NHS Grampian

Protocol For The Administration Of Oral Paracetamol And Ibuprofen By Nurses Working Within The Emergency Department NHS Grampian

Lead Author: Clinical Pharmacist	**Consultation Group**: See Page 2	**Approver:** Medicines Guidelines and Policies Group
Signature: 		**Signature:** 
NHSG Identifier: MGPG/Protocol/Paralbuprof_ED/1569	**Review Date:** October 2026 **Expiry Date:** October 2027	**Date Approved:** October 2024

NHS Grampian have authorised this protocol to help individuals by providing them with more convenient access to an efficient and clearly defined service within the NHS Boards. This Protocol cannot be used until Appendix 1 and 2 are completed.

Uncontrolled when printed

Version 2

Revision History:

Reference and approval date of previous superseded protocol	Supersedes NHSG/Protocol/ParaIbuprof_ED/MGPG1229, Version 1	
Date of change	**Summary of Changes**	**Section heading**
28/05/24	Exclusion criteria for ibuprofen updated to include pregnant patients and those with severe heart failure.	Exclusion criteria in Ibuprofen monograph
19/09/24	Transferred to protocol template v3.	All
19/09/24	Addition of requirement for measuring device for liquid medications.	Facilities and supplies required
19/09/24	References updated	References
19/09/24	Monograph for paracetamol updated to include additional detail on excipients and drug interactions.	Exclusion criteria and Precautions and Warnings in Paracetamol monograph
19/09/24	Monograph for ibuprofen updated to include additional detail on side effects, excipients and drug interactions.	Exclusion criteria, Precautions and Warnings and Potential Adverse Reactions in Ibuprofen monograph
19/09/24	Exclusion criteria for ibuprofen updated to include those with severe hepatic impairment and patients taking zidovudine.	Exclusion criteria in Ibuprofen monograph

NoS Identifier: MGPG/Protocol/ParaIbuprof_ED/1569
Keyword(s): Protocol Ibuprofen Paracetamol ED Nurse soluble suspension

Policy Statement: It is the responsibility of the individual healthcare professionals and their line managers to ensure that they work within the terms laid down in this protocol and to ensure that staff are working to the most up to date protocol. By doing so, the quality of the services offered will be maintained, and the chances of staff making erroneous decisions which may affect individual, staff or visitor safety and comfort will be reduced. Supervisory staff at all levels must ensure that staff using this protocol act within their own level of competence.

The lead author is responsible for the review of this protocol and for ensuring the protocol is updated in line with any changes in clinical practice, relevant guidelines, or new research evidence.

Review date: The review and subsequent expiry date should not be more than 3 years from the date the protocol was authorised.

Document:	Drafted:	June 2024
	Completed:	September 2024
	Approved:	October 2024 (published – November 2024)
	Amended:	

Approved and authorised for use within NHSG by;

Medicines Guidelines and Policies Group Chair	Signature	Date Signed
Lesley Coyle		14/11/2024

Management and Monitoring of Protocol

Consultative Group

Name:	Title:
Victoria Russell	Unscheduled Care Pharmacist
Stefan Young	Unscheduled Care Pharmacist
Catharina Hartman	Emergency Medicine Consultant
Darren Watson	Emergency Medicine Senior Charge Nurse

Protocol For The Administration Of Oral Paracetamol And Ibuprofen By Nurses Working Within The Emergency Department NHS Grampian

Clinical indication to which this Protocol applies

Definition of situation/Condition	This protocol will authorise approved Nurses working within the Emergency Department in Aberdeen Royal Infirmary or Dr Gray's Hospital to administer a single dose of oral paracetamol or ibuprofen (Appendix 4) to individuals, aged 16 years and over, awaiting treatment for pain or pyrexia as a result of minor injuries or minor illness. This protocol should be used in conjunction with the recommendations in the current, British National Formulary (BNF), and the individual Summary of Product Characteristics (SmPC).
Inclusion criteria	Individuals aged 16 years and over and presenting to Emergency Department while awaiting treatment for minor injury or minor illness. Prior to the administration of the medicine, valid consent to receiving treatment under this protocol must be obtained. Consent must be in line with current NHSG consent policy.
Exclusion criteria	Individuals: • Who are under the age of 16 • Who have known anaphylactic hypersensitivity to paracetamol or ibuprofen or any of the excipients • For whom no valid consent has been received. Refer to individual medicine monographs in Appendix 4
Precautions and special warnings	The medicines listed for use under this protocol should only be used for the specific conditions and age group specified. Individuals who are suffering from a condition out with the protocol specifications should be seen by medical staff.
Action if excluded from treatment	Medical advice must be sought – refer to relevant medical practitioner. Document the reason for exclusion under the protocol and any action taken in the individual's appropriate clinical records.
Action if treatment is declined	Inform/refer to the relevant medical practitioner if individual/parent/carer declines treatment. Document that the administration was declined, the reason and advice given in appropriate clinical records.

Description of treatment available under the protocol

Name form and strength of medicine	See individual medicine monographs.
Legal status	See individual medicine monographs.
Dosage/Maximum total dose	See individual medicine monographs.
Frequency of dose/Duration of treatment	See individual medicine monographs.
Maximum or minimum treatment period	See individual medicine monographs.
Route/Method of administration	See individual medicine monographs.
Quantity to be administered	See individual medicine monographs.
Storage requirements	See individual medicine monographs.
Follow-up (if applicable)	Individuals should not leave if they are feeling unwell without speaking to the healthcare professional who administered the medicine first. If necessary a doctor or the individuals GP should be contacted for advice.
Advice (Verbal)	See individual medicine monographs • If serious adverse or persistent effects occur, the individual/parent/carer should be advised to contact their GP/Accident and Emergency department/NHS24. • Individuals/parents/carers should be advised to report suspected adverse reactions to the Medicines and Healthcare products Regulatory Agency (MHRA) using the Yellow Card reporting scheme.
Advice (Written)	The Patient Information Leaflet (PIL) contained in the medicine(s) should be made available to the individual/parent/carer. Where this is unavailable, or unsuitable, sufficient information should be given in a language that they can understand.

Identifying and managing possible adverse reactions	See individual medicine monographs **This list is not exhaustive. Please also refer to current BNF/BNFC and manufacturers SmPC for details of all potential adverse reactions.** **BNF/BNFC**: BNF British National Formulary - NICE BNF for Children British National Formulary - NICE **SmPC/PIL/Risk Minimisation Material:** Home - electronic medicines compendium (emc) MHRA Products | Home RMM Directory - medicines starting with A - (emc) If an adverse reaction does occur give immediate treatment and inform relevant medical practitioner as soon as possible. Document in accordance with locally agreed procedures in the individual's record. Report any suspected adverse reactions using the Yellow Card System. Yellow Card Scheme - MHRA
Facilities and supplies required	The following are to be available at sites where the medicine is to be administered: • Appropriate storage facilities • Appropriate equipment for measuring dose (e.g. measuring spoon, oral syringe) • An acceptable level of privacy to respect individual's right to confidentiality and safety • Basic airway resuscitation equipment (e.g. pocket mask, bag valve mask, supraglottic airway) • Immediate access to Epinephrine (Adrenaline) 1 in 1000 injection • Access to a working telephone • Another competent adult, who can summon urgent emergency support if required should ideally be present • Access to medical support (this may be via the telephone) • Approved equipment for the disposal of used medicines • Clean and tidy work areas, including access to hand washing facilities or alcohol hand gel • A copy of this current protocol in print or electronically.

Characteristics of staff authorised to administer medicine(s) under this protocol

Professional qualifications	Registered Nurses as recognised by the Nursing and Midwifery Council (NMC).
Specialist competencies	**Approved by the organisation as:** • Competent to assess the individual's/parent's/carer's capacity to understand the nature and purpose of the medicine administration in order to give or refuse consent • Aware of current treatment recommendations and be competent to discuss issues about the medicine with the individual • Having undertaken appropriate training to carry out clinical assessment of individuals identifying that treatment is required according to the indications listed in the protocol • Competent to undertake administration of the medicine • Competent to work under this protocol.
Ongoing training and competency	**All professionals working under this protocol must:** • Have attended basic life support training in-line with Board requirements • Have undertaken NHS e-anaphylaxis training or equivalent which covers all aspects of the identification and management of anaphylaxis in-line with Board requirements • Maintain their skills, knowledge and their own professional level of competence in this area according to their individual Code of Professional Conduct • Have knowledge and familiarity of the following; ○ SmPC for the medicine(s) to be administered in accordance with this protocol.
Responsibilities of professional manager(s)	**Professional manager(s) will be responsible for;** Ensuring that the current protocol is available to all staff providing care under this direction. Ensuring that staff have received adequate training in all areas relevant to this protocol and meet the requirements above. Maintain up to date record of all staff authorised to administer the medicine(s) specified in this protocol.

Documentation

Authorisation of administration	Nurses working within the emergency department in Aberdeen Royal Infirmary or Dr Gray's Hospital within NHS Grampian can be authorised to administer the medicine(s) specified in this protocol by their Senior Charge Nurse. All authorised staff are required to read the protocol and sign the Agreement to Administer Medicines Under Protocol (Appendix 1). A Certificate of Authorisation (Appendix 2) signed by the authorising professional/manager should be supplied. This should be held in the individual health professional's records, or as agreed locally.
Record of administration	An electronic or paper record must be completed to allow audit of practice. An electronic/HEPMA record of the screening and subsequent administration, or not of the medicine(s) specified in this protocol should be made in accordance with individual Health Board electronic/HEPMA recording processes. If a paper record is used for recording the screening of individuals and the subsequent administration, or not of the medicine(s) specified in this protocol. This should include as a minimum: • Date and time of administration • Individuals name and CHI • Exclusion criteria, record why the medicine was not administered (if applicable) • Record that valid consent to treatment under this protocol was obtained • The name, dose, form, route of the medicine administered • Advice given, including advice given if excluded or declined treatment under this protocol • Signature and name in capital letters of the healthcare professional who administered the medicine, and who undertook the assessment of the individual's clinical suitability for the administration of the medicine • Record of any adverse effects and the actions taken (advise individuals' GP/relevant medical practitioner). Depending on the clinical setting where administration is undertaken, the information should be recorded manually or electronically, in one (or more) of the following systems, as appropriate: • Secondary Care Medical Notes

<table>
<tr><td></td><td>

- HEPMA
- Individual service specific systems.

Local policy should be followed with respect to sharing information with the individual's General Practitioner.

All records should be clear, legible and contemporaneous and in an easily retrievable format.

</td></tr>
<tr><td>Audit</td><td>All records of the medicine(s) specified in this protocol will be filed with the normal records of medicines in each practice/service.</td></tr>
<tr><td>References</td><td>

Electronic Medicines Compendium
http://www.medicines.org.uk

<table>
<tr><th>Medicine name</th><th>Date of revision of text</th><th>Accessed</th></tr>
<tr><td>Paracetamol 500mg Effervescent Tablets (Medley Pharma Limited)</td><td>22/05/24</td><td>19/09/24</td></tr>
<tr><td>Paracetamol 250mg/5mL Oral Suspension (Rosemont Pharmaceuticals)</td><td>03/05/24</td><td>19/09/24</td></tr>
<tr><td>Anadin Paracetamol Tablets (Haleon)</td><td>22/03/24</td><td>19/09/24</td></tr>
<tr><td>Ibuprofen 200mg film-coated Tablets (Strides Pharma)</td><td>24/05/24</td><td>19/09/24</td></tr>
<tr><td>Fenpaed Ibuprofen 100mg/5mL Oral Suspension (Pinewood Healthcare)</td><td>03/09/24</td><td>19/09/24</td></tr>
</table>

British National Formulary https://medicinescomplete.com/ accessed 19/09/24.

British National Formulary for Children https://medicinescomplete.com/ accessed 19/09/24.

</td></tr>
</table>

NHS Grampian

Appendix 1

Healthcare Professional Agreement to Administer Medicine(s) Under Protocol

I: _____ (Insert name)

Working within: _____ e.g. Area, Practice

Agree to administer the medicine(s) contained within the following Protocol

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I have completed the appropriate training to my professional standards enabling me to administer the medicine(s) under the above protocol. I agree not to act beyond my professional competence, nor out with the recommendations of the protocol.

