SESLHD PROCEDURE COVER SHEET



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EXECUTIVE SPONSOR or EXECUTIVE CLINICAL SPONSOR	Clinical Stream Director, Women's and Children's Health	
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FUNCTIONAL GROUP(S)	Women and Babies Health	
KEY TERMS	Breastfeeding, mastitis, lactation	
SUMMARY	To ensure consistent evidence-based management and treatment of Lactation Mastitis across SESLHD.	

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1. POLICY STATEMENT

Diagnosis and treatment of mastitis should be done in an effective and timely manner to protect and support breastfeeding and reduce the risk of breast abscess. Maintenance of breastfeeding should be encouraged and supported during this time in accordance with NSW - Promotion, Protection and Support.

Aboriginal women may require additional supports sometimes as an inpatient. This can include family, Aboriginal health professionals, Aboriginal liaison officers, health workers or other culturally specific services.

Non–English speaking culturally and linguistically diverse (CALD) women can be supported by offering appropriate interpreters using the Interpreter service. NSW Ministry of Health-Policy Directive PD2017_044 Interpreters - Standard Procedures for Working with Health Care Interpreters.

2. BACKGROUND

Lactational mastitis is inflammation of breast tissue, with or without an accompanying bacterial infection. The causes of mastitis and the associated mechanisms are not well understood. Mastitis often occurs in the first four weeks postpartum, however mastitis can occur at any stage during lactation. Mastitis can also occur in the antenatal period. Common symptoms include localised redness, tenderness, breast lumps, breast pain and generalised malaise and fever.

A breast abscess is a local accumulation of pus within the breast due to bacterial infection (infective mastitis). Prompt, effective management of mastitis can reduce the risk of a breast abscess developing.

Engorgement usually involves both breasts that are warm, tight, painful; often with a glassy translucent appearance. Milk flow may be reduced. Engorgement can occur four to five day's post-partum or with sudden weaning. Engorgement can lead to mastitis if not properly managed.

Physiological breastfeeding, where the pattern and frequency of breastfeeding is responsive to baby's needs, reduces the risk of breast inflammation and mastitis.

All breastfeeding women need the knowledge of how to prevent, manage, and resolve mastitis.



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3. RESPONSIBILITIES

3.1 All staff are responsible for:

• Staff are mandated to familiarise themselves with this procedure in order to provide consistent, effective treatment for lactational mastitis. This procedure ensures that breastfeeding is supported, and that mothers and babies are not separated.

3.2 Line Managers are responsible for:

• Ensuring staff are familiar with the Local Health District policies and procedures and the requirement for adherence (for periodic review at management discretion).

4. PROCEDURE

4.1 Signs and symptoms recognition

- Reddened area usually on one breast which may be tender/painful, swollen and/or hot to touch.
- Flu like symptoms including aching joints and fever.
- It is important to differentiate between mastitis and engorgement.

4.2 Possible causes identified

- Separation from baby, baby with tongue tie, ineffective milk removal.
- A thorough breastfeeding history should be taken to identify possible causes and management strategies.
- Non physiological breastfeeding: infrequent, scheduled or missed feeds, limited suckling time at the breast, non-physiological devices and excessive pumping.
- Changes in feeding pattern, pressure on the breast from an ill-fitting bra, recent trauma to breast, or previous breast surgery.
- Nipple damage, such as grazes or cracks may lead to bacterial colonisation.
- White spot on nipple face may be present and obstruct the milk flow.
- Maternal stress and fatigue.

4.3 Discussion of Prevention strategies

- Educate the woman so she can recognise signs and symptoms of mastitis and teach her how to hand express independently.
- Adhere to principles of hand hygiene before and after handling breasts or pumping equipment.
- Encourage baby led responsive breastfeeding.
- Ensure optimal attachment to prevent nipple distortion and/or damage.
- Ensure adequate milk removal. Consider expressing if feed/s are missed.
- Support mother to express if separated from her baby.
- Avoid constrictive or ill-fitting bra and non-physiological devices which may lead to poor drainage of the breast.

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- Avoid use of breastmilk substitutes unless there is an acceptable medical reason.
- Rooming in 24 hours to enable the woman to respond to her baby's early feeding cues.
- Rooming in 24 hours to enable the woman to respond to her baby's early feeding cues.
 SESLHDPD/251 Breastfeeding Women: Support in Non-Maternity Facilities in SESLHD offers guidance for staff caring for women in non-maternity facilities.
- Avoid rapid weaning as it may increase the risk of mastitis.
- Expressing equipment should be washed thoroughly with warm soapy water, rinsed well and dried thoroughly. Follow manufacturer's instructions.

4.4 Treatment

- Women with antenatal mastitis are advised NOT to express. See medical management below. Refer to CMC Lactation for follow up.
- For breastfeeding women follow guidance below.

4.4.1 Support Physiological Breastfeeding:

- A return to physiological breastfeeding should be encouraged and supported.
- Review positioning, attachment, and milk transfer. Note that the breast may not soften after feeds when inflammation present.
- There is no evidence of any risk to the baby when continuing to breastfeed from a mother with mastitis.
- If the woman is unable or does not wish to breastfeed it will be necessary to remove milk by either hand expressing or with the use of a breast pump. Expressing milk should mimic physiological breastfeeding - express when baby usually feeds, do not collect more milk than baby needs.
- Women suspected of having an oversupply (for example they are expressing much more than baby needs) should be supported to reduce expressing slowly.

4.4.2 Reduce Inflammation:

- Cold packs to breasts after and between feeds can reduce pain and inflammation.
- Applying heat may *increase* pain and inflammation and should not be used.
- Rest, adequate fluids, good nutrition, and family support are important.
- Analgesia as directed for relief of pain and other symptoms. Paracetamol can be used during pregnancy. Both paracetamol and ibuprofen are safe during lactation. Ibuprofen may be helpful to reduce both pain and inflammation.

4.4.3 Helping the Milk to Flow:

- Continued milk removal is important during engorgement, breast inflammation or mastitis, both to relieve symptoms and protect the woman's milk supply. Strategies that help the baby to breastfeed or encourage the milk ejection reflex can be suggested (for example skin to skin contact and relaxation techniques).
- It is important to note that there is no need to increase milk removal it should just meet the needs of the baby.
- If there is no milk flow due to inflammation within the breast, the mother can recline with her breasts slightly elevated. Place cool packs around her breasts encircling her areola/nipple complex for 10-15mins. The mother can be taught to alternate very

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gentle fingertip massage of the areola with reverse pressure softening. Gentle stroking of the breast directs fluid from the areola towards her armpit.

- Avoid abrupt weaning.
- White spot on the nipple (nipple bleb). There is no consensus in the evidence about appropriate treatment of a white spot. A clean warm pack applied to the nipple directly before a feed may assist natural removal of the white spot during the feed. If this is ineffective consider removing aseptically.

4.4.4 Medical Management

- Provide the woman with the SESLHD information leaflet on Mastitis (Appendix 1).
- Explain procedure, gain verbal consent, give handout (<u>Appendix 2</u>) to woman and verbally assist her in this collection.
- Obtain breastmilk samples for quantitative breastmilk culture and sensitivities from both breasts and transport to pathology.
- Antibiotic Therapy for infective mastitis:
 - o Refer to Therapeutic Guidelines: Antibiotic, Lactational mastitis.
 - o Mastitis is usually caused by Staphylococcus Aureus.
 - o Follow table 1 below for suggested antibiotic regimes.
 - Discuss with CNC-Infection Control if breast milk culture indicates presence of Methicillin-resistant microorganism (MRSA) or Group B Streptococcus.
 - Antibiotic treatment may cause vaginal thrush. If symptoms develop treatment will be needed.
- Medical officer to arrange diagnostic ultrasound if breast abscess is suspected or mastitis is not resolved after 48 hours of antibiotics. Obtain breast surgical team review.
- Management and treatment of the abscess is by ultrasound guided drainage or surgical intervention as per surgical consultation.
- Inform all women to expect improvement within 24 48 hours after commencing antibiotic treatment. Advise her to follow up with her GP.

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Table 1: Antibiotic Therapy

Oral Therapy	If febrile, consider commencing IV antibiotics.		
First line			
Flucloxacillin* 500 mg orally, 6-hourly	Flucloxacillin 2 g intravenously, 6-hourly. Review need		
<u>OR</u>	for IV therapy after 48-72 hours. Switch to oral		
Dicloxacillin* 500 mg orally, 6-hourly	therapy (as above) when symptoms are resolving.		
For patients with delayed non-severe hypersensitivity to penicillins			
Cefalexin 500 mg orally, 6-hourly	Cefazolin 2 g intravenously, 8-hourly		
For patients with immediate (non-severe or severe) or delayed severe hypersensitivity to			
penicillins			
Clindamycin [¥] 450 mg orally, 8-hourly	Clindamycin 600 mg intravenously, 8-hourly		
Infectious Diseases to be notified if patient is suspected colonised with MRSA			
Duration of Therapy: If symptoms and signs resolve rapidly, 5 days of therapy may be			
sufficient; otherwise continue treatment for 10 days.			
* This medicine is absorbed best if taken on an empty stomach at least half an hour before food or 2 hours after food			
* Take with a full glass of water			

4.4.5 Hospital admission

- Request review by CMC Lactation or a senior midwife or nurse.
- On admission and every shift thereafter complete <u>Mastitis</u>: <u>Breast Examination form</u> SES060429.
- Consideration must be given to the most appropriate location for the baby. A clinical management plan for the baby accompanying their unwell mother is required. (Refer to local business rules/procedures and MOH policies).
- The woman should be supported and encouraged to have her baby with her to maintain breastfeeding.
- If the woman needs to express and store her breast milk follow <u>SESLHDGL/081 Expression and Safe Management of Expressed Breast Milk.</u> Breast milk needs to be stored below 4*C in a food fridge, ideally a designated expressed breast milk fridge (storage in a medication fridge is not appropriate as the temperature range is between 2 and 8 degrees).

5 Follow Up

- Ensure hospital or GP follow up to assess specificity and duration of antibiotics prescribed. Many authorities recommend a ten day course to minimise re-occurrence. Two prescriptions will be needed.
- Ensure follow up consult with Lactation Consultant, Child and Family Health nurse or Australian Breastfeeding Association counsellor prior to completing course of antibiotics to ensure appropriate resolution and optimal breastfeeding resumed.

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- Midwives and <u>Child and Family Health</u> nurses can provide ongoing breastfeeding support.
- The <u>Australian Breastfeeding Association</u> provides a 24-hour advice line. The number (1800 686 268 or 1800mum2mum) is listed on the back cover of baby's personal health record (blue book).
- Private <u>International Board Certified Lactation Consultants</u> (IBCLCs) are listed on the LCANZ website.
- MotherSafe (Medications in pregnancy and Lactation Service) provides information on the safety of medications during pregnancy and breastfeeding. 02 9382 6539 or 1800 647 848.

6. DOCUMENTATION

Electronic Medication Records
Mastitis: Breast Examination form (SES060429)
Maternal Care Pathway
SMOC. SNOC. SPOC

7. REFERENCES - Related Policies

- NSW Health Policy Directive PD2018-034 Breastfeeding in NSW Promotion, Protection and Support
- NSW Health Policy Directive PD2017 013 Infection Prevention and Control Policy
- NSW Health Policy Directive PD2017_044 Interpreters Standard Procedures for Working with Health Care Interpreters
- NSW Health Policy Directive PD2022_028 Aboriginal Cultural Training Respecting the Difference
- SESLHDPD/251 Breastfeeding Women: Support in Non-Maternity Facilities in SESLHD

REFERENCES

- 1. Amir, L.H & The Academy of Breastfeeding Medicine. 2014, Clinical Protocol #4 Mastitis Revision, *Breastfeeding Medicine*, vol 9, no. 5, viewed 8th January 2019, viewed 29th March 2022.
- Mitchell, K. B., Johnson, H. M., Rodríguez, J. M., Eglash, A., Scherzinger, C., Zakarija-Grkovic, I., Cash, K. W., Berens, P., Miller, B., & Academy of Breastfeeding Medicine (2022). Academy of Breastfeeding Medicine clinical protocol #36: The mastitis spectrum, Revised 2022. Breastfeeding Medicine, 17(5), 360–376
 https://www.bfmed.org/assets/ABM Protocol %2336.pdf
- 3. Baeza, C., Paricio-Talayero, J. M., Pina, M., & De Alba, C. (2022). Re: "Academy of Breastfeeding Medicine Clinical Protocol #36: The Mastitis Spectrum, Revised 2022" by Mitchell et al. *Breastfeeding Medicine*, *17* (11). DOI: 10.1089/bfm.2022.0129

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- 4. Drake, G (2023). 'Smoothing the bumps': Updates to ABA's information on engorgement, localised breast inflammation and mastitis. https://abaprofessional.asn.au/smoothing-the-bumps-updates-to-abas-information-on-engorgement-localised-breast-inflammation-and-mastitis/
- 5. Drake, G (2023). Factsheet for Health Professionals: Localised Breast Inflammation and Mastitis. Australian Breastfeeding Association. https://abaprofessional.asn.au/download/inflammation-mastitis-fact-sheet/
- 6. Antibiotic> Empirical regimens for sepsis or septic shock [published April 2019. Amended September 2021]. In: Therapeutic Guidelines [digital]. Melbourne: Therapeutic Guidelines Limited; 2021 Mar viewed 9th March 2022
- 7. <u>Australian Commission of Safety and Quality in Health Care. National Safety and Quality Health Service Standards. 2nd ed. version 2. Sydney: ACSQHC; 2021.</u>
- 8. <u>Boakes E, Woods A, Johnson N, Kadoglou. Breast Infection: A Review of Diagnosis and Management Practices. Eur J Breast Health 2018; 14: 136-143.</u>
- 9. Hale T, Medication and Mothers Milk 2019, (18th Edn), Springer Publishing Company, New York.
- 10. <u>Lactational Mastitis [published April 2019]</u>. In: <u>Therapeutic Guidelines [digital]</u>. <u>Melbourne:</u> Therapeutic Guidelines Limited; 2021 Mar viewed 9th March 2022
- 11. Mastitis. Australian Medicines Handbook. Accessed 21/4/23. https://amhonline-amh-net-au.libraryproxy.griffith.edu.au/chapters/anti-infectives/tables/skin-soft-tissue-infections-table?menu=hints
- 12. <u>NSW Government, Health 2018, Antimicrobial Stewardship</u> [electronic resource], <u>SESLHDPD/137</u>, <u>NSW Health, NSW Department of Health [North Sydney, N.S.W.]</u>, viewed 9th March 2022
- 13. NSW Government, Health, 2017, Infection Prevention and Control Policy [electronic resource], PD2017 013/ NSW Health NSW Department of Health [North Sydney, N.S.W.], viewed 24 December 2018
- 14. NSW Government Health. 2018. Breastfeeding in NSW [electronic resource]: Promotion, Protection, and Support, PD2018_034/NSW Health NSW Department of Health {North Sydney, N.S.W.], viewed 8th January 2019
- 15. <u>Pustotina, O. 2016, 'Management of mastitis and breast engorgement in breastfeeding women', The Journal of Maternal-Fetal & Neonatal Medicine</u>, vol.29, no. 19, pp. 3121-3125
- 16. SESLHDPD/251 Breastfeeding Women: Support in Non-Maternity Facilities in SESLHD



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9. REVISION AND APPROVAL HISTORY

Date	Revision No.	Author and Approval	
February 2011	0	SESIAHS Lactation Group, and approved by Combined Clinical Council, and SESIAHS Infection Prevention and Control Committee	
March 2014	2	SESLHD Lactation Group/ Women's and Children's Clinical Stream	
June 2014	2.5	Final Amendment made as instructed by Authors. Submitted to Leisa Rathborne, Women's and Babies Health Clinical Stream Director and Clinical Executive Sponsor	
June 2014	2.5	Approved by Executive Clinical Sponsor, Leisa Rathborne	
December 2014	3	Minor review endorsed by Executive Sponsor	
January 2019	4	Claudelle Miles, CMC Lactation RHW, Deborah Atton, CMC Lactation RHW	
March 2019	4	Minor review approved by Executive Sponsor. Updates on specific antibiotic use. Completion of Mastitis: Breast Examination form – SES060429. Breast exam form to be completed once every shift. Addition of appendix 3 with SESLHD Patient information leaflet on mastitis. Updates on references.	
March 2019	4	Processed by Executive Services and progressed to Quality Use of Medicines Committee.	
April 2019	4	Approved by Quality Use of Medicines Committee.	
April 2022	5	Minor Review. Katy Hunt CMC Lactation RHW & SESLHD Lactation Group, RHW Snr Pharmacist Lily Byun. Additional points included in 4.3 and 4.4. Hyperlinks and references updated. Approved by Executive Sponsor. To be tabled at Quality Use of Medicines Committee.	
May 2022	5	Approved by Quality Use of Medicines Committee.	
May 2023	6	Minor review: Update on prevention and treatment of mastitis. Update of references. Michelle Culshaw, CMC Lactation TSH, Katy Hunt, CMC Lactation RHW, Faith Robertson, CMC Lactation SGH, and SESLHD Lactation Group. To be tabled at SESLHD Drug and Therapeutics Committee. Approved by Executive Sponsor.	
June 2023	6	Approved at SESLHD Drug and Therapeutics Committee.	

10. APPENDICES

- 1. Mastitis brochure
- 2. Information leaflet how to collect a breastmilk sample.



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Appendix 1: Mastitis

English May 2023

Mastitis is inflammation of the breast tissue that can affect one or both breasts and make breastfeeding painful or difficult. When treated early, more serious conditions and infections can be prevented. It is safe to breastfeed your baby if you have mastitis.

Signs and symptoms

- Your breast becomes painful with pink/red areas, you may feel a lump, and your breasts may be hot and swollen.
- · Chills/fever, joint aches and pains, flu-like symptoms.

Possible causes

- Incorrect positioning and attachment to the breast.
- Infrequent feeding, scheduling of breastfeeds, limiting sucking time at the breast, or a change in the pattern of feeds (including when weaning). Favouring one breast. Pressure on the breast, this could be from a tight bra or finger pressing into the breast during a feed.
- · Nipple damage (grazes or cracks).
- · An engorged or over-full breast.
- · A white spot on the face of the nipple.

How to avoid mastitis

It may be possible to prevent mastitis if you follow these tips:

- · Wash your hands before handling your breasts or nipples.
- Position and attach your baby to the breast correctly. The nipple may look slightly stretched after the feed but should not be squashed or flattened.
- · Offer both breasts each feed (baby may take only one breast).
- If your baby feeds on one side only, you may want to hand express some milk from the other breast for comfort only.

Management of mastitis

The most important step in treating mastitis is reducing inflammation and pain.

- If you feel pain when breastfeeding or think you may have mastitis, seek help from your Midwife, Child and Family Health Nurse, Lactation Consultant (IBCLC) or Australian Breastfeeding Association Counsellor.
- If possible, continue to feed as baby cues and avoid massaging painful lumps.
- Your baby may need to be woken to feed.

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- You may notice milk flow is reduced or baby refuses to feed. If unable to feed, hand express or use a pump to soften the breast for comfort.
- Make sure your baby is positioned and attached correctly and do not limit sucking time.
- · Cold packs after and between feeds may help with pain relief and reduce swelling.
- · Consider short term use of pain relief such as paracetamol or ibuprofen, as directed.
- · It is important to rest and ask for help at home.

If the problem does not get better within 12-24 hours or you feel very ill, contact your doctor. Antibiotics may be needed.

Use of antibiotics

- The current recommendations are Flucloxacillin (preferred) or Clindamycin (if allergic to penicillin).
- · These antibiotics can be used safely when breastfeeding.
- You should expect to see some improvement in 24-48 hours.
- · If your symptoms are not improving see your GP.
- Take your antibiotics as directed by your doctor. You may need a 10 day course of antibiotics to prevent recurrence of mastitis.
- Antibiotic treatment can sometimes cause vaginal thrush. If symptoms develop, treatment will be needed.

In the rare instance that your baby seems unwell or has a fever, you should seek prompt medical attention.

Resources

- Your Local Maternity Unit
- Your Midwife, Child and Family Health Nurse, or Lactation Consultant
- Mother Safe (Medications in Pregnancy & Lactation Service) Phone: (02) 9382 6539 or
- 1800 647 848 if outside the Sydney Metropolitan area
- Australian Breastfeeding Association www.breastfeeding.asn.au Helpline: 1800 686 268
- For a Lactation Consultant (IBCLC) https://www.lcanz.org/find-a-lactation-consultant/
- After-hours telephone advice lines are listed in your baby's Personal Health Record (Blue Book)
- If you need an interpreter, call Translating and Interpreting Service (TIS) on 131 450

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Appendix 2

PATIENT HANDOUT ON COLLECTING MIDSTREAM BREASTMILK CULTURE

OPTION 1	OPTION 2- IF UNABLE TO BREASTFEED
YOU WILL NEED : ONE CONTAINER NORMAL SALINE OR WATER GAUZE	YOU WILL NEED : THREE CONTAINERS NORMAL SALINE OR WATER GAUZE
Wash your hands	Wash your hands
Feed baby on affected breast for 5 minutes	Express one teaspoon of milk into one container (store this milk for baby)
Clean breast / nipple / areola with water or normal saline	Clean breast / nipple areola with water or normal saline
Express and collect approximately two teaspoons from each breast into 2 separate new specimen containers. Take care not to let your breast, nipple or fingers touch inside of specimen container	Express and collect approximately two teaspoons from each breast into 2 separate new specimen containers. Take care not to let your breast, nipple or fingers touch inside of specimen container
Give sample to midwife / nurse / doctor immediately to label confirming your details are correct	Give sample to midwife / nurse / doctor immediately to label confirming your details are correct
Breastmilk sample will be sent to Pathology immediately. If delayed breastmilk sample must be refrigerated immediately	Breastmilk sample will be sent to Pathology immediately. If delayed breastmilk sample must be refrigerated immediately.