

Maternity - Breast Milk: Safe Management

Summary Direction for Area Health Services on the requirements about how to safely manage breastmilk and the process for management in the event of neonatal exposure from a non-biological mother.

• For information regarding breastmilk management, contact: Primary Health and Community Partnerships on 9424 5891.

• For information about non-biological breastmilk exposure contact: The Centre for Health Protection on 9391 9623.

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 - Audience Maternity clinical staff;midwives;paediatricians;nurses;students;neonatal intensive care;EDs

This Policy Directive may be varied, withdrawn or replaced at any time. Compliance with this directive is mandatory for NSW Health and is a condition of subsidy for public health organisations.

MATERNITY - BREAST MILK: SAFE MANAGEMENT

PURPOSE

This policy outlines the requirements to safely manage expressed breast milk and manage adverse incidents of neonatal exposure to breast milk from a non-birth mother.

MANDATORY REQUIREMENTS

NSW Health facilities are required to safely manage and store expressed breast milk (EBM), and ensure babies are only fed breast milk from their birth mother (section 2.1).

All NSW Health facilities must develop local operational arrangements to manage adverse incidents relating to a baby receiving breast milk from a non-birth mother (Section 5.2) and identify designated officers who can conduct risk assessments in such an event. (Sections 5.4 and 5.5)

IMPLEMENTATION

Chief Executives must ensure:

- all clinical areas that manage EBM implement the strategies outlined in Section 3 to reduce risk of babies receiving incorrect breast milk;
- all staff working in maternity services receive biannual education/updates on safe management of breast milk (Section 4);
- local policy addresses education and communication criteria as outlined in this Policy Directive (Section 4);
- if the exposure of a baby or neonate to breast milk from a non-birth mother occurs maternity services staff implement appropriate management of these events (Section 5).

REVISION HISTORY

| Version | Approved by | Amendment notes | | | |
|---------------|------------------|---|--|--|--|
| November 2006 | Director-General | New policy providing direction for Area Health Services on | | | |
| (PD2006_088) | | the requirements to safely manage breast milk. | | | |
| March 2010 | Deputy Director- | Replaces 2006_088 | | | |
| PD2010_019 | General | Provides further direction on: | | | |
| | | strategies to reduce the risk of babies receiving incorrect breast milk | | | |
| | | management of accidental neonatal exposure to breast milk from a non-birth mother | | | |
| | | statements that accommodate circumstances where milk is provided to a neonate from a non birth mother in an approved, controlled environment. | | | |

ATTACHMENTS

1. Maternity-Breast Milk: Safe Management-Procedures

Maternity - Breast Milk: Safe Management



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1 BACKGROUND

1.1 About this document

Area Health Services are required to safely manage and store expressed breast milk (EBM), as babies must only be fed breast milk from their birth mother.

The importance of babies receiving breast milk is well documented, and supported by the NHMRC Infant Feeding Guidelines for Health Workers (2003). Mothers may need to express their breast milk for a variety of reasons, if their infant is sick or premature, if mother and baby are temporarily separated, or in order to increase the existing milk supply.

Breast milk has the potential for the possible transmission of infectious pathogens if contaminated and/or given to the wrong infant. The risk of transmission of disease by this route is low but is possible.

It is important to note that there is the potential for babies to receive incorrect breast milk in any clinical area where mothers and babies are separated and/or expressed breast milk (EBM) is dispensed. Factors that may lead to babies receiving the incorrect breast milk include the separation of mothers and babies, inadequate identification processes, and the absence of systems to manage safe storage and dispensing of EBM (Section 2).

Maternity Services must ensure that strategies to reduce risk of babies receiving incorrect breast milk are implemented (Section 2).

All staff working in maternity services must receive biannual/education updates on safe management of breast milk and local policy should address the content of this Policy Directive (Section 3).

When the exposure of a baby or neonate to breast milk from a non birth mother occurs. Maternity services staff must implement appropriate management of these events when they occur (Section 4).

1.2 Related Documents

This Policy Directive should be read in conjunction with the following policy directives:

PD2006_012 Breastfeeding in NSW: Promotion, Protection and Support.

NSW DOH Safety Advocate (July 2004). (http://www.health.nsw.gov.au/pubs/s/pdf/safety_ad_7.pdf).

<u>PD2007 061 Incident Management Policy</u> - Advice to staff on the effective response to all corporate and clinical incidents that occur in the health system. Contains important information on the legal aspects of health care incident management, the requirements for a privileged Root Cause Analysis (RCA) and information on privilege and Reportable Incident Briefs (RIB)

<u>PD2005_311 HIV, Hepatitis B and Hepatitis C - Management of Healthcare Workers</u> <u>Potentially Exposed</u> provides direction on the management of potential exposure to infectious pathogens. <u>PD2005 222 Hepatitis B Vaccination Policy</u> - Specifies how and when specific groups of persons are to be offered Hepatitis B vaccine. Also covers reporting requirements.

<u>GL2007_007 Open Disclosure Guidelines</u> - Provides a framework for implementing open disclosure in NSW Health facilities in accordance with <u>Open Disclosure PD2007_040</u>. All Health Services are required to have appropriate local procedures in place to ensure consistency and compliance with the policy.

2 RATIONALE

- **2.1** Area Health Services are required to:
 - Safely manage and store expressed breast milk (EBM)
 - Ensure babies are breastfed by their birth mother, except for current milk banks which have been approved by the Chief Executive.

Area Health Services (AHSs) should make local arrangements for special circumstances such as adoption, same sex couples, foster carers and surrogacy.

- 2.2 The importance of babies receiving breast milk is well documented, and supported by the NHMRC Infant Feeding Guidelines for Health Workers (2003). Mothers may need to express their breast milk for a variety of reasons, if their infant is sick or premature, if mother and baby are temporarily separated, or in order to increase the existing milk supply.
- **2.3** Breast milk has the potential for the possible transmission of infectious pathogens if contaminated and/or given to the wrong infant. The risk of transmission of disease by this route is low but is possible.
- 2.4 It is important to note that there is the potential for babies to receive incorrect breast milk in any clinical area where mothers and babies are separated and/or expressed breast milk (EBM) is dispensed. Factors that may lead to babies receiving the incorrect breast milk include the separation of mothers and babies, inadequate identification processes, and the absence of systems to manage safe storage and dispensing of EBM.

3 STRATEGIES TO REDUCE THE RISK OF BABIES RECEIVING INCORRECT BREAST MILK

Unless clinically indicated, babies should not be separated from their mothers for any length of time. Ideally, babies should "room in" with their mothers in order to promote successful breastfeeding.

All clinical areas that manage EBM or where breast-fed babies are potentially separated from their mothers should implement the following strategies (incorporate into local policies):

3.1 Separation of Mothers and Babies

- 3.1.1 Babies must not be separated from their mothers without a compelling reason
- 3.1.2 Where Babies must be separated from their Mothers
 - On return to their mother, two members of staff, or one member of staff and the mother if appropriate, should check identification of both mother and baby prior to breastfeeding or feeding of EBM.
 - When babies and mothers are separated, for example, when babies are admitted to the Neonatal Intensive Care Unit (NICU), a procedure should be implemented to ensure the correct identification of these babies at all times (See 3.2).

3.2 Identification of Babies

- Ensure that all babies have secure identification in place on two sites (ideally two ankles) at all times according to the facility/hospital local policy.
- Communicate to parents the importance of ensuring that their baby has correct identification tags at all times.
- Replace identification tags immediately if removed and encourage parents to report loss of tags when it occurs.
- Be aware of babies with similar or the same names and have a system for managing this occurrence. For example, babies with the same name should not be accommodated in the same room, unless clinically indicated.

3.3 Storage Fridge/Freezer Environment

- Appropriately sized fridges/freezers should be available for the storage of expressed breast milk (EBM) to avoid overcrowding.
- EBM should be refrigerated at 4°C and only up to 48 hours. Thawed EBM should be used within 24 hours¹.
- If EBM is to be transported (for example, from the mother's home), frozen EBM must be maintained in a completely frozen state and refrigerated EBM kept at 4°C by using appropriate equipment (such as an esky and freezer brick). It should be placed in the refrigerator (or in the freezer if it is still frozen) immediately upon arrival¹.
- EBM brought in from home should be checked in to the milk fridge/freezer by two staff, or one staff and one parent if appropriate.
- Each baby should have an allocated area and a labelled storage basket/container for the EBM in the fridge/freezer. All EBM containers should be consistently, correctly and clearly labelled using moisture-resistant ink, with the following information:
 - o the baby's and mother's names
 - o baby's medical record number

- o contents (eg. EBM)
- o any additives
- o date and time expressed, and
- \circ date and time thawed.
- Policy regarding labeling must apply equally to EBM expressed in the hospital and to EBM brought from home to the hospital facility.
- A specific label is recommended if existing EBM container labels are unable to accommodate this information.
- A member of staff should be allocated to check the fridge on each shift for all of the above, using a locally agreed process.

3.4 Dispensing of EBM

- EBM that is dispensed into a second or third container/syringe should be checked with the original EBM container at that time. It should be correctly labelled and signed by two members of staff, or one member of staff and the mother if appropriate. EBM must have two (preferably three) of the following identifiers: the name of the mother, name of the baby and the baby's medical record number (MRN). Other identifiers include date of birth of the baby, and the mother's MRN.
- Ensure that labeling is complete for each EBM container before dispensing further EBM.
- Never refreeze or reheat EBM.
- Do not use a microwave to thaw EBM. Thaw EBM by standing the container in either cool or warm water. Check to ensure identification labels do not become loose while being warmed using this method. EBM can also be thawed in the fridge. Thaw frozen breast milk by moving it from the freezer to the fridge for slow thawing over 24 hours
- If a feed is delayed, EBM should never be left at the bedside.

3.5 Checking of EBM prior to Feeding a Baby

Two members of staff, or one member of staff and the mother if appropriate, should always undertake identification of the EBM and checking the baby's identification bands. The checking of EBM should be treated the same as checking medications prior to administration.

Ensure the following:

- Correct EBM: by cross checking the details identified on the EBM identification label are a match with the baby's identification tags.
- Correct feeding time and amount: by checking the EBM identification label with the baby's feed chart.

• Correct baby: by checking the baby's identification tags and signing off on the baby's feeding chart that this check is correct prior to the baby receiving EBM.

4 EDUCATION/COMMUNICATION

- 4.1 All staff managing breast milk/EBM must comply with this directive, and receive biannual education/updates on this issue.
- 4.2 A local policy should address the content of this policy direction to ensure that:
 - All policy changes relating to breastfeeding/EBM are communicated with staff through appropriate formal in-service education processes e.g. seminars, ward meetings.
 - All casual and pool/relieving staff who are working in these areas are aware of current policy and practice in relation to the safe management and storage of EBM.
 - All parents are provided with appropriate information regarding the collection, labeling, and storage of EBM and that they are coherent with the unit policies for checking, storage and management of EBM.
 - Parents are made aware that the best place for their baby in postnatal wards is next to their own bed.
 - Staff and parents are aware of the potential risks should a baby mistakenly receive incorrect breast milk. In the event of this occurring, the correct "exposure" procedures should be followed.

5 MANAGEMENT OF NEONATAL EXPOSURE TO BREASTMILK FROM A NON-BIRTH MOTHER

5.1 Background

There is a small but possible risk of transmission of infectious agents from the ingestion of breast milk. Twenty-one infectious agents have been identified in breast milk but only a small number of these agents have been shown to be transmitted via breast milk (see Appendix 1).

The exposure of a baby or neonate to breast milk from a non-birth mother may arise in the following circumstances:

- EBM from one mother is given to another mother's baby in error; or
- A mother inadvertently breastfeeds a baby other than her own.

5.2 Local Operational Arrangements

All NSW Health facilities must develop local operational arrangements to manage adverse incidents relating to a baby receiving breast milk from a non-birth mother (an example flowchart and checklist is provided in Appendix 2).

These arrangements must include:

- An immediate response plan to manage the incident (see 4.3).
- Reporting of all incidents to the appropriate medical, nursing/midwifery and infection control personnel immediately. Guidelines for reporting to the Department of Health by IIMS (Incident Information Management System) and RIBs (Reportable Incident Brief) are set out in *PD2007_061 Incident Management Policy.*
- Open disclosure to the birthmother/parents and source mother that this incident has occurred consistent with *GL2007_007 Open Disclosure Guidelines.*
- Counselling of both the source mother/parents and exposed baby's mother/parents in the event of an incorrect breast milk feed occurring.
- An individual assessment of clinical risk factors to identify the appropriate screening and follow up pathology tests that should be obtained. This will include obtaining informed consent from both the source mother and the birthmother.
- Ensure that mothers who allow another mother to breastfeed their baby (outside a NSW Health Care Facility) are informed of the associated risks.
- Adequate processes to check and audit incidents for causation. If required, local procedures for the management of breast milk must be appropriately amended in accordance with this Policy Directive and staff must be informed of the amendments.
- Provision of information regarding the risks associated with a single breast milk feed from a non-birth mother (noting that information from the literature on the risk of transmission from one episode is not available, but has to be extrapolated from long term exposure of babies to maternal breast milk).

5.3 Immediate Response – Treatment of Baby

If the baby is being fed EBM via a nasogastric or orogastric tube and the incident is identified at the time of feeding, aspirate the stomach contents immediately. The feed can be aspirated up to 30 minutes after feeding but only if the nasogastric or orogastric tube is still in situ.

If the baby is not being fed EBM via a nasogastric or orogastric tube, proceed to a risk assessment of the source (non-birth) mother (see 4.4). Nasogastric or orogastric tubes must not be inserted for the purpose of aspirating EBM.

5.4 Risk Assessment of the Source (non-birth) Mother

Each facility must identify designated officers who can conduct risk assessments that include:

• An assessment of the clinical status of the source mother at the time of breast milk collection/expression or feeding with regard to:

- the presence of fever
- o the presence of rash (including vesicles on the breast), and
- o the presence of mastitis, breast abscess or bleeding nipple.
- Checking the source mother's antenatal serology for previous results, e.g. syphilis, hepatitis C (HCV) antibodies, hepatitis B (HBV), and Human Immunodeficiency virus (HIV) antibodies.
- Checking for a history of HBV vaccination.
- Checking medications prescribed to the source mother.
- Where recent serological results are lacking, discussing risk factors for blood borne viruses (HIV, HBV and HCV) and syphilis in the source mother. These include:
 - o Injecting drug use
 - Birthplace or previous residence or travel in a country with high prevalence of HIV (see Appendix 3) or other blood borne viruses (as identified by an appropriate specialist; see 4.7)
 - o Tattoo or piercing
 - History of syphilis (including date and treatment)
 - Blood transfusion history or possible iatrogenic exposure to a blood borne virus, and
 - Unprotected sex with a partner who has or is at risk of having a blood borne virus.

It is important this information is obtained by an experienced clinical staff member, and that these questions are asked in an appropriate manner. The clinician must be cognisant of the source mother's emotional state during questioning, and adequate counselling must be provided during the questioning about these sensitive areas (see 4.8).

- Provision of pre and post-test counselling and support, obtaining consent to collect appropriate serology and breast milk (as per 4.6 below).
- Arranging an appointment to discuss results and arrangements for follow-up blood testing if required.

5.5 Risk Assessment of the Exposed Baby's Birth Mother/ Parents

Each facility must identify designated officers who can conduct risk assessments maintaining the following principles:

- The confidentiality of the source mother is maintained
- The legal right of the source mother to refuse testing is recognised
- The reason for testing of the mother and not the baby is clearly explained
- There is open disclosure to the birthmother/parents regarding the incident

- The birthmother is advised of any potential risks associated with the exposure (see Appendix 1) and appropriate measures to be taken
- Pre and post-test counselling is provided and informed consent is obtained to collect appropriate serology and breast milk (as per 4.6 below)
- An appointment is arranged to discuss test results and arrangements for follow-up blood testing, and
- The parents of the affected baby are informed of the appropriate follow up and/or treatments required for their baby, and are offered counselling and support.

All information should be documented in both the source mother's clinical records and the exposed baby's medical records. The source mother **SHOULD NOT** be identified during any counselling sessions.

5.6 Serological and Breast Milk Screening²

Testing should be expedited, in order to inform appropriate treatment to the baby, should it be required. Pre and post-test counselling must be conducted and informed consent obtained for testing.

It is recommended that at the time of the exposure the following should be collected from the source mother and the mother of the exposed baby:

| Blood | HIV RNA NAT, HIV proviral DNA (if available) and HIV antibody/antigen test. | | | | |
|-------------|---|--|--|--|--|
| | However this information will be unlikely to be available in time to guide initiation of prophylactic therapy of the baby. | | | | |
| | HCV antibody test, HCV RNA test | | | | |
| | HBV surface antigen, HBV core antibody | | | | |
| Breast milk | Cytomegalovirus (CMV) NAT (if baby is less than one month of age, or has underlying immune deficiency illness) | | | | |

Where the risk assessment of the source mother identifies risk factors that may indicate a potential window period for HIV infection HIV serology should be repeated on both mothers 3 months after the exposure of the newborn.

If a result from either mother is positive or equivocal, further investigations and management will be required for the exposed newborn, and should be discussed with an ID physician or other appropriate consultant.

Additional testing should also be discussed with a clinical microbiologist or ID physician if the source mother is clinically unwell (e.g. fever, breast abscess).

² Jones, CA, 2001, Maternal transmission of infectious pathogens in breast Milk, Journal of Paediatric Child Health, 37, 576-582. See also: Read JS, 2008, Prevention of mother-to-child transmission of HIV through breast milk, Pediatr Dis J, 27(7), 649-650; Lehman, DA, at al, 2008, HIV-1 persists in breast milk cells despite antiretroviral treatment to prevent mother-to-child transmission, AIDS, 22(12), 1475-1485.

If post-exposure HBV immunoglobulin, HBV vaccination, HIV post-exposure prophylaxis (PEP) and/or CMV antiviral therapy are clinically appropriate or being considered, instigation and management must be undertaken with advice from clinicians with relevant expertise.

5.7 Non-consent to Testing

If either of the mothers decline consent for testing, then the baby's blood or urine should be taken for CMV testing, with parental consent.

The relative risk of the source mother being infected with HIV or HBV must be assessed from epidemiological and historical information and the baby treated appropriate to the level of risk. This must be done in consultation with an ID physician, experienced HIV physician, or virologist.

5.8 Counselling

Hospitals should identify individuals with appropriate clinical expertise and provide them with appropriate training if needed to counsel mothers in relation to breast milk feeding from a non-birth mother. For cases with cultural sensitivities regarding the exchange (deliberate or accidental) of breast milk, NSW Health staff can consult with the NSW Multicultural Health Communication Service for advice on effective communication.

5.9 Management and Treatment for the Source and Birth Mothers

If the source mother or birthmother is found to have positive results for HIV, HBV or HCV during the screening process they must be referred immediately to a clinician with relevant expertise for appropriate management.

5.10 Management and Treatment for the Baby

Treatment for the baby who has inadvertently been fed breast milk from a non-birth mother is as follows:

If the results of testing in the source mother are all negative, no further action is required.

If the source mother is HIV positive:

• Sydney Children's Hospital, Randwick offers statewide expertise in the management of paediatric HIV disease; an expert clinician should be consulted regarding the event and, if required, advice on antiretroviral HIV prophylaxis doses for infants or neonates.

If the source mother is HBsAg or hepatitis B DNA positive:

- hepatitis B immunoglobulin (ideally within 24 hours of exposure); and
- commence hepatitis B vaccination (in a different limb) if birth dose of HBV vaccine has not already been administered (refer to PD2005_222 Hepatitis B Vaccination Policy).

If testing of the source is not possible with rapid availability of results and the source is assessed to be at high risk of being HBsAg or DNA positive (that is, is a person from an

endemic country or known to have engaged in risk behaviours which may have exposed them to hepatitis B), advice should be sought from an expert clinician regarding the need for administration of hepatitis B immunoglobulin to the exposed baby.

If the source mother is HCV positive:

• the baby should be referred to a clinician with expertise in the management of HCV.

If either mother is CMV positive:

• the baby should be referred to a clinician with expertise in the management of CMV, for example a paediatrician.

Advice regarding these or any other infection risk (other than HIV) should be sought from the relevant tertiary children's hospital supporting the NSW Child Health Network domain in which the event occurred (see contact details Appendix 4).

6 DOCUMENTATION

All screening, management plans, results and counselling are to be contemporaneously documented in the relevant medical record.

7 MONITORING

Audit to assess compliance with this Policy Directive should be undertaken on a yearly basis.

8 **REFERENCES**

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APPENDIX 1 Infectious agents transmitted via breast milk

| Bacteria | Bacteria, particularly normal skin flora, may be present in expressed breast milk. Bacteria in breast milk are extremely unlikely to cause infections in healthy neonates or infants. The absence of clinical features in the source (mother) such as fever, mastitis, and breast abscess further reduces the risk for transmission of bacteria. Neonates and infants are monitored for signs and symptoms of sepsis as part of general routine care. |
|--|---|
| | A number of viruses have been found to be present in breast milk and some have been implicated in transmission. This transmission has occurred with regular breastfeeding rather than a one-off feed. |
| Human Immunodeficiency Virus (HIV) | HIV RNA has been identified in infected mothers' breast milk and HIV can be transmitted by breast milk. The risk of HIV transmission from expressed breast milk consumed by a neonate or baby is considered to be very low because: ¹ |
| | - women who are HIV positive and aware of that fact are advised not to breastfeed their babies; |
| | chemicals present in breast milk act, together with time and cold temperatures, to destroy the HIV present in expressed breast milk; and |
| | - transmission of HIV from a single breast milk exposure has never been documented. |
| Cytomegalovirus (CMV) | Transmission of CMV has been well recognised after primary or recurrent maternal CMV infection. Babies at particular risk from CMV infection include premature infants; those with very low birth weight (less than 2000 grams); and babies with T cell immune deficiency. |
| Hepatitis B (HBV) | HBV particles have been detected in human milk, but have been identified as extremely low risk in causing transmission of the virus and disease in neonates or infants. |
| Hepatitis C (HCV) | Hepatitis C RNA and antibodies have been detected in breast milk. The role of infected breast milk in the transmission of HCV remains unclear, but is considered to be extremely low risk. |
| Human T cell leukaemia virus type I (HTLV1) | HTLV1 can be transmitted by breastfeeding. The virus occurs in general populations in Japan, the West Indies, parts of Africa and South America, and in many Aboriginal populations in central and northern Australia. |
| Human T cell leukaemia virus type II (HTLVII) | HTLVII DNA has been detected in breast milk however the epidemiology of transmission to the baby and risk of subsequent disease are unclear. HLTVII has been identified in some indigenous populations and the risk of transmission is considered to be extremely low. |
| Herpes simplex virus types I & 2 (HSV 1&2) | HSV 1 & 2 can be found in breast milk. Active lesions and viral shedding have been implicated in transmission of the disease. |
| Rubella | Wild-type and vaccine rubella virus have been isolated from breast milk but other routes of infection are more likely. There are high rates of immunity to Rubella and the mother's status should be known from antenatal screening. |
| Syphilis | There is no evidence that syphilis can be transmitted by breast milk alone. The presence of clinical features of syphilis infection in the source mother (particularly syphilitic lesions on the breast) has been associated with the transmission of syphilis. |
| Varicella Zoster Virus (VZV) | Breastfeeding is not considered to be a significant route of transmission for VZV. |

¹ CDC, 2005, Breastfeeding: Recommendations: What To Do If An Infant Or Child Is Mistakenly Fed Another Woman's Expressed Breast Milk.

APPENDIX 2 Checklist – Exposure of baby to breast milk from a non-birth mother

| Exposure checklist | Com | pleted | Results/comments |
|--|------------|----------|---|
| 1. Breast milk feeding from a non-birth mother verified | Yes | No | Date of exposure: Time of exposure: Time identified: |
| 2. Breast milk feed aspirated from infant stomach (only if nasogastric or orogastric tube is in situ at time of incident or still in situ and <30 minutes after event) | Yes | No | Date of aspiration: Time aspiration: |
| 3. The birthmother/parents have been informed of the exposure and relevant information and fact sheets provided | Yes | No | Date informed: Time informed: Counselling provided by; Time informed: |
| 4. A clinical assessment has been performed on the source (non-birth) mother at time of breast milk collection/expression or feeding | Yes | No | Date of assessment: Presence of fever: Presence of rash (including vesicles on the breast): Presence of mastitis or breast abscess or bleeding nipples: |
| 5. A check of the antenatal serology for previous results has been done for: a) Non-birth mother b) Birthmother | Yes Yes | No No | Non-birth motherBirthmotherRubella:Syphilis:HCV antibodies:HBV:HIV antibodies:CMV: |
| 6. Risk factors for blood borne viruses and/or syphilis have been identified | Yes | No | If Yes, indicate which: Injecting Drug Use: Birthplace or previous residence or travel in a country with high prevalence of HIV: Birthplace or previous residence or travel in a country with high prevalence of HBV or HCV: |

| Exposure checklist | Com | pleted | Results/comments |
|--|------------|----------|--|
| | | | Tattoo or piercing History of syphilis (including date and treatment): Blood transfusion history or possible iatrogenic exposure to a blood borne virus Unprotected sex with a partner who has or is at risk of having a blood borne virus Other risk factors: |
| 7. A check of medications prescribed to source mother has been conducted | Yes | No | List relevant medications: |
| 8. Pre and post test counselling provided and consent given for relevant serological testing for:(a) Non-birth mother(b) Birthmother | Yes Yes | No No | Name of counsellor: Name of counsellor: |
| 9. Infectious Diseases Physician consulted | Yes | No | Date: Time: |
| | | | Name: Facility/Hub: |
| 10. Appropriate testing for exposure performed on non- birth mother | Yes | No | Date collected: Time collected: Blood – HIV RNA NAT: HIV proviral DNA (if available): HIV antigen: HCV antibody: HCV RNA: HBV surface antigen: HBV core antibody: Breast milk – CMV NAT (if baby less than one month of age): |
| 11. Appropriate testing for exposure performed on birthmother | Yes | No | Date collected: Time collected: Blood – HIV RNA NAT: HIV proviral DNA (if available): |

| Exposure checklist Com | | pleted | Results/comments |
|---|-----|--------|--|
| | | | HIV antigen: |
| | | | HCV antibody: |
| | | | HCV RNA: |
| | | | HBV surface antigen: |
| | | | HBV core antibody: |
| | | | Breast milk - CMV NAT (if baby less than one month of age-corrected): |
| 12. Arrangement for appointment to discuss results and arrangement for follow-up blood testing: | Vos | No | Recommended follow up: Yes No Appointment date: |
| a) Non-birth motion | 165 | No | Recommended follow up: Tes No Appointment date: |
| b) Birthmother/parent | Yes | NO | Recommended follow up: Yes No Appointment date: |
| 13. Results of testing for exposure reviewed:a) Non-birth mother | Yes | No | Date: Time: |
| b) Birthmother | Yes | No | Date: Time: |
| | | | |
| 14. Exposed baby requires treatment | Yes | No | |
| Hepatitis B immunoglobulin and/or vaccine given | Yes | No | Infant hepatitis B immunoglobulin: Date: Time: |
| HIV prophylaxis diven (access via Papdiatric specialist | Voc | No | Commence hepatitis B vaccination (in a different limb) if birth dose of HBV vaccine has not already been administered. Date: Time: |
| hospital) | 165 | | HIV prophylaxis commenced: Date: Time: |
| | | | Single/double/triple therapy: |
| 15. Incident has been documented and reported appropriately: | | | |
| (a) Baby's medical record: | Yes | No | |
| (b) Source mother's medical record: | Yes | No | |
| (c) IIMS: | Yes | No | |
| | | | |



APPENDIX 3 Estimated Adult (15-49) prevalence of HIV, 2007

<u>Source</u>: World Health Organization, 2008, *HIV and AIDS Estimates and Data 2007 and 2001 – 2008 Report on the Global AIDS Epidemic* <u>Notice</u>: Estimates only.

| Region / Country | % |
|--|------|
| Sub-Saharan Africa – Regional Estimate | 5 |
| Angola | 2.1 |
| Benin | 1.2 |
| Botswana | 23.9 |
| Burkina Faso | 1.6 |
| Burundi | 2 |
| Cameroon | 5.1 |
| Central African Republic | 6.3 |
| Chad | 3.5 |
| Comoros | <0.1 |
| Congo | 3.5 |
| Côte d'Ivoire | 3.9 |
| Democratic Republic of Congo | |
| Djibouti | 3.1 |
| Equatorial Guinea | 3.4 |
| Eritrea | 1.3 |
| Ethiopia | 2.1 |
| Gabon | 5.9 |
| Gambia | 0.9 |
| Ghana | 1.9 |
| Guinea | 1.6 |
| Guinea-Bissau | 1.8 |
| Kenya | |
| Lesotho | 23.2 |
| Liberia | 1.7 |
| Madagascar | 0.1 |
| Malawi | 11.9 |
| Mali | 1.5 |
| Mauritania | 0.8 |
| Mauritius | 1.7 |
| Mozambique | 12.5 |
| Namibia | 15.3 |
| Niger | 0.8 |
| Nigeria | 3.1 |
| Rwanda | 2.8 |
| Senegal | 1 |
| Sierra Leone | 1.7 |
| Somalia | 0.5 |
| South Africa | 18.1 |
| Swaziland | 26.1 |
| Тодо | 3.3 |
| Uganda | 5.4 |
| United Republic of Tanzania | 6.2 |
| Zambia | 15.2 |

| Zimbabwe | 15.3 |
|---|------|
| | |
| East Asia - Regional Estimate | 0.1 |
| China | 0.1 |
| Democratic People's Republic of Korea | |
| Japan | |
| Mongolia | 0.1 |
| Republic of Korea | <0.1 |
| | |
| Oceania – Regional Estimate | 0.4 |
| Australia | 0.2 |
| Fiji | 0.1 |
| New Zealand | 0.1 |
| Papua New Guinea | 1.5 |
| | |
| South and South-East Asia – Regional Estimate | 0.3 |
| Afghanistan | |
| Bangladesh | |
| Bhutan | 0.1 |
| Brunei Darussalam | |
| Cambodia | 0.8 |
| India | 0.3 |
| Indonesia | 0.2 |
| Iran (Islamic Republic of) | 0.2 |
| Lao People's Democratic Republic | 0.2 |
| Malaysia | 0.5 |
| Maldives | |
| Myanmar | 0.7 |
| Nepal | 0.5 |
| Pakistan | 0.1 |
| Philippines | |
| Singapore | 0.2 |
| Sri Lanka | |
| Thailand | 1.4 |
| Timor-Leste | |
| Viet Nam | 0.5 |
| | |
| Eastern Europe and Central Asia – Regional Estimate | 0.8 |
| Armenia | 0.1 |
| Azerbaijan | 0.2 |
| Belarus | 0.2 |
| Bosnia and Herzegovina | <0.1 |

| Bulgaria | |
|---|------|
| Croatia | <0.1 |
| Estonia | 1.3 |
| Georgia | 0.1 |
| Kazakhstan | 0.1 |
| Kyrgyzstan | 0.1 |
| Latvia | 0.8 |
| Lithuania | 0.1 |
| Republic of Moldova | 0.4 |
| Romania | 0.1 |
| Russian Federation | 1.1 |
| Tajikistan | 0.3 |
| Turkmenistan | <0.1 |
| Ukraine | 1.6 |
| Uzbekistan | 0.1 |
| | |
| Western and Central Europe – Regional Estimate | 0.3 |
| Albania | |
| Austria | 0.2 |
| Belgium | 0.2 |
| Czech Republic | |
| Denmark | 0.2 |
| Finland | 0.1 |
| France | 0.4 |
| Germany | 0.1 |
| Greece | 0.2 |
| Hungary | 0.1 |
| Iceland | 0.2 |
| Ireland | 0.2 |
| Israel | 0.1 |
| Italy | 0.4 |
| Luxembourg | 0.2 |
| Malta | 0.1 |
| Montenegro | |
| Netherlands | 0.2 |
| Norway | 0.1 |
| Poland | 0.1 |
| Portugal | 0.5 |
| Serbia | 0.1 |
| Slovakia | <0.1 |
| Slovenia | <0.1 |
| Spain | 0.5 |
| Sweden | 0.1 |
| Switzerland | 0.6 |
| The former Yugoslav Republic of Macedonia | <0.1 |
| United Kingdom of Great Britain & Northern Ireland | 0.2 |
| North Africa and Middle East – Regional | 03 |
| Estimate | 0.5 |
| Algeria | 0.1 |
| Bahrain | |
| Cyprus | |
| Egypt | |

| Iraq | |
|-----------------------------------|-----|
| Jordan | |
| Kuwait | |
| Lebanon | 0.1 |
| Libyan Arab Jamahiriya | |
| Morocco | 0.1 |
| Oman | |
| Qatar | |
| Saudi Arabia | |
| Sudan | 1.4 |
| Syrian Arab Republic | |
| Tunisia | 0.1 |
| Turkey | |
| United Arab Emirates | |
| Yemen | |
| | |
| North America – Regional Estimate | 0.6 |
| Canada | 0.4 |
| United States of America | 0.6 |
| | |
| Caribbean – Regional Estimate | 1.1 |
| Bahamas | 3 |
| Barbados | 1.2 |
| Cuba | 0.1 |
| Dominican Republic | 1.1 |
| Haiti | 2.2 |
| Jamaica | 1.6 |
| Trinidad and Tobago | 1.5 |
| | |
| Latin America – Regional Estimate | 0.5 |
| Argentina | 0.5 |
| Belize | 2.1 |
| Bolivia | 0.2 |
| Brazil | 0.6 |
| Chile | 0.3 |
| Colombia | 0.6 |
| Costa Rica | 0.4 |
| Ecuador | 0.3 |
| El Salvador | 0.8 |
| Guatemala | 0.8 |
| Guyana | 2.5 |
| Honduras | 0.7 |
| Mexico | 0.3 |
| Nicaragua | 0.2 |
| Panama | 1 |
| Paraguay | 0.6 |
| Peru | 0.5 |
| Suriname | 2.4 |
| Uruquav | 0.6 |
| Venezuela | |
| | |

APPENDIX 4 Contact points for specialised advice

As per Section 4.10, advice regarding infection risk, investigations and management should be sought from the relevant tertiary children's hospital supporting the NSW Child Health Network domain in which the event occurred.

Appropriate contacts are as follows:

For HIV (State-wide):

Sydney Children's Hospital9382 1654Larissa Mackey, CNC HIV Immunology9382 1654Alternatively, contact the consultant on-call for Infectious Diseasesvia switch 9382 1111

All other queries:

• In Northern Child Health Network (Hunter New England and North Coast):

John Hunter Children's Hospital

Contact the Infectious Diseases team member on-call via switch 49213000

• In Western Child Health Network (Greater Western, Northern Sydney Central Coast, Sydney South West and Sydney West):

The Children's Hospital at Westmead A/Prof Cheryl Jones, Paediatric ID Consultant Alternatively, the consultant on-call for Infectious Diseases

9845 3448 via switch 9845 0000

• In Greater Eastern and Southern Child Health Network (Greater Southern, South Eastern Sydney Illawarra, Sydney South West, Northern Sydney Central Coast and ACT Health):

Sydney Children's Hospital

Consultant on-call for Infectious Diseases

via switch 9382 1111

For Child Health Network details see: http://internal.health.nsw.gov.au/services/chn/