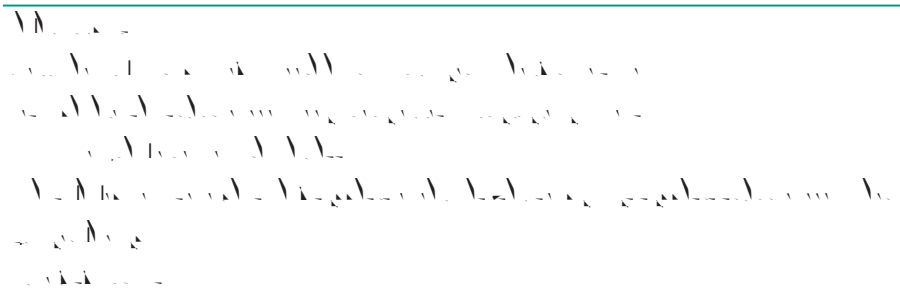
Risk factors for sepsis identified from the women who died in the 2003-2005 and 2006-2008 triennia are shown in table 1. Many of the women who died had one or more risk factors. Urinary tract infection and chorioamnionitis are common infections associated with septic shock in the pregnant patient.[5]

ab e

Diagnostic criteria for sepsis and severe sepsis are provided in appendix 1 and features of toxic shock syndrome are listed in appendix 2.

ab e Clinical features suggestive of sepsis. Modified from references 1 and 3.



at are t e appropr ate nvest at ons w en seps s s suspected

B ood cu tures are t e ey nvest at on and s ou d be obta ned pr or to ant b ot c ad n strat on owever ant b ot c treat ent s ou d be started w t out wa t n or crob o o y resu ts

eru actate s ou d be easured w t n s x ours o t e susp c on o severe seps s n order to u de ana e ent eru actate o. s nd cat ve o t ssue ypoper us on

o s ou d be nvo ved n t e co aborat ve care o wo en w t seps s

I seps s s suspected re u ar requent observat ons s ou d be ade e use o a ME c art s reco ended ere s ou d be an ur ent re erra to t e cr t ca care tea n severe or rap d y deter orat n cases and t e nvo ve ent o a consu tant obstetr c an

e expert adv ce o a consu tant crob o o st or n ect ous d sease p ys c an s ou d be sou t ur ent y w en ser ous seps s s suspected

A MEOWS chart should be used for all maternity inpatients to identify seriously ill pregnant women and refer them to critical care and obstetric anaesthetic colleagues according to local guidelines.[1]

Early, goal-directed resuscitation has been shown to improve survival for non-pregnant patients presenting with septic shock.[6]

I en ta tract seps s s suspected pro pt ear y treat ent w t a co b nat on o dose broad spectru ntravenous ant b ot cs ay be esav n

Administration of intravenous broad spectrum antibiotics are recommended within one hour of suspicion of severe sepsis in the woman, with or without septic shock, as part of the Surviving Sepsis Campaign Resuscitation Bundle.[3]

Empirically, broad spectrum antimicrobials active against Gram-negative bacteria, and capable of preventing exotoxin production from Gram-positive bacteria, should be used according to local microbiology policy, and therapy narrowed once the causative organism(s) has been identified.

The 2003–2005 CEMACH report[1] referred to the use of cefuroxime and metronidazole for genital tract sepsis. However, cefuroxime is no longer part of many hospital formularies because of the association with C. *difficile*. Neither agent provides any MSRA, *Pseudomonas* or extended-spectrum beta-lactamases (ESBL) cover (see appendix 3 for range of activity of common antibiotics). Information on antimicrobials which may aid in guiding choice is provided in table 5; however, hospital guidelines differ, and local guidance should be followed as the incidence of resistant organisms varies throughout the UK.

In addition to antimicrobial therapy, the source of sepsis should be sought and dealt with if possible: for example, by delivery of the baby.[1]

ab e Antimicrobial choices and limitations of antimicrobial.

	Pseudomonas [10]	
	[11,12]	

be through a blood warming device, and hospital protocols for replacement therapy in haematology patients may be used.

How s ou d t e etus be on tored and w en and ow s ou d t e baby be de vered

In a cr t ca y pre nant wo an b rt o t e baby ay be cons dered t wou d be bene c a to t e ot er or t e baby or to bot A dec s on on t e t n and ode o b rt s ou d be ade by a sen or obstetr c an o ow n d scuss on w t t e wo an er cond t on a ows

I preter de very s ant c pated caut ous cons derat on s ou d be ven to t e use o antenata cort costero ds or eta un atur ty n t e wo an w t seps s

Dur n t e ntrapartu per od cont nuous e ectron c eta on tor n s reco ended C an es n card otoco rap y (C G suc as c an es n base ne var ab ty or new onset dece erat ons ust pro pt reassess ent o aterna ean arter a pressure ypox a and ac dae a

Ep dura sp na anaest es a s ou d be avo ded n wo en w t seps s and a enera anaest et c w usua y be requ red or caesarean sect on

The effects of maternal sepsis on fetal wellbeing include the direct effect of infection in the fetus, the effect of maternal illness/shock and the effect of maternal treatment. The risk of neonatal encephalopathy and cerebral palsy is increased in the presence of intrauterine infection.[15]

C ose ouse o d contacts o wo en w t roup A streptococca n ect on s ou d be warned to see ed ca attent on s ou d sy pto s deve op and t e s tuat on ay warrant ant b ot c prop y ax s ✓

Hea t care wor ers w o ave been exposed to resp ratory secret ons o wo en w t roup A streptococca n ect on s ou d be cons dered or ant b ot c prop y ax s ✓

The Health Protection Agency have produced detailed guidelines for the investigation, control and prevention of the spread of group A streptococcal infection in healthcare settings in the United Kingdom.[22]

As well as the specific recommendation for group A streptococcal disease, any baby of a mother found to have sepsis in the peripartum period should be discussed with neonatology colleagues so that prophylactic antibiotic administration to the baby can be considered.[22] Evidence level 4

at n ect on contro ssues s ou d be cons dered

Group A β ae o yt c Streptococcus and M A are eas y trans tted v a t e ands o ea t care wor ers and v a c ose contact n ouse o ds Loca n ect on contro u de nes s ou d be o owed or osp ta spec c so at on and contact precaut ons ✓

Invas ve roup A streptococca n ect ons are not ab e and t e n ect on contro tea and t e consu tant or co un cab e d seases s ou d be n or ed ✓

Women suspected of or diagnosed with group A *Streptococcus* sepsis should be isolated in a single room with en suite facilities to minimise the risk of spread to other women. Local advice from infectious control colleagues should always be sought.

u ested aud t top cs

- **The existence of locally based guidelines for the investigation and management of genital tract sepsis in the maternity unit.**
- **The use of a version of a MEOWS chart to aid the identification of seriously ill pregnant women[1] in the maternity unit.**
- **The proportion of pregnant women with suspected severe sepsis who had serum lactate measured within six hours of presentation.**

A ENDIX 2

Staphylococcal and streptococcal toxic shock syndrome clinical disease definition.[12,23]

Staphylococcal toxic shock[24]	Streptococcal toxic shock syndrome[12,24]
{ \ \ >. [[[[	[Streptococcus { [
[\\ • • • • • •	[{ [• • • • •

APPENDIX 3

Antibiotic spectra for obstetrics and gynaecology.

r o r o n .on

At least one meta-analysis, systematic review or randomised controlled trial rated as 1++ and directly applicable to the target population; or

directlle to the target population; or

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The final version is the responsibility of the Guidelines Committee of the RCOG.

The guidelines review process will commence in 2015 unless evidence requires an earlier review.

