
Title:	ADULT SEPSIS SCREEN & BUNDLE (INCLUDING NEUTROPENIC GUIDELINES) FOR ESSENTIAL FIRST HOUR MANAGEMENT GUIDE	Ref No: 1653 Version 7
Directorate:	Organisation Wide	Classification: Guideline
Responsible for review:	Patient Safety Lead Consultant in CCU	Due for Review: 15/06/21 Document Control
Ratified by:	Director of Patient Safety Clinical Director of Pharmacy Medical Director	
Applicability:	All staff	

[Please see Adult Sepsis Screening Bundle and Essential First Hour Management Guide \(Pages 2 and 3\)](#)

Adult Sepsis Screening Bundle and Essential First Hour Management Guide

PATIENT LABEL	Adult Sepsis Screening Bundle and Essential First Hour Management Guide	DATE: TIME: ASSESSOR:
	STOP COULD THE PATIENT HAVE SEPSIS? If YES start Pathway	

ANY ONE OF HIGH RISK CRITERIA:	TICK
1. Chemotherapy in the last 6 weeks* AND Temp >38°C or <36°C OR Heart rate >/=90bpm	
2. Respiratory rate >/=25 breaths /min	
3. Heart rate >/=130 bpm	
4. New requirement of O ₂ to maintain sats at 92% or 88-92% in COPD	
5. Objective evidence of new altered mental state	
6. Systolic blood pressure </= 90 mmHg	
7. Anuric >/= 18hrs (or catheter urine < 0.5ml/kg/hour)	
8. Mottled appearance / cyanosed / non-blanching rash	

Is Systolic BP 91-100mmHg? <input type="checkbox"/> Or Are any TWO of these MODERATE RISK features present?	TICK
1. Reported history of NEW onset of altered behaviour or mental state	
2. Acute deterioration of functional ability	
3. Impaired immunity (steroids, illness, drugs)	
4. Trauma, Surgery, invasive procedure within 6 weeks	
5. Respiratory rate 21-24 breaths /min	
6. Heart rate 91 – 129 bpm (pregnant patients 100–129bpm)	
7. New onset arrhythmia	
8. Tympanic temperature <36°C	
9. Anuric 12-17.9 hrs (or catheter urine 0.5 – 1.0 ml/kg/hour)	
10. Signs of potential infection (redness/swelling/discharge from surgical site or breakdown of wound)	

If only ONE Moderate Risk Criteria

Do Blood Cultures
Dr Must review within 1 hour and every 2 hours until a Consultant makes an alternative diagnosis

Do venous **Lactate** if another **MODERATE RISK CRITERIA** develops

RESUSCITATE: START SEPSIS 6 BUNDLE – Must be delivered within 1 hour			
Time bundle started:	Time bundle completed:	Sign	Time
TAKE BLOOD CULTURES	2 sets of blood cultures and a full septic screen		
TAKE LACTATE	Inform ICU Outreach if Lactate > 4.0mmol/L		
GIVE OXYGEN	Aim for SpO ₂ >94% (if CO ₂ retainer aim for SpO ₂ 88 – 92%)		
GIVE IV ANTIBIOTICS <i>Prescribe and ensure they are given within 1 hour</i>	If source of sepsis unknown or suspected neutropenic sepsis: Piperacillin+Tazobactam 4.5g IV stat + Gentamicin 5mg/kg IV stat If Penicillin allergic (non-anaphylaxis): Meropenem 2g IV stat If Penicillin allergic (anaphylaxis): Teicoplanin 600mg IV stat + Gentamicin 5mg/kg IV stat + Metronidazole 500mg IV stat If source is known: (e.g. meningitis): Rx as per IVAB guidance		
	<i>For guidance on previous infection/colonisation with MRSA, ESBL or patients with CVC or PVC related infection, see BugBuster or discuss with microbiologist</i>		
GIVE IV FLUIDS	30mls/kg (give 500ml boluses and reassess)		
MONITOR URINE OUTPUT	Insert urinary catheter/send sample for urinalysis and start Fluid Balance chart		
Consider risk of AKI: Co-morbidity DM, CCF, CKI and CLD Review medications and consider withholding NSAIDS, ACE inhibitors and other nephrotoxics			
REVIEW EVERY 15 Minutes and Get a Senior Dr to review within 1 hour			

Take Bloods Cultures & Venous Lactate REASSESS WITHIN ONE HOUR

1) Is venous lactate >2mmol/L?
2) AKI?
3 HIGH RISK CRITERIA developed?
If there is an obvious infection follow Antimicrobial Guidelines on BugBuster 3000.

If awaiting Surgical samples/Aspirate for culture the **MAXIMUM** wait time allowed is 4 hours. Give antibiotics **IV UNLESS** a Consultant advises a longer wait

Check for other **HIGH** or **MODERATE RISK CRITERIA** every 2 hours until patient seen by a Consultant. If new Criteria treat with IV antibiotics

- * **EVERY 15 MINUTES:** continue close vital signs monitoring, assessing response to treatment
- * **WITHIN 1 HOUR:** have patient reviewed by either a Speciality Dr/ SP Registrar/Consultant
- * **LACTATE >4.0mmol/L OR Systolic BP </=90mmHg:** discuss with ICU Consultant/Outreach team
- * For patients who have had chemotherapy within the last 6 weeks please contact the On-call Haematologist or Acute Oncology Service immediately

STOP

COULD THE PATIENT HAVE SEPSIS
If YES start Pathway

STOP

ANY ONE OF HIGH RISK CRITERIA:

1. Chemotherapy in the last 6 weeks* AND Temp >38°C or <36°C OR Heart rate >=90bpm
2. Respiratory rate >=25 breaths /min
3. Heart rate >=130 bpm
4. New requirement of O₂ to maintain sats at 92% or 88-92% in COPD
5. Objective evidence of new altered mental state
6. Systolic blood pressure <= 90 mmHg
7. Anuric >= 18hrs (or catheter urine < 0.5ml/kg/hour)
8. Mottled appearance / cyanosed / non-blanching rash

NO

YES

Is Systolic BP 91-100mmHg? Or Are any TWO of these MODERATE RISK features present?

1. Reported history of NEW onset of altered behaviour or mental state
2. Acute deterioration of functional ability
3. Impaired immunity (steroids, illness, drugs)
4. Trauma, Surgery, invasive procedure within 6 weeks
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10. Signs of potential infection (redness/swelling/discharge from surgical site or breakdown of wound)

NO

YES

If only ONE Moderate Risk Criteria

- Do Blood Cultures
- Dr Must review within 1 hour and every 2 hours until a Consultant makes an alternative diagnosis
- Do venous Lactate if another MODERATE RISK CRITERIA develops

If awaiting Surgical samples/Aspirate for culture the MAXIMUM wait time allowed is 4 hours. Give antibiotics IV UNLESS a Consultant advises a longer wait

Take Bloods Cultures & Venous Lactate REASSESS WITHIN ONE HOUR

- 1) Is venous lactate >2mmol/L?
 - 2) AKI?
 - 3) HIGH RISK CRITERIA developed?
- If there is an obvious infection follow Antimicrobial Guidelines on BugBuster 3000.

YES

NO

Check for other HIGH or MODERATE RISK CRITERIA every 2 hours until patient seen by a Consultant. If new Criteria treat with IV antibiotics

- * EVERY 15 MINUTES: continue close vital signs monitoring, assessing response to treatment
- * WITHIN 1 HOUR: have patient reviewed by either a Speciality Dr/ SP Registrar/Consultant
- * LACTATE >4.0mmol/L OR Systolic BP <=90mmHg: discuss with ICU Consultant/Outreach team
- * For patients who have had chemotherapy within the last 6 weeks please contact the On-call Haematologist or Acute Oncology Service immediately

RESUSCITATE: START SEPSIS 6 BUNDLE – Must be delivered within 1 hour

Time bundle started:	Time bundle completed:
TAKE BLOOD CULTURES	2 sets of blood cultures and a full septic screen
TAKE LACTATE	Inform ICU Outreach if Lactate > 4.0mmol/L
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GIVE IV ANTIBIOTICS Prescribe and ensure they are given within 1 hour	If source of sepsis unknown or suspected neutropenic sepsis: Piperacillin+Tazobactam 4.5g IV stat+ Gentamicin 5mg/kg IV stat If Penicillin allergic (non-anaphylaxis): Meropenem 2g IV stat If Penicillin allergic (anaphylaxis): Teicoplanin 600mg IV stat + Gentamicin 5mg/kg IV stat+ Metronidazole 500mg IV stat If source is known: (e.g. meningitis): Rx as per IVAB guidance
GIVE IV FLUIDS	30mls/kg (give 500ml boluses and reassess)
MONITOR URINE OUTPUT	Insert urinary catheter/send sample for urinalysis and start Fluid Balance chart

Consider risk of AKI: Co-morbidity DM, CCF, CKI and CLD

Review medications and consider withholding NSAIDS, ACE inhibitors and other nephrotoxics

REVIEW EVERY 15 Minutes and Get a Senior Dr to review within 1 hour

Abbreviations

SIRS	Systemic Inflammatory Response Syndrome
EWS	Early Warning System
Rx	Prescribe
IVAB	IV Anti-Biotic Guidance
AKI	Acute Kidney Injury
LFT	Liver Function Test
INR	International Normalised Ratio
APTT	Activated Partial Thromboplasting Time
DM	Diabetes Mellitus
CCF	Congestive Cardiac Failure
CKI	Chronic Kidney Injury
CLD	Chronic Lung Disease

Name	Grade	Signature

Protocols & Guidelines – Document Control

This is a controlled document. It should not be altered in any way without the express permission of the author or their representative. On receipt of a new version, please destroy all previous versions.

Ref: 1653	Title: Adult Sepsis Screen & Bundle (including Neutropenic Guidelines) and Essential First Hour Management Guide		
Date of Issue:	15 June 2018	Next Review Date:	15 June 2021
Version:	7		
Author:	Patient Safety Lead Consultant in Critical Care		
Index:	Organisation Wide		
Classification:	Guideline		
Applicability:	All Staff		
Equality Impact:	The guidance contained in this document is intended to be inclusive for all patients within the clinical group specified, regardless of age, disability, gender, gender identity, sexual orientation, race and ethnicity & religion or belief.		
Evidence based:	Yes		
References:	Adult Sepsis Screen & Bundle (including Neutropenic Guidelines) and Essential First Hour Management Guide)		
Produced following audit:	No		
Audited:	No		
Approval Route:	See Ratification	Date Approved:	11 June 2018
Approved By:	Director of Patient Safety		
	Clinical Director of Pharmacy		
	Medical Director		
Links or overlaps with other policies:			
All TSDFT Trust strategies, policies and procedure documents.			

PUBLICATION HISTORY:

Issue	Date	Status	Authorised
1	3 October 2014	New	Interim Medical Director Clinical Director of Pharmacy
2	6 November 2015	Revised	Medical Director Clinical Director of Pharmacy
3	5 May 2017	Revised	Director of CCU Clinical Director of Pharmacy Medical Director
4	18 May 2017	Amended	Director of CCU Governance Lead - Pharmacy Medical Director Patient Safety Lead
5	1 December 2017	Revised	Clinical Director of Pharmacy Clinical Governance Pharmacist and Medication Safety Officer Director of CCU
6	19 January 2018	Revised	Clinical Director of CCU Clinical Governance Pharmacist and Medication Safety Officer
7	15 June 2018	Revised	Clinical Director of Pharmacy Director of Patient Safety Medical Director

The Mental Capacity Act 2005

The Mental Capacity Act provides a statutory framework for people who lack capacity to make decisions for themselves, or who have capacity and want to make preparations for a time when they lack capacity in the future. It sets out who can take decisions, in which situations, and how they should go about this. It covers a wide range of decision making from health and welfare decisions to finance and property decisions

Enshrined in the Mental Capacity Act is the principle that people must be assumed to have capacity unless it is established that they do not. This is an important aspect of law that all health and social care practitioners must implement when proposing to undertake any act in connection with care and treatment that requires consent. In circumstances where there is an element of doubt about a person's ability to make a decision due to 'an impairment of or disturbance in the functioning of the mind or brain' the practitioner must implement the Mental Capacity Act.

The legal framework provided by the Mental Capacity Act 2005 is supported by a Code of Practice, which provides guidance and information about how the Act works in practice. The Code of Practice has statutory force which means that health and social care practitioners have a legal duty to have regard to it when working with or caring for adults who may lack capacity to make decisions for themselves.

“The Act is intended to assist and support people who may lack capacity and to discourage anyone who is involved in caring for someone who lacks capacity from being overly restrictive or controlling. It aims to balance an individual's right to make decisions for themselves with their right to be protected from harm if they lack the capacity to make decisions to protect themselves”. (3)

All Trust workers can access the Code of Practice, Mental Capacity Act 2005 Policy, Mental Capacity Act 2005 Practice Guidance, information booklets and all assessment, checklists and Independent Mental Capacity Advocate referral forms on iCare

http://icare/Operations/mental_capacity_act/Pages/default.aspx

Infection Control

All staff will have access to Infection Control Policies and comply with the standards within them in the work place. All staff will attend Infection Control Training annually as part of their mandatory training programme.

Rapid (E)quality Impact Assessment (EqIA) *(for use when writing policies)*

Policy Title (and number)		Version and Date	
Policy Author			
An (e)quality impact assessment is a process designed to ensure that policies do not discriminate or disadvantage people whilst advancing equality. Consider the nature and extent of the impact, not the number of people affected.			
Who may be affected by this document?			
Patients/ Service Users <input type="checkbox"/>		Staff <input type="checkbox"/>	Other, please state... <input type="checkbox"/>
Could the policy treat people from protected groups less favorably than the general population? <i>PLEASE NOTE: Any 'Yes' answers may trigger a full EIA and must be referred to the equality leads below</i>			
Age	Yes <input type="checkbox"/> No <input type="checkbox"/>	Gender Reassignment	Yes <input type="checkbox"/> No <input type="checkbox"/>
Race	Yes <input type="checkbox"/> No <input type="checkbox"/>	Disability	Yes <input type="checkbox"/> No <input type="checkbox"/>
Sexual Orientation	Yes <input type="checkbox"/> No <input type="checkbox"/>	Religion/Belief (non)	Yes <input type="checkbox"/> No <input type="checkbox"/>
Gender	Yes <input type="checkbox"/> No <input type="checkbox"/>	Pregnancy/Maternity	Yes <input type="checkbox"/> No <input type="checkbox"/>
Marriage/ Civil Partnership	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Is it likely that the policy could affect particular 'Inclusion Health' groups less favorably than the general population? (substance misuse; teenage mums; carers ¹ ; travellers ² ; homeless ³ ; convictions; social isolation ⁴ ; refugees)			Yes <input type="checkbox"/> No <input type="checkbox"/>
Please provide details for each protected group where you have indicated 'Yes'.			
VISION AND VALUES: Policies must aim to remove unintentional barriers and promote inclusion			
Is inclusive language ⁵ used throughout?			Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
Are the services outlined in the policy fully accessible ⁶ ?			Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
Does the policy encourage individualised and person-centred care?			Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
Could there be an adverse impact on an individual's independence or autonomy ⁷ ?			Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
EXTERNAL FACTORS			
Is the policy a result of national legislation which cannot be modified in any way?			Yes <input type="checkbox"/> No <input type="checkbox"/>
What is the reason for writing this policy? (Is it a result in a change of legislation/ national research?)			
Who was consulted when drafting this policy?			
Patients/ Service Users <input type="checkbox"/>		Trade Unions <input type="checkbox"/>	Protected Groups (including Trust Equality Groups) <input type="checkbox"/>
Staff <input type="checkbox"/>		General Public <input type="checkbox"/>	Other, please state... <input type="checkbox"/>
What were the recommendations/suggestions?			
Does this document require a service redesign or substantial amendments to an existing process? <i>PLEASE NOTE: 'Yes' may trigger a full EIA, please refer to the equality leads below</i>			Yes <input type="checkbox"/> No <input type="checkbox"/>
ACTION PLAN: Please list all actions identified to address any impacts			
Action	Person responsible	Completion date	
AUTHORISATION:			
By signing below, I confirm that the named person responsible above is aware of the actions assigned to them			
Name of person completing the form		Signature	
Validated by (line manager)		Signature	

Please contact the Equalities team for guidance:

For South Devon & Torbay CCG, please call 01803 652476 or email marisa.cockfield@nhs.net

For Torbay and South Devon NHS Trusts, please call 01803 656676 or email pfd.sdht@nhs.net

This form should be published with the policy and a signed copy sent to your relevant organisation.

- ¹ Consider any additional needs of carers/ parents/ advocates etc, in addition to the service user
- ² Travelers may not be registered with a GP - consider how they may access/ be aware of services available to them
- ³ Consider any provisions for those with no fixed abode, particularly relating to impact on discharge
- ⁴ Consider how someone will be aware of (or access) a service if socially or geographically isolated
- ⁵ Language must be relevant and appropriate, for example referring to partners, not husbands or wives
- ⁶ Consider both physical access to services and how information/ communication is available in an accessible format
- ⁷ Example: a telephone-based service may discriminate against people who are d/Deaf. Whilst someone may be able to act on their behalf, this does not promote independence or autonomy

Clinical and Non-Clinical Policies – New Data Protection Regulation (NDPR)

Torbay and South Devon NHS Foundation Trust (TSDFT) has a commitment to ensure that all policies and procedures developed act in accordance with all relevant data protection regulations and guidance. This policy has been designed with the EU New Data Protection Regulation (NDPR) in mind and therefore provides the reader with assurance of effective information governance practice.

NDPR intends to strengthen and unify data protection for all persons; consequently, the rights of individuals have changed. It is assured that these rights have been considered throughout the development of this policy.

Furthermore, NDPR requires that the Trust is open and transparent with its personal identifiable processing activities and this has a considerable effect on the way TSDFT holds, uses, and shares personal identifiable data. The most effective way of being open is through data mapping. Data mapping for NDPR was initially undertaken in November 2017 and must be completed on a triannual (every 3 years) basis to maintain compliance. This policy supports the data mapping requirement of the NDPR.

For more information:

- Contact the Data Access and Disclosure Office on dataprotection.tsdf@nhs.net,
- See TSDFT's [Data Protection & Access Policy](#),
- Visit our [GDPR](#) page on ICON.