

ACCIDENT AND EMERGENCY GUIDELINE FOR EYE IRRIGATION

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient in consultation with the patient and /or carer. Health care professionals must be prepared to justify any deviation from this guidance.

INTRODUCTION

The most common use for eye irrigation is for the removal of caustic substances from the eye, e.g. cleaning agents, chemical or calcium hydroxide, found in plaster and mortar. This should be done as soon as possible to minimise damage. Waggoner [1997] recommends eye irrigation for 15 – 30 minutes. Failure to dilute chemical agents will increase the risk of more severe injury.

CS Spray (used by police as a chemical incapacitant spray) is not an indication for eye irrigation. CS spray is dispersed as a fine dust and is made worse by irrigation with fluid due to its water-soluble nature.

The patients covered by this guideline are all patients who require eye irrigation.

THIS GUIDELINE IS FOR USE BY THE FOLLOWING STAFF GROUPS:

All nurses who have received appropriate training within the department and are deemed competent by qualified nurse / clinician.

Lead Clinician(s)

Sikander Majid

Consultant A&E

Reviewed by Clinical Lead:
Approved by Urgent Care Governance and
Medicines Safety Committee

11th February 2025
9th April 2025

Review Date:
This is the most current document and is to be
used until a revised version is available

9th April 2028

Accident and emergency guideline for eye irrigation		
WAHT-A&E-023	Page 1 of 14	Version 3

Key amendments to this guideline

Date	Amendment	Approved by:
April 2015	No amendments	Donna Jeynes
27.10.2016	Remove Rose Johnson and change to James France	Joy Powell
	Add Graham O'Byrne KTC in the circulate to section	
	Change J Taylor to T Jones specialist nurse ophthalmology KTC	
December 2017	Sentence added in at the request of the Coroner	
May 2018	Document extended for three months as per TLG recommendation	TLG
June 2018	Document extended for 3 months as per TLG recommendation	TLG
January 2018	Minor amendments	Ian Levett
February 2025	PH target for post irrigation changed to 7.0 – 8.0 Line added for CS spray	Sikander Majid

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INTRODUCTION

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AIMS

1. To ensure the correct procedure is carried out for eye irrigation.
2. To ensure the patient understands procedure and gives his/her verbal consent.
3. To irrigate the eye adequately.

EQUIPMENT

X2 litre bag 0.9% Sodium Chloride
Giving set
Receiver
Towels
Gauze Swab
pH paper
Local anaesthetic drops

GUIDELINE FOR EYE IRRIGATION

Assessment

Action	Rationale
1. Explain procedure to patient.	To ensure patient understands and gives his/her valid consent.
2. Remove contact lenses prior to irrigation	
3. Check pH of eyes and visual acuity	To provide a baseline measurement. To see if pH is the same as the unaffected eye. (Normal pH range 7 – 8).

Procedure

Action	Rationale
1. Instil anaesthetic drops if required Tetracaine 1% (see Patient Group Directions)	To alleviate corneal pain so the patient can cooperate fully with procedure.
2. Prepare irrigation fluid to room temperature, connect to giving set.	Tepid fluid will be more comfortable for the patient. Test on inner aspect of wrist to ensure appropriate temperature.
3. Assist patient into comfortable position, head supported with chin almost horizontal, head inclined to the side of the eye to be treated.	To avoid solution running into other eye.
4. Wash hands	To reduce risk of infection.
5. Ask patient to hold receiver against cheek below eye to be irrigated or use a sink.	To collect irrigation fluid.
6. Place towel over patients' shoulder (on the side of irrigation)	To protect patients clothing.
7. Hold the eyelids apart using first and second fingers.	Once irrigation commences the patient will be unable to hold eye open.
8. Open giving set and direct flow of fluid from the nasal corner outwards.	Allows control of fluid during irrigation and prevents contamination of opposite eye.
9. Ask patient to look up and down and to either side whilst irrigating.	To ensure adequate irrigation.
10. Evert lids when irrigating.	To ensure complete removal of any foreign bodies
11. Following irrigation ask patient to close eyes, use a swab to dry lids wiping from inner eye to out.	For patient comfort.
12. Dispose of equipment	
13. Wash hands	To reduce risk of infection.
14. Check pH of eye and visual acuity 5 minutes after irrigation	Target for irrigation is to match the pH of the unaffected eye or reach a normal physiological pH if both eyes affected.
15. Wash hands	To prevent cross infection.
16. Complete necessary documentation.	To record procedure.

POTENTIAL PROBLEMS

Problem	Nursing Action
1. Pain	Offer analgesia

WAHT-A&E-023

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Monitoring Tool

This should include realistic goals, timeframes and measurable outcomes.

How will monitoring be carried out?

Who will monitor compliance with the guideline?

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: <i>(Responsible for also ensuring actions are developed to address any areas of non-compliance)</i>	Frequency of reporting:
	WHAT?	HOW?	WHEN?	WHO?	WHERE?	WHEN?
	Following correct procedure. Thorough irrigation with sodium chloride 0.9%. Ensure patient safety and comfort	Spot checks	monthly.	Ward Manager	Matron	Monthly .

Accident and emergency guideline for eye irrigation

WAHT-A&E-023	Page 6 of 14	Version 3
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References and further reading

Dougherty L and Mallett J (2000). The Royal Marsden Manual of Clinical Nursing Procedures. Fifth Edition. London. Blackwell Science.

Waggoner MD (1997). Chemical Injuries of the Eye: Current Concepts in Pathphysiology and Therapy. Survey of Ophthalmology, 41 (4), 275 – 313.

Kuckelkorn R, Kottek A, Schrage N et al. Poor prognosis of severe chemical and thermal eye burns: the need for adequate emergency care and primary prevention. Int Arch Occup Environ Health 1995;67:281-284

CONTRIBUTION LIST

Key individuals involved in developing the document

Name	Designation
L Ingles	Senior Sister A&E WRH
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Circulated to the following individuals for comments

Name	Designation
James France	Consultant A&E WRH
Donna Jeynes	Sister A&E WRH
T Jones	Specialist Nurse Ophthalmology KH
G O'Byrne	Consultant KTC

Circulated to the following CD's/Heads of dept for comments from their directorates / departments

Name	Directorate / Department

Supporting Document 1 - Equality Impact Assessment Tool

To be completed by the key document author and included as an appendix to key document when submitted to the appropriate committee for consideration and approval.

Please complete assessment form on next page;



Herefordshire & Worcestershire STP - Equality Impact Assessment (EIA) Form
Please read EIA guidelines when completing this form

Section 1 - Name of Organisation (please tick)

Herefordshire & Worcestershire STP		Herefordshire Council		Herefordshire CCG	
Worcestershire Acute Hospitals NHS Trust	x	Worcestershire County Council		Worcestershire CCGs	
Worcestershire Health and Care NHS Trust		Wye Valley NHS Trust		Other (please state)	

Name of Lead for Activity	
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Details of individuals completing this assessment	Name	Job title	e-mail contact
	Sikander Majid		
Date assessment completed			

Section 2

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	Title: Accident and emergency guideline for eye irrigation			
What is the aim, purpose and/or intended outcomes of this Activity?				
Who will be affected by the development & implementation of this activity?	<input type="checkbox"/> Service User <input checked="" type="checkbox"/> Patient <input type="checkbox"/> Carers <input type="checkbox"/> Visitors	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> Staff <input type="checkbox"/> Communities <input type="checkbox"/> Other _____	

WAHT-A&E-023

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Is this:	<input type="checkbox"/> Review of an existing activity <input type="checkbox"/> New activity <input type="checkbox"/> Planning to withdraw or reduce a service, activity or presence?
What information and evidence have you reviewed to help inform this assessment? (Please name sources, eg demographic information for patients / services / staff groups affected, complaints etc.	
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	
Summary of relevant findings	

Section 3

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale.**

Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	Potential <u>positive</u> impact	Potential <u>neutral</u> impact	Potential <u>negative</u> impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Age		X		
Disability		X		
Gender Reassignment		X		
Marriage & Civil Partnerships		X		
Pregnancy & Maternity		X		
Race including Traveling Communities		X		
Religion & Belief		X		
Sex		X		
Sexual Orientation		X		

Equality Group	Potential <u>positive</u> impact	Potential <u>neutral</u> impact	Potential <u>negative</u> impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Other Vulnerable and Disadvantaged Groups (e.g. carers; care leavers; homeless; Social/Economic deprivation, travelling communities etc.)		X		
Health Inequalities (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)		X		

Section 4

What actions will you take to mitigate any potential negative impacts?	Risk identified	Actions required to reduce / eliminate negative impact	Who will lead on the action?	Timeframe
How will you monitor these actions?				
When will you review this EIA? (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)				

Section 5 - Please read and agree to the following Equality Statement

1. Equality Statement

- 1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9 protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation
- 1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.

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1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer's etc, and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

Signature of person completing EIA	
Date signed	
Comments:	
Signature of person the Leader Person for this activity	
Date signed	
Comments:	



Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	No
2.	Does the implementation of this document require additional revenue	No
3.	Does the implementation of this document require additional manpower	No
4.	Does the implementation of this document release any manpower costs through a change in practice	No
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	No
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval