitted.

File Structure notes:

- Do not zero fill items unless specified.
- Padding fields with space characters (either to the left or right) is not necessary and should be avoided.

Header Record

Header Record File Structure

Note	Data Item	Field Size	Layout/Code Set
M	Collection Identifier	4	VPDC
M	Version Identifier	4	2009
M	Hospital Code (Agency Identifier)	4	NNNN
M	Data Submission Identifier	12	YYYYMMDDhhmm
M	Submission Number	2	NN
M	Number of Records Following	5	NNNNN
M	Name of software	10	AAA....AAA (10)

Key To Note

M Mandatory

Reported by All Victorian Hospitals that have a birth (includes Birth Centres) and Homebirth Practitioners

Reported for Each transmission file

Reported when A file is transmitted to VPDC and the Header record must be included as the first record of the file

Reporting guide **General**
The Header Record identifies the source of the VPDC transmission file and the Episode Records to which the file relates

Episode Records

Episode Records File Structure

For detailed specification of each data item refer to Section 3 - *Data Definitions*.

For detailed information on Transaction Type Flag refer to page 5-12.

Note	Data Item	Field Size	Layout/Code Set
M	Collection Identifier	4	VPDC
M	Version Identifier	4	2009
M	Transaction Type Flag	1	A (N,C, X or U)
M	Hospital Code (Agency Identifier)	4	NNNN
M	Patient Identifier - Mother	10	AAAAAAAAAA
C1	Patient Identifier – Baby	10	AAAAAAAAAA
M	Date of Admission - Mother	8	DDMMCCYY
M	Surname/Family Name - Mother	40	AAA...AAA (40)
M	First Given Name - Mother	40	AAA...AAA (40)
C1	Middle Name – Mother	40	AAA...AAA (40)
M	Residential Locality – Mother	46	AAA....AAAA (46)
M	Residential Postcode – Mother	4	NNNN
C1	Residential Road Number – Mother	12	AAA...AAA
C1	Residential Road Name – Mother	45	AAA...AAA (45)
C1	Residential Road Suffix Code – Mother	2	AA
C1	Residential Road Type - Mother	4	AAAA
M	Admitted Patient Election Status	1	N
M	Country of Birth	4	NNNN
M	Indigenous Status - Mother	1	N
M	Indigenous Status – Baby	1	N
M	Marital Status	1	N
M	Date of Birth – Mother	8	DDMMCCYY
M	Height (self reported) – Mother	3	NNN
M	Weight (self reported) – Mother	3	NNN
M	Setting of Birth, Intended	4	NNNN
C2	Setting of Birth, Intended – Other Specified Description	20	AAA....AAA (20)
M	Setting of Birth, Actual	4	NNNN
C3	Setting of Birth, Actual – Other Specified Description	20	AAA....AAA (20)
C4	Setting of Birth – Change of Intent	1	N
C5	Setting of Birth – Change of Intent – Reason	1	N
M	Maternal Smoking < 20 weeks	1	N
M	Maternal Smoking ≥ 20 weeks	2	NN
M	Gravidity	2	NN
M	Total Number of Previous Live births	2	NN