Signed: _____

Print Name: _____

Date: _____

Profession: _____

Professional Registration number/PIN: _____

Appendix 2

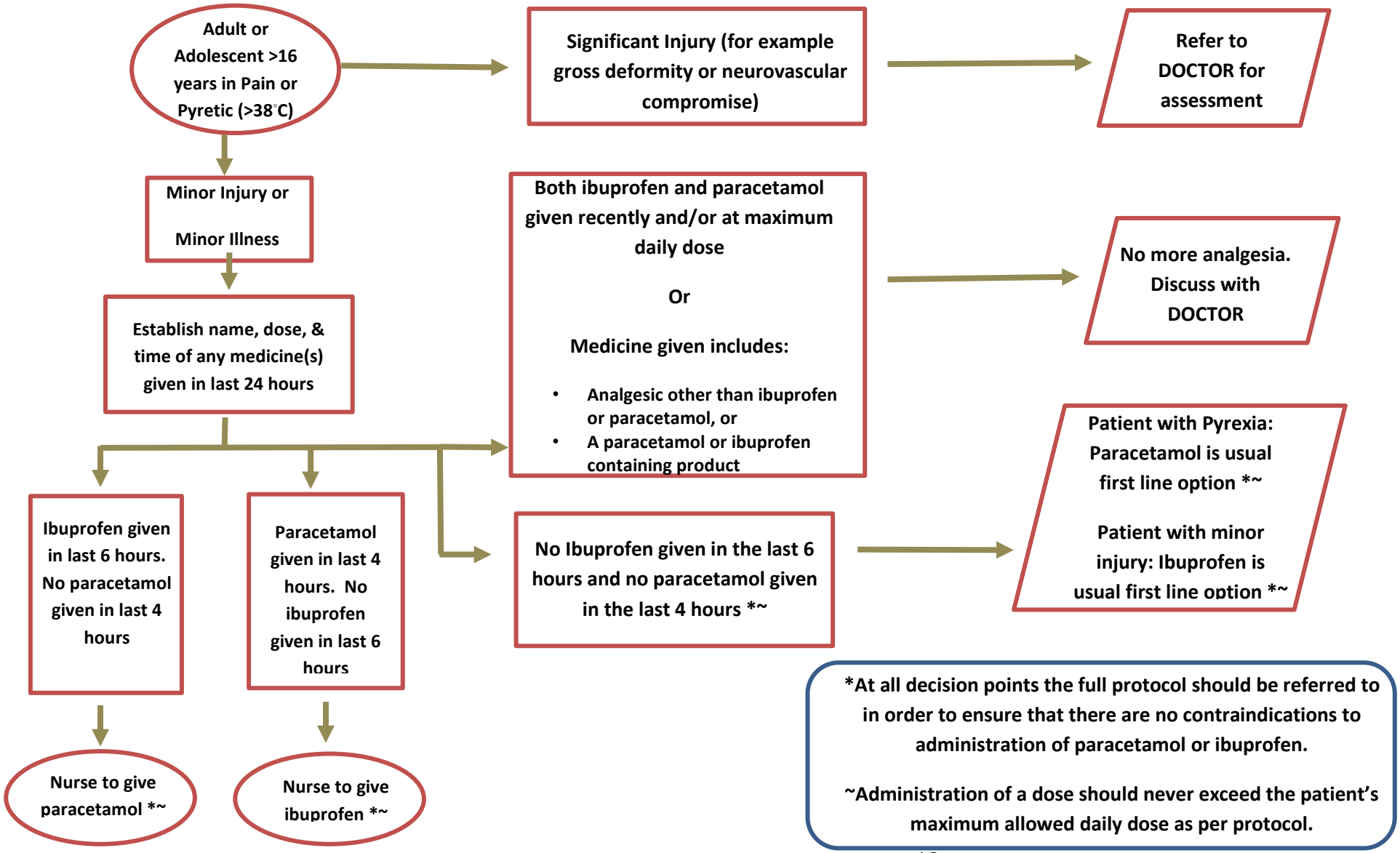
Healthcare Professionals Authorisation to Administer Medicine(s) Under Protocol

The Lead manager/Professional of each clinical area is responsible for maintaining records of all clinical areas where this protocol is in use, and to whom it has been disseminated.
The Senior Nurse/Professional who approves a healthcare professional to administer the medicine(s) under this protocol is responsible for ensuring that they are competent, qualified and trained to do so, and for maintaining an up-to-date record of such approved persons.
The Healthcare Professional that is approved to administer the medicine(s) under this protocol is responsible for ensuring that they understand and are qualified, trained and competent to undertake the duties required. The approved person is also responsible for ensuring that administration is carried out within the terms of the direction, and according to their individual code of professional practice and conduct.
Protocol For The Administration Of Oral Paracetamol And Ibuprofen By Nurses Working Within The Emergency Department Within NHS Grampian – Version 2
Local clinical area(s) where the listed healthcare professionals will operate under this protocol:

Name of Healthcare Professional	Signature	Date	Name of Manager	Signature	Date

Protocol For The Administration Of Oral Paracetamol And Ibuprofen By Nurses Working Within The Emergency Department Within NHS Grampian – Version 2					
Name of Healthcare Professional	**Signature**	**Date**	**Name of Manager**	**Signature**	**Date**

Appendix 3 - Nurse Administration of Analgesia/Antipyretic to Patients With Minor Injury or Minor Illness



Appendix 4 - Medicine Monographs

The information in these monographs is not exhaustive. They must be read in conjunction with the current issue of the British National Formulary, and the Summary of Product Characteristics for each product.

Paracetamol Oral Suspension 250mg in 5mL or Paracetamol 500mg Tablets or 500mg Soluble Tablets	
Indication	To treat pyrexia or mild to moderate pain as a result of minor injury or minor illness.
Inclusion Criteria	As per main protocol inclusion criteria.
Exclusion Criteria	As per main protocol exclusion criteria and additionally: • Already had paracetamol administered within last 4 hours – do not give more paracetamol until 4 hours after last dose • