INFORMING PUBLIC HEALTH

Public health departments have a major role in the management of IMD, ensuring that there are adequate disease prevention and surveillance programmes, and in the prevention of secondary spread through contact tracing. Usually the lead is through the consultant in communicable disease and environmental health/consultant in public health medicine in your local NHS Board.

SOURCES OF FURTHER INFORMATION AND SUPPORT FOR PATIENTS, PARENTS AND CARERS

Meningitis Research Foundation
133 Gilmore Place
Edinburgh EH3 9PP
Freephone 24-hour helpline: ☎ 080 88003344
www.meningitis.org

The Meningitis Trust
Centrum Offices Ltd
38 Queen Street
Glasgow G1 3DX
Freephone 24-hour helpline: ☎ 0800 028 1828
www.meningitis-trust.org

Meningitis Association of Scotland
9 Edwin Street
Glasgow G51 1ND
☎ 0141 427 6698 • 0141 554 6680
www.menscot.org

This Quick Reference Guide provides a summary of the main recommendations in the SIGN guideline on **Management of invasive meningococcal disease in children and young people.**

Recommendations are graded A B C D to indicate the strength of the supporting evidence.

Good practice points ☑ are provided where the guideline development group wishes to highlight specific aspects of accepted clinical practice. Details of the evidence supporting these recommendations can be found in the full guideline, available on the SIGN website: **www.sign.ac.uk**

EARLY TREATMENT

D	**Parenteral antibiotics** *(either benzylpenicillin or cefotaxime)* **should be administered in children as soon as IMD is suspected, and not delayed pending investigations.**

Be aware of the potential for, and be able to recognise, **rapidly progressive disease.**

D	**Following arrival at hospital, children with suspected IMD should be reviewed and treated promptly by a senior and experienced clinician.**
D	**Management of children with progressive IMD should be discussed with intensive care at an early stage.**
B	**If there are signs of shock, administer a rapid infusion of IV fluids as isotonic crystalloid or colloid solution** *(up to 60 ml/kg given as three boluses of 20 ml/kg)***, with reassessment after each bolus.**
☑	Fluid resuscitation in excess of 60 ml/kg and inotropic support are often required.
D	**Children with fluid resistant shock should receive early inotropic therapy and ventilatory support should be considered.**
D	**Transfer to PICU should be considered for patients who continue to deteriorate despite appropriate supportive therapy** *(oxygen, fluids and antibiotics)***.**

Access PICU in accordance with local policies, see www.snprs.nhs.uk.

TREATMENT

B	**Parenteral cefotaxime should be used as initial treatment of previously well children over three months with a diagnosis of IMD.**
B A	**In children with meningococcal meningitis or who are beginning empirical antibiotic treatment for bacterial meningitis of unknown aetiology, parenteral dexamethasone therapy** *(0.15 mg/kg six hourly)* **should be commenced with, or within 24 hours of, the first antibiotic dose and be continued for four days.**
☑	In children with IMD the duration of antibiotic therapy should be seven days.
C D	**To confirm the diagnosis in all children with suspected IMD, blood should be taken for:** ▪ **bacterial culture** ▪ **meningococcal PCR.**

