

A Guide for Completion of the British Columbia Newborn Resuscitation Record (PSBC 1583B)

January 2014

Table of Contents

1.0 Introduction	2
2.0 Abbreviations	2
3.0 Role of the Recorder	3
4.0 Completion of the Form.	4
Top Section	4
Section 1: Time	4
Section 2: Assessment.	4
Section 3: Interventions	5
Section 4: Notes.	6
Signatures	6
Additional Narrative Notes	6
5.0 PSBC Perinatal Data Registry	7
Clinical Data Variables Reported For Quality Improvement	7
References	8
Members of the Newborn Record Revision Working Group	8
Obtaining Copies of the BC Newborn Resuscitation Record	8
Appendix 1 – British Columbia Newborn Resuscitation Record.	9

Perinatal Services BC
West Tower, Suite 350
555 West 12th Avenue
Vancouver, BC Canada V5Z 3X7
Tel: 604-877-2121
www.perinatalservicesbc.ca



While every attempt has been made to ensure that the information contained herein is clinically accurate and current, Perinatal Services BC acknowledges that many issues remain controversial, and therefore may be subject to practice interpretation.

© Perinatal Services BC, 2014

1.0 Introduction

Notes written well after the neonatal resuscitation are influenced by the recorder's memory and perception of what occurred. Studies have found that documentation of resuscitation varies considerably from actual interventions, including number and duration of intubation attempts, duration of PPV, and on occasion, even failure to record the use of chest compression (Rich, Leone and Finer, 2010).

Typically, a team member is assigned this role at random and most often to the least experienced staff nurse. One study reported that 63% of the resuscitation records had documentation problems, mostly related to where and how the information was entered on the form (Stewart et al, 2002). The literature recommends that a code sheet be used to document the neonatal resuscitation as it occurs, and that a team member assume the role of recorder, just as in other patient code situations (Stokowski, 2008).

Perinatal Services BC Newborn Resuscitation Record (PSBC 1583B rev. OCTOBER 2013) is a form developed for the documentation of a neonatal resuscitation, and is consistent with the Neonatal Resuscitation Program (NRP) guidelines. It is a tool that also facilitates communication and continuity of care between facilities and providers of care. This form should be used at the time of birth to document resuscitation requiring the use of oxygen or positive pressure ventilation in the delivery setting, but can be used in any setting where a neonate requires resuscitation or to capture a neonate's deteriorating status, where a poor outcome is anticipated.

Any documentation done on separate pieces of scrap paper should be attached to the form to ensure no information is missed.

Specific fields on the newborn and resuscitation records are collected as part of a comprehensive database for the British Columbia Perinatal Data Registry (BCPDR). The mandate of Perinatal Services BC (PSBC) includes the collection and analysis of perinatal data to evaluate provincial perinatal outcomes, and to improve health care initiatives.

2.0 Abbreviations

Ax axilla

BCPDR British Columbia Perinatal Database Registry

BP blood pressure

CPAP continuous positive airway pressure

EPI epinephrine

ETT endotracheal tube

HR heart rate

LMA laryngeal mask airway

LMP last menstrual period

lpm litres per minute

NICU neonatal intensive care unit

NRP Neonatal Resuscitation Program

O₂ oxygen

PPV positive pressure ventilation

PIP peak inspiratory pressure

PEEP peak end expiratory pressure

PSBC Perinatal Services BC

RESP respirations or respiratory

TEMP temperature

UVC umbilical venous catheter

VOL EXP volume expander

3.0 Role of the Recorder

The purpose of the resuscitation record is to facilitate clear, concise, factual, objective, timely documentation. Delay in documentation can cloud the memory of events, increase the possibility of errors and affect the continuity of care. However, the confusion and urgency of most resuscitation efforts prohibit accurate event documentation if one person is not assigned the role of recorder. Other challenges to recording include the following (Resuscitation Central, 2010):

- It is not clear if the form should be completed or not. For example, when the neonate requires only a few assisted ventilations.
- The form is not quickly located and accessible to begin documentation.
- The recorder is unfamiliar with the form, data requested and/or the NRP algorithm.
- Different clocks are used to enter times onto the form.
- The data on the form is incomplete and/or illegible.

Responsibilities of the Recorder include:

- Identify/confirm the recorder as soon as possible, preferably before the birth.
- Have no other role during the resuscitation so that full attention can be given to collecting the needed data and following the multiple interventions that often occur simultaneously.
- Have working knowledge of the NRP algorithm and familiarity with the information needed and how to obtain it. For example, the documenter may need to request that when any medication is administered IV push to the patient, the provider announce when it is “in” so that the time of documentation can be accurate.
- Communicate with the Team Leader throughout the resuscitation which interventions have been done (should be an experienced health care provider who can anticipate resuscitation needs).
- Maintain an accurate written record of the timing of all interventions, documenting the events of the resuscitation as they occur.

Practice Point

Generally, a nurse documents only the care she/he provides, does not allow others to document for her/him, and does not document care that anyone else provides. There are two exceptions to this rule:

- in an emergency, such as a cardiac arrest when you are designated as recorder, document the care provided by other health professionals
- record a verbal order when circumstances require doing so (CRNBC, 2008).

4.0 Completion of the Form

If the neonate's label or addressograph is not available, record the neonate's last name, gender, multiple if appropriate, date and time of birth in the upper right hand corner of the record. The patient's label or the addressograph stamp should also be placed in this section.

Top Section

The top section of the record should be completed immediately after the event.

- Event Date - Record the date of the event.
- Time - Record the time the event began.
- Gestational Age - Use LMP, sonogram/ultrasound or by exam.
- Weight - Indicate estimated weight or actual weight.
- Location - Check the area in which the resuscitation occurred. Birthing Room includes a labour delivery room, single room maternity care. For Other, record the area such as the mother's residence (for example if midwife attended home birth), postpartum ward or emergency department.
- Stamp with the neonate's Addressograph.
- Page # _____ of _____ - Record the page number and the total number of pages utilized to document the event.

Section 1: Time

Item	Description
ACTUAL TIME or AGE (in minutes)	<ul style="list-style-type: none">• Either actual time on a wall clock OR age in minutes from an Apgar timer• It is important to chart the time at which all major events or decisions took place• The more complex the resuscitation, the more entries

Section 2: Assessment

Note: do not leave blank lines between entries. Do not squeeze entries between lines.

Item	Description
RESP EFFORT	<ul style="list-style-type: none">• Record the respiratory effort utilizing the following codes<ul style="list-style-type: none">√ = good/cryingH = hypoventilation (defined as breathing that is too shallow or too slow and thereby unable to meet the needs of the body)0 = absent• Record in the Notes section if the respiratory effort is laboured (e.g. tachypnea, grunting, retractions)
HR (per minute)	<ul style="list-style-type: none">• Record the auscultated, palpated or monitored heart rate
O ₂ SATURATION (%)	<ul style="list-style-type: none">• Record the preductal (right hand or wrist) oxygen saturation as per the pulse oximeter
COLOUR	<ul style="list-style-type: none">• Record the color utilizing the following codes<ul style="list-style-type: none">P = pinkM = mottled/paleC = cyanosed

4.0 Completion of the Form, *cont'd.*

Item	Description
TONE	<ul style="list-style-type: none"> Record the tone utilizing the following codes <ul style="list-style-type: none"> √ = active motion SF= some flexion H = hypotonic/flaccid
TEMP °C (axilla or skin probe)	<ul style="list-style-type: none"> Indicate what the temperature is and method by which it is monitored: A (axilla) or SP (skin probe) Servo-controlled temperature probes are applied to all neonates by 10 minutes of life and the temperature reading recorded

Section 3: Interventions

Item	Description
DEVICE	<ul style="list-style-type: none"> Record the ventilation device used by checking T-piece, self inflating or flow inflating If the device is changed during the resuscitation, record the reason in the Notes section
O ₂ % ON BLENDER	<ul style="list-style-type: none"> Record the amount of oxygen delivered as per the oxygen/air blender This will include PPV, CPAP or free-flow oxygen administration
VENTILATION RATE (per minute)	<ul style="list-style-type: none"> Record the number of breaths per minute administered
PIP/PEEP or CPAP (cmH ₂ O)	<ul style="list-style-type: none"> For Positive Pressure Ventilation (PPV) record PIP on the top of the slash and PEEP below the slash <div style="display: flex; align-items: center; margin: 10px 0;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;"> PIP / PEEP </div> e.g. <div style="border: 1px solid black; padding: 5px; margin-left: 10px;"> 20 / 5 </div> </div> For Continuous Positive Airway Pressure (CPAP) record the pressure below the slash <div style="display: flex; align-items: center; margin: 10px 0;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;"> / CPAP </div> e.g. <div style="border: 1px solid black; padding: 5px; margin-left: 10px;"> / 5 </div> </div>
MASK (M) LMA ETT	<ul style="list-style-type: none"> In the column, record the interface (e.g. Mask, LMA or ETT) used to administer PPV or CPAP In the Notes section, document the LMA size and name of the person who successfully/unsuccessfully inserted it In the Notes section, document if the ETT insertion was successful/unsuccessful, number of attempts, tube size, confirmation method, and name of the person who successfully/unsuccessfully performed the intubation procedure <ul style="list-style-type: none"> Appropriate sized endotracheal tubes are as follows and should be recorded: <ul style="list-style-type: none"> 2.5mm ETT (≤1kg) 3.0mm ETT (1 to 3.5 kg) 3.5mm ETT (>3.5 kg)

4.0 Completion of the Form, *cont'd.*

Item	Description
CHEST COMPRESSIONS “✓”	<ul style="list-style-type: none">Indicate administration of chest compressions with a checkmark

Section 4: Notes

Item	Description
NOTES	<ul style="list-style-type: none">Record important information during resuscitation not captured in the previous sections, including who performed invasive interventions, response to interventions and meconium management<ul style="list-style-type: none">Type of suctioning (oropharyngeal or tracheal) and type/amount of secretionsETT and UVC insertion (tube/catheter size, insertion depth, who inserted, confirmation method)Medications and volume expander administration (including dose, route, name of person who administered)Procedures or diagnostic tests (include blood volume taken for the test), completed and results (if reported)Time extra help arrived and who they wereNeonate’s condition post resuscitationTransfer for post resuscitation/stabilization and ongoing care (including where to and how transported)

Signatures

- This section identifies those involved in the resuscitation and the recorder.
- Signatures – The recorder and all other personnel present must print, sign, initial and indicate their profession in the designated place.
- A signature at the bottom of the form indicates having read and concurred with all procedures and events documented.

Additional Narrative Notes

This section on the back of the form provides a place for the health care provider to document identified problems, treatment summary and progress. Record the date (dd/mm/yy) and time (24 hour clock) the entry is made.

If the resuscitation occurs at birth, the initial entry here should include the mode of delivery, number of neonates delivered and pertinent delivery complications.

5.0 PSBC Perinatal Data Registry

Clinical Data Variables Reported For Quality Improvement

The first and foremost reason for documentation of the resuscitation is that the form is the medical record of all the interventions that occur during resuscitation. Other benefits of the form include (Resuscitation Central, 2010):

- Providing information that can guide continuing care for the neonate
- Helping to answer questions the family may have about the event
- Assisting the institution to know if resuscitation care has been provided according to current standards
- Identifying quality issues so they can be investigated in a timely manner
- Providing data that can be aggregated to describe the population undergoing resuscitation to determine if processes of care are delivered in the time intervals recommended by the NRP, and to know if an institution's outcomes are similar to those of like institutions
- Using the aggregate data to identify variances of concern and as the base for continuous quality improvement efforts
- Providing information to guide resource allocations related to personnel, equipment and supplies used during resuscitations
- Helping to identify learning needs of staff
- Providing data to answer research questions

The following variables are currently collected at the time of discharge for all neonates who required resuscitation at birth:

- Apgars at 1, 5 and 10 minutes
- 1st temperature within the 1st hour of life
- Suction: oropharynx, trachea, unspecified site
- Oxygen administration (yes/no, days on oxygen)
- CPAP (days only – not specified for resuscitation)
- IPPV by mask (yes/no)
- IPPV by ETT (yes/no)
- Chest compressions (yes/no)
- Resuscitation medication(s) (yes/no – no details)
- Meconium (yes/no)

PSBC collects the above standardized variables through the British Columbia Perinatal Data Registry (BCPDR), a quality-controlled database containing clinical information on all births collected from perinatal designated facilities and home births throughout the province of British Columbia. Indicators for all neonates who required resuscitation at birth are monitored annually and presented to the Provincial NRP Steering Committee for discussion and identification of educational and clinical issues and shared with the Health Authorities. The data also assists with evaluation of application of NRP into clinical practice.

References

1. Stokowski, L. A. (2008). *The Current Legal Climate in Neonatology*. Retrieved from <http://www.medscape.org/viewarticle/568009>. Accessed July 16, 2013.
2. CRNBC (2008). *Documentation*. Retrieved from <https://www.crnbc.ca/Standards/PracticeStandards/Pages/documentation.aspx>. Accessed July 16, 2013.
3. Stewart, K., Nemeth, S., Garland, P.P., Culver, L., Kamradt, F., Culvern, J., and Holcomb, S. (2002). *Code Blue: a closer look*. Retrieved from www.modernmedicine.com/print/305886. Accessed July 15, 2013.
4. Rich, W.D., Leone, T., Finer, N.N. (2010). *Delivery Room Intervention: Improving the Outcome*. Clinics of Perinatology. 37(1):189-202
5. Kattwinkel, J. (2011). *Textbook of Neonatal Resuscitation* (6th Ed.). American Academy of Pediatrics, Evanston, Illinois
6. Resuscitation Central. (2010). *Hospital Code Documentation*. Retrieved from <http://www.resuscitationcentral.com/documentation/hospital-code-data>. Accessed July 16, 2013.

Members of the Newborn Record Revision Working Group

Perinatal Services BC would like to acknowledge the following people who contributed to the revision of the BC Newborn Resuscitation Record.

Kim Campbell RM (Vancouver)

Adele Harrison MD (Victoria)

Andrea MacKenzie RN (Nelson)

Debra O'Flaherty RN (Vancouver)

Lynn Popien RN (Salmon Arm)

Avash Jeet Singh MD (Vancouver)

John Smyth MD (Vancouver)

Elene Vanderpas RN (Vancouver)

Janet Walker RN (Vancouver)

Obtaining Copies of the BC Newborn Resuscitation Record

- For sites wishing to order forms or to obtain ordering information, refer to PSBC website link: www.perinatalservicesbc.ca/NR/rdonlyres/1C039FB4-1EF0-4558-BF2E-A938FE1831EF/0/FormsOrderForm24Feb2012.pdf.
- Contact Perinatal Services BC (PSBC) at 604-877-2121 regarding any feedback or questions about any of the perinatal forms.

Perinatal Services BC
West Tower, Suite 350
555 West 12th Avenue
Vancouver, BC Canada V5Z 3X7
Tel: 604-877-2121
www.perinataleservicesbc.ca



While every attempt has been made to ensure that the information contained herein is clinically accurate and current, Perinatal Services BC acknowledges that many issues remain controversial, and therefore may be subject to practice interpretation.

© Perinatal Services BC, 2014