Note	Data Item	Field Size	Layout/Code Set
M	Parity	2	NN
M	Total Number of Previous Stillbirths (Fetal Deaths)	2	NN
M	Total Number of Previous Neonatal Deaths	2	NN
M	Total Number of Previous Abortions – Spontaneous	2	NN
M	Total Number of Previous Abortions – Induced	2	NN
M	Total Number of Previous Ectopic Pregnancies	2	NN
M	Total Number of Previous Unknown Outcomes of Pregnancy	2	NN
C6	Date of Completion of Last Pregnancy	6 (8)	(DD)MMCCYY
C6	Outcome of Last Pregnancy	1	N
C7	Last Birth – Caesarean Section Indicator	1	N
M	Total number of Previous Caesareans	2	NN
C8	Plan for VBAC	1	N
M	Estimated Date of Confinement	8	DDMMCCYY
M	Estimated Gestational Age	2	NN
C9	Maternal Medical Conditions – Free text	300	AAA....AAA (300)
C9	Maternal Medical Conditions – ICD-10-AM Code	5 (5x12)	ANNNN ICD-10-AM Sixth Edition
C10	Obstetric Complications – Free text	300	AAA....AAA (300)
C10	Obstetric Complications – ICD-10-AM Code	5 (5x15)	ANNNN ICD-10-AM Sixth Edition
M	Gestational Age at First Antenatal Visit	2	NN
M	Discipline of Antenatal Care Provider	1	N
C11	Procedure – Free text	300	AAA....AAA (300)
C11	Procedure – ACHI Code	7 (7x8)	NNNNNNN ACHI Sixth Edition
M	Number of Ultrasound 10-14 weeks	2	NN
M	Number of Ultrasound 15-26 weeks	2	NN
M	Number of Ultrasound ≥ 27 weeks	2	NN
M	Artificial Reproductive Technology – Indicator	1	N
M	Date of Onset of Labour	8	DDMMCCYY
M	Time of Onset of Labour	4	HHMM
M	Date of Onset of Second Stage of Labour	8	DDMMCCYY
M	Time of Onset of Second Stage of Labour	4	HHMM
M	Date of Rupture of Membranes	8	DDMMCCYY
M	Time of Rupture of Membranes	4	HHMM
M	Labour Type	1 (1x3)	N

Note	Data Item	Field Size	Layout/Code Set
C12	Labour Induction / Augmentation Agent	1 (1x3)	N
C13	Labour Induction / Augmentation Agent – Other specified description – Free text	20	AAA....AAA (20)
C14	Indication for Induction – Free text	50	AAA....AAA (50)
C14	Indication for Induction – ICD-10-AM Code	5	ANNNN ICD-10-AM Sixth Edition
M	Fetal Monitoring In Labour	2 (2x7)	NN
M	Birth Presentation	1	N
M	Method of Birth	1	N
C15	Indications for Operative Delivery – Free text	300	AAA....AAA (300)
C15	Indications for Operative Delivery – ICD-10-AM code	5 (5x4)	ANNNN ICD-10-AM Sixth Edition
C16	Analgesia for Labour – Indicator	1	N
C17	Analgesia for Labour – Type	1 (1x4)	N
C18	Anaesthesia for Operative Delivery – Indicator	1	N
C19	Anaesthesia for Operative Delivery – Type	1 (1x4)	N
C20	Events of Labour and Birth – Free text	300	AAA....AAA (300)
C20	Events of Labour and Birth – ICD-10-AM Code	5 (5x9)	ANNNN ICD-10-AM Sixth Edition
M	Prophylactic Oxytocic in 3 rd Stage	1	N
C21	Manual Removal of Placenta	1	N
M	Perineal Laceration – Indicator	1	N
C22	Perineal Laceration– Degree / Type	1 (1x2)	N
C22	Perineal Laceration – Repair	1	N
M	Episiotomy Indicator	1	N
M	Estimated Blood Loss (mls)	5	NNNNN
M	Blood Product Transfusion – Mother	1	N
C23	Postpartum Complications – Free Text	300	AAA....AAA (300)
C23	Postpartum Complications – ICD-10-AM Code	5 (5x6)	ANNNN
M	Discipline of Lead Intrapartum Care Provider	1	N
M	Admission to HDU/ICU: (Mother)	1	N
M	Date of Birth – Baby	8	DDMMCCYY
M	Time of Birth – Baby	4	HHMM

Note	Data Item	Field Size	Layout/Code Set
M	Sex – Baby	1	N
M	Birth Plurality	1	N
M	Birth Order	1	N
M	Birth Status	1	N
M	Birth Weight	4	NNNN
M	Apgar Score at 1 minute	2	NN
M	Apgar Score at 5 minutes	2	NN
M	Time to Established Respiration (TER)	2	NN
M	Resuscitation Method – Mechanical	2 (2x10)	NN
M	Resuscitation Method – Drugs	1 (1x5)	N
M	Congenital Anomalies – Indicator	1	N
C24	Congenital Anomalies – Free text	300	AAA....AAA (300)
C25	Surname/Family Name – Paediatrician	40	AAA....AAA (40)
C25	First Given Name – Paediatrician	40	AAA....AAA (40)
C26	Neonatal Morbidity – Free text	300	AAA....AAA (300)
C26	Neonatal Morbidity – ICD-10-AM Code	5 (5x10)	ANNNN ICD-10-AM Sixth Edition
C27	Admission to SCN/NICU – Baby	1	N
C27	Hepatitis B Vaccine Received	1	N
C27	Breastfeeding Attempted	1	N
C27	Formula Given In Hospital	1	N
C27	Last Feed Taken Exclusively From The Breast	1	N
M	Separation Date – Mother	8	DDMMCCYY
C27	Separation Date – Baby	8	DDMMCCYY
M	Separation Status – Mother	1	N
C27	Separation Status – Baby	1	N
C28	Transfer Destination – Mother	4	NNNN
C29	Transfer Destination – Baby	4	NNNN

Key To Note

M	Mandatory
C1	Report if available
C2	Report when Setting of Birth, Intended code is 0008 <i>Other – specify</i>
C3	Report when Setting of Birth, Actual code is 0008 <i>Other – specify</i>
C4	Report when Setting of Birth, Intended is not equal to Setting of Birth, Actual
C5	Report when Setting of Birth – Change of Intent is reported
C6	Report when Gravidity is greater than 01 <i>Primigravida</i>
C7	Report when a woman has had a previous birth. Outcome of Last Pregnancy is 1 <i>Live birth</i> , 4 <i>Still birth</i> or 6 <i>Neonatal death</i>
C8	Report when <i>Total Number of Previous Caesareans</i> is greater than zero and Parity is not 00 <i>Primipara</i> .
C9	Report when a maternal medical condition is present
C10	Report when an obstetric complication is present
C11	Report when a medical procedure and/or an operation is performed
C12	Report when Labour Type is 2 <i>Induced – medical</i> , 3 <i>Induced – surgical</i> , or 4 <i>Augmented</i>
C13	Report when Labour Type code is 2 <i>Induced – medical</i> , 3 <i>Induced – surgical</i> , or 4 <i>Augmented</i> and Labour Induction/Augmentation Agent code is 8 <i>Other – specify</i>
C14	Report when Labour Type code is 2 <i>Induced – medical</i> or 3 <i>Induced – surgical</i>
C15	Report when Method of Birth code is 1 <i>Forceps</i> , 4 <i>Planned caesarean – no labour</i> , 5 <i>Unplanned caesarean – labour</i> , 6 <i>Planned caesarean – labour</i> , 7 <i>Unplanned caesarean – no labour</i> or 8 <i>Vacuum extraction</i>
C16	Report when Labour Type is 1 <i>Spontaneous</i> , 2 <i>Induced – medical</i> , 3 <i>Induced – surgical</i> , or 4 <i>Augmented</i>
C17	Report when Analgesia for Labour – Indicator is 1 <i>Analgesia administered</i>
C18	Report when Method of Birth is 1 <i>Forceps</i> , 4 <i>Planned caesarean – no labour</i> , 5 <i>Unplanned caesarean – labour</i> , 6 <i>Planned caesarean – labour</i> , 7 <i>Unplanned caesarean – no labour</i> or 8 <i>Vacuum extraction</i>
C19	Report when Anaesthesia for Operative Delivery is 1 <i>Anaesthesia administered</i>
C20	Report when an event of labour and birth is present
C21	Report when Method of Birth is 1 <i>Forceps</i> , 3 <i>Vaginal birth – non instrumental</i> , or 8 <i>Vacuum extraction</i>
C22	Report when Perineal Laceration Indicator is 1 <i>Laceration/tear of the perineum following birth</i>
C23	Report when a postpartum complication is present
C24	Report when Congenital Anomalies Indicator is 1 <i>Congenital anomalies identified</i>
C25	Report when Congenital Anomalies Indicator is 1 <i>Congenital anomalies identified</i> or baby is referred to a paediatrician
C26	Report when a neonatal morbidity is present
C27	Report when Birth Status is 1 <i>Liveborn</i>
C28	Report when Separation Status – Mother is 3 <i>Transferred</i> or 4 <i>Transferred and died</i>
C29	Report when Separation Status – Baby is 3 <i>Transferred</i> or 4 <i>Transferred and died</i>