SIGN
Scottish Intercollegiate Guidelines Network

NHS Quality Improvement Scotland

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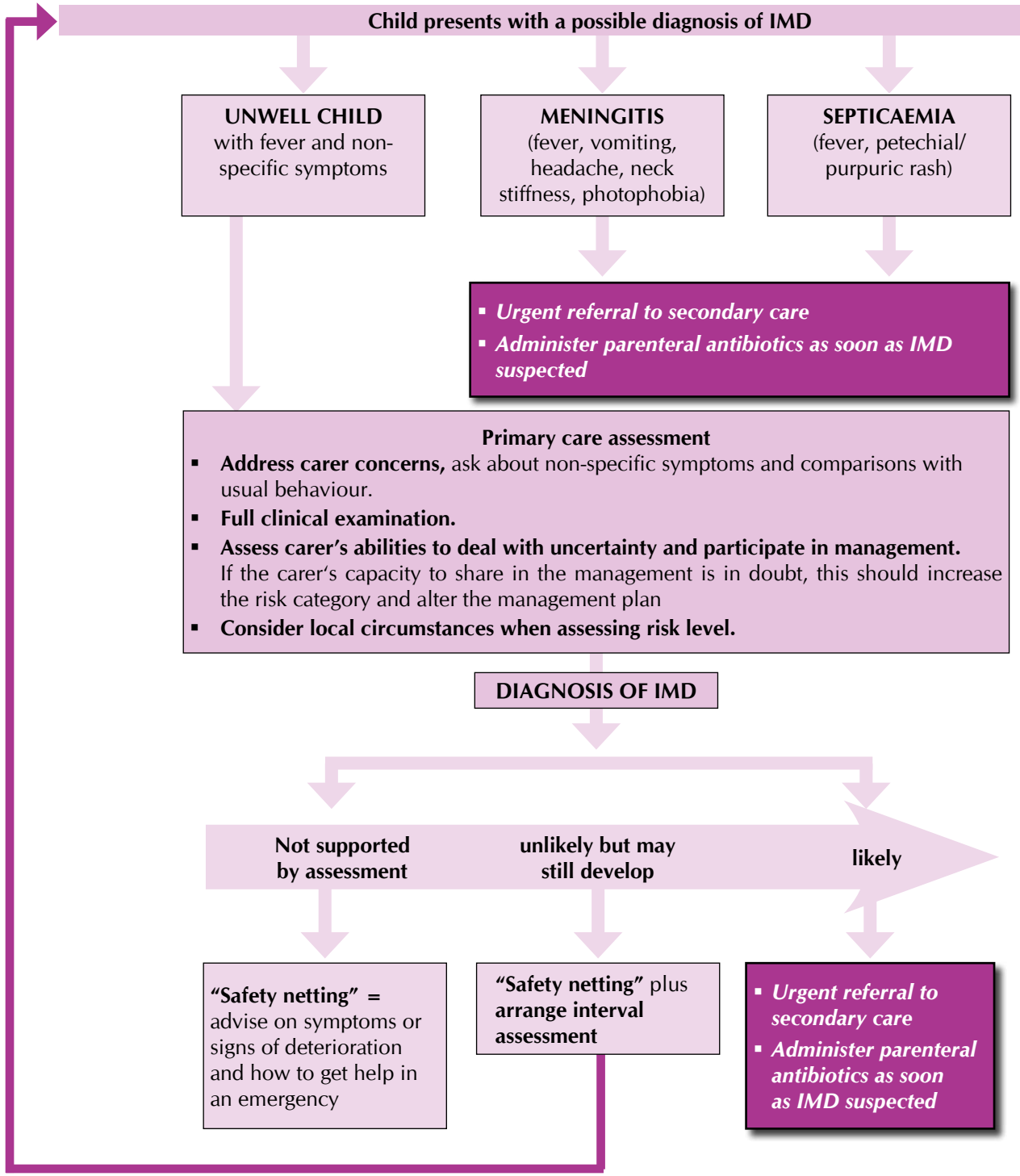
Quick Reference Guide

May 2008

COPIES OF ALL SIGN GUIDELINES ARE AVAILABLE ONLINE AT WWW.SIGN.AC.UK

MANAGEMENT OF INVASIVE MENINGOCOCCAL DISEASE (IMD) IN CHILDREN AND YOUNG PEOPLE



SIGNS AND SYMPTOMS

IMD generally presents in three illness patterns:

- **Meningococcal septicaemia** (~20%) characterised by fever, petechiae, purpura and toxicity. This presentation is associated with a significantly poorer outcome.
- **Clinical meningitis**, with fever, lethargy, vomiting, headache, photophobia, neck stiffness, and positive Kernig's and Brudzinski's signs. These are the classic features of established bacterial meningitis of any cause. There may be less specific features such as poor feeding, irritability, a high-pitched cry, and a full fontanelle.
- **A mixed picture** of septicaemia and meningitis.

INITIAL ASSESSMENT

D **A generalised petechial rash, beyond the distribution of the superior vena cava, or a purpuric rash in any location, in an ill child, are strongly suggestive of meningococcal septicaemia and should lead to urgent treatment and referral to secondary care.**

D **The following features in an ill child should prompt consideration of a diagnosis of IMD:**

- **petechial rash**
- **altered mental state**
- **cold hands and feet**
- **extremity pain**
- **fever**
- **headache**
- **neck stiffness**
- **skin mottling.**

D
- **Meningococcal disease should not be automatically excluded as a potential diagnosis if young children present with non-specific symptoms** *(fever, lethargy, poor feeding, nausea, vomiting and irritability or a non-blanching rash)* **within the first four to six hours of illness.**
- **If there is sufficient clinical suspicion, appropriate treatment should be commenced and assessment in secondary care should be arranged.**

INTERVAL ASSESSMENT

D **Children with symptoms or signs which are highly suggestive of meningococcal disease should not have their treatment delayed by interval assessment.**

☑ Children with non-specific symptoms at initial presentation, in whom meningococcal disease cannot be excluded, should be reassessed within four to six hours.