

Neonatal Minimisation of Early Onset of Group B Streptococcal (EOGBS) Infection

Document Number PD2005_240

Publication date 27-Jan-2005

Functional Sub group Clinical/ Patient Services - Baby and child
Clinical/ Patient Services - Maternity

Summary Hospitals are required to have a written protocol on the minimisation.

Author Branch Primary Health and Community Partnerships

Branch contact Dr Elisabeth Murphy 9391 9475

Applies to Area Health Services/Chief Executive Governed Statutory Health Corporation, Board Governed Statutory Health Corporations, Affiliated Health Organisations - Non Declared, Affiliated Health Organisations - Declared, Government Medical Officers, NSW Ambulance Service, NSW Dept of Health, Private Hospitals and Day Procedure Centres, Public Hospitals

Distributed to Public Health System, Government Medical Officers, Health Associations Unions, Health Professional Associations and Related Organisations, NSW Ambulance Service, NSW Department of Health, Public Hospitals, Private Hospitals and Day Procedure Centres, Tertiary Education Institutes

Review date 31-Dec-2010

Policy Manual Not applicable

File No. 00/5458

Previous reference 2002/28

Issue date 20-Feb-2002

Status Active

Director-General

This Policy Directive may be varied, withdrawn or replaced at any time.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.

CIRCULAR

| | |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| File No | 00/5458 |
| Circular No | 2002/28 |
| Issued | 20 February 2002 |
| Contact | Administrative Contact: Ms S Stewart (02) 9424 5703 Clinical Contact: NSW Pregnancy & Newborn Services Network (02) 9351 7318 |

**MINIMISATION OF NEONATAL EARLY ONSET
OF GROUP B STREPTOCOCCAL (EOGBS) INFECTION**

1. All hospitals should have a written protocol on the minimisation of neonatal early onset group B streptococcal (EOGBS) infection.
2. EOGBS infection is a major cause of serious infection in the first week of life, affecting between 1 and 4 infants per 1000 live births. Approximately 12-15% of Australian women have asymptomatic vaginal carriage of group B streptococcus. Infants acquire the infection through vertical transmission at birth and preterm infants are at higher risk of acquiring EOGBS^{1,2,3}. Currently there is no vaccine for EOGBS and there is no method for rapid diagnosis at the onset of labour or at delivery. It is possible to minimise but not eradicate the risk of EOGBS.
3. Chemoprophylaxis is the best option to minimise EOGBS infection. There are several strategies to identify at-risk women for intra-partum prophylactic antibiotics.

Most hospitals in NSW have adopted either screening or the risk factor approach to minimising neonatal early onset group B streptococcal (EOGBS) infection.

In the screening-based approach, all pregnant women are screened in the second half of pregnancy for anogenital GBS colonisation. All carriers identified by culture are offered intrapartum chemophylaxis.

In the risk-factor approach, all pregnant women with intrapartum risk factors alone eg, less than 37 weeks' gestation, duration of membrane rupture greater or equal to 18 hours¹, or temperature greater than or equal to 38°C, a swab to be taken and intrapartum prophylaxis antibiotics offered.

Distributed in accordance with circular list(s):

| | | | | | |
|-------------|------------|-------------|------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------|
| A 27 | B | C 21 | D | E 4 | 73 Miller Street North Sydney NSW 2060 Locked Mail Bag 961 North Sydney NSW 2059 Telephone (02) 9391 9000 Facsimile (02) 9391 9101 |
| F | G 7 | H 15 | I | J 13 | |
| K | L 5 | M | N 7 | P 5 | |

In accordance with the provisions incorporated in the Accounts and Audit Determination, the Board of Directors, Chief Executive Officers and their equivalents, within a public health organisation, shall be held responsible for ensuring the observance of Departmental policy (including circulars and procedure manuals) as issued by the Minister and the Director-General of the Department of Health.

4. Several studies have indicated that susceptibility to neonatal EOGBS infection is caused by maternal anticapsular antibody and this can be prevented by active maternal immunisation. This immunisation can then prevent peripartum disease and vertical transmission to the fetus. However, vaccines designed to induce antibodies against the polysaccharide capsule of GBS are still being developed. Also, their potential impact may be limited because of reduced transplacental transport of protective antibody before 32-34 weeks gestation and because of possible difficulty in making the vaccine available to pregnant women¹.
5. The following resources and references are available to assist hospitals in developing protocols:
 - 5.1 Centers for Disease Control (CDC) prevention guidelines. Prevention of Perinatal Group B Streptococcal Disease: A Public Health Perspective. MMWR May 31, 1996/45(RR-7);1-24. Available in full text at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/00043277.htm>

Gilbert GL, Isaac D, Burgess MA *et al*. Prevention of neonatal Group B Streptococcal Sepsis: is routine antenatal screening appropriate. *Aust NZ J Obstet Gynaecol* 1995; 35:2:120-126.
 - 5.2 The NSW Pregnancy and Newborn Services Network (PSN) can assist with protocol development or adaptation (phone 02 9351 7318 or facsimile 02 9351 7742).
 - 5.3 Hospitals with tertiary referral services
The Departments of Obstetrics and Gynaecology of hospitals with tertiary referral services have also indicated that that they are willing to provide copies of their protocols to other hospitals as a resource and/or assist with the development of hospital specific clinical protocols. Requests for copies of policies/procedures may be forwarded to the Director of Obstetrics at:

King George V Memorial Hospital, Missenden Road, Camperdown 2050
Royal North Shore Hospital, Pacific Highway, St Leonards 2065
Royal Hospital for Women, Barker Street, Randwick 2031
Liverpool Hospital, Elizabeth Street, Liverpool 2170
Westmead Hospital, Cnr Hawkesbury and Darcy Rds, Westmead 2145
Nepean Hospital, Somerset Street, Penrith 2751
John Hunter Hospital, Lookout Road, Newcastle 2305

While protocols may be a common resource to many hospitals, individual hospitals remain responsible for ensuring that their own protocols are up to date and staff are trained and able to implement them. Regions may wish to consult with their Area Managers on protocol development.
6. This circular should be brought to the attention of staff who are responsible for the administration and delivery of maternal and neonatal care, including maternity units, antenatal clinics and emergency departments.

References

1. Centers for Disease Control (CDC) prevention guidelines: Prevention of Perinatal Group B Streptococcal Disease: A Public Health Perspective. *MMWR* May 31, 1996/45 (RR-7):1-24.
2. Jefferey HE and McIntosh ED. Antepartum screening and non-selective intrapartum chemoprophylaxis for group B streptococcus. *Aust NZ J Obstet Gynaecol* 1994,34:14-19.
3. Garland SM and Fleigner JR. Group B streptococcus (GBS) and neonatal infections: the case for intrapartum chemoprophylaxis. *Aust NZ J Obstet Gynaecol* 1991,31:119-122.

Robert McGregor
Acting Director-General