Transaction Type Flags

Episode Record

The Transaction Type Flag (TTF) informs the VPDC as to the nature of each episode record.

Transaction type flag	Description
'N' New	<p>This flag is assigned to an Episode Record that is being submitted to the VPDC for the first time.</p> <p>An Episode Record previously submitted but rejected should be resubmitted using the 'N' TTF.</p>
'U' Correction/Update	<p>To amend or update a previously accepted Episode Record, re-transmit the entire record containing the updated data, using the 'U' TTF. This will overwrite the existing VPDC Episode record with the same record identification data.</p>
'C' Confirmation	<p>In cases where a request to confirm details of a previously submitted episode record occur, it may be that all details are correct as originally submitted. In such circumstances, resubmit the entire episode record using the 'C' TTF to indicate that the details have been reviewed and are being confirmed.</p>
'X' Deletion	<p>In cases of deletions, submit the entire previously accepted episode record using the 'X' TTF. All details will be matched prior to processing the deletion.</p> <p>It is unusual to delete an Episode Record, as a previously submitted Episode can be amended or updated (see above).</p>

Examples of how the transaction type flag is used:

Episode Record submitted with a 'N'

- The VPDC database is checked for an existing record. If there is an existing record in the database, the record is rejected as it is assumed the record is a duplicate. If an incorrect TTF has been assigned, resubmit with the correct TTF.
- If an existing record is not found but is rejected on validation, the record is sent back with a rejection/error. The hospital corrects the error and resends the record with an 'N'
- If the record is accepted but is sent back with a 'Confirmation Request':
 - If confirming the initial record as correct, resend with a 'C'
 - If correcting a value, resend with a 'U'
- If the record is accepted, no further action is required.

Episode Record submitted with a 'U'

- The VPDC database is checked for an existing record. If the record is not located in the VPDC database, the record is rejected as it cannot be an update record. If an incorrect TTF has been assigned, resubmit with the correct TTF.
- If a previously accepted record is found then:
 - If the state of the updated record is valid, the update is accepted and no further action is required
 - If the state of the updated record is now invalid, the update is not accepted, the record remains unchanged in the VPDC database and the record is sent back with a rejection/error. Correct the record and resend with a 'U'
 - If the state of the updated record is now queried, the update is accepted and the record is sent back with a Confirmation Request. To confirm the update record as correct resend with a 'C' or correct the record and resend with a 'U'.

Episode Record submitted with a 'C'

- The VPDC database is checked for an existing record. If the record is not located, the record is rejected as it cannot be a confirmation record. If an incorrect TTF has been assigned, resubmit with the correct TTF.
- If the previously accepted record is located, each field of existing record is compared to the confirmation record:
 - If all the same, the confirmation is successful, the query flag is removed and no further action is required.
 - If there are variations in values confirmation, the confirmation is unsuccessful. The record remains unchanged in the VPDC database, the query flag is maintained and the record is sent back with a Confirmation Request.

Episode Record submitted with an 'X'

- The VPDC database is checked for an existing record. If a previously accepted record is not located, record is sent back a rejection/error and the VPDC database remains unchanged. If an incorrect TTF has been assigned, resubmit with the correct TTF.
- If a previously accepted record is found then, record is marked as 'deleted' and no further action is required.

Data submission

For security and confidentiality reasons, data files must be submitted securely via a Secure Data Exchange (SDE).

Each site is expected to register with the SDE in order to submit a file and receive Validation reports.

The VPDC Secure Data Exchange Portal Submission procedure is available on the Consultative Council on Obstetric and Paediatric Mortality and Morbidity (CCOPMM) website at:

www.health.vic.gov.au/ccopmm

Please contact the Perinatal Help Desk (perinatal.data@health.vic.gov.au) if you are unable to access the document.

Data submission timelines

From a business perspective data is required to be submitted within 30 days from the Date of Birth – Baby however a maximum of 90 days is permitted under the Public Health and Wellbeing Regulations 2009.

To meet this requirement at least one submission is required for each calendar month. Experience has shown that the review and correction of any submission issues is easiest closer to the clinical event. Therefore agencies with high birth counts will benefit from a more regular submission cycle such as fortnightly or weekly.

The Episode Record for a particular birth episode must include all the components known at the time. Whilst it is understood that the episode is unseparated for mothers and/or babies still admitted after 30 days it is recommended that those data items that are able to be reported are submitted at that time.

All edits triggered via the submission process should be resolved as soon as possible but up to 30 days from the date of notification of the edit is allowed.

Data quality is of the utmost importance therefore there is no time limit on submitting updates or corrections to data previously submitted to the VPDC. To this end it is possible to send further updates and corrections to data as required.

Data Quality

Input Edits

Upon receipt, a series of 'input edits' (see Section 8: *Editing*) are applied to the data. These edits are intended to validate certain aspects of the data at the episode level.

Wherever possible, edits should also be maintained within the in-house software system to minimise rejection of records from the DH editing program.

Section 8: *Editing*, provides edits in number order with details of the edit title, data items involved, the effect of the edit, the problem and the remedy. The table below outlines the problem and remedy for the three possible edit effects:

Edit prefix	Effect	Problem	Impact	Remedy
SE	Run terminated	The data file is corrupt or contains data that may compromise the dataset integrity	Entire submission file not processed	Hospital determines and resolves the data problem and resubmits data file.
E	Rejection	Data item/s in the record did not meet the criteria specified in the business rules	Specific record is rejected	Hospital determines the cause of the rejection corrects it and resubmits the affected episode record.
CR	Record accepted with query	Record was accepted but data item/s in the record requires confirmation	Record is accepted but is flagged as a query until confirmation or an update is received	Hospital checks that the data is valid. If the data is correct as it was originally submitted the record is resubmitted with a transaction type flag of 'C' for 'confirmation'. If the hospital amends the data the record is resubmitted with a transaction type flag of 'U' for 'updated'.

Output Edits

As well as editing the data at the episode level, DH also routinely checks data at an aggregate level. It is possible for data to be valid at the episode level, but meaningless when viewed from a different perspective. For example reporting a Country of Birth of 6106 (Nepal) is valid at the episode level, but if Country of Birth for every episode in a submitted data file is 6106 then it would be highly unlikely that the data would be accurate. Resolution of these issues usually involves some dialogue between the site and DH to determine the appropriate course of action. Resolution can occur in several ways including:

- Resubmission
- Software or reference data alteration
- DH simply noting it in metadata where unusual occurrences turn out to be accurate
- Changes in collection practises, clarification of aspects of collection.

It should be noted that data can be considered to be 'rejected' at the output edit level as well as the input edit level.

Test Transmissions

Test transmissions may be necessary under the following circumstances:

- If a site is changing from hard copy submission to electronic transmission of VPDC data, therefore new to electronic transmission of data
- If a site changes software vendor or system
- If a site makes changes within the current software that may impact on the capacity to report
- To test annual revisions to reporting specifications

If a site believes they need to submit test transmissions, contact DH (perinatal.data@health.vic.gov.au) to make arrangements to submit test data.

Staff at DH will, if requested, assist in identifying problems. Once the supplier and/or site are satisfied that the software meets the specifications as defined, live transmissions can commence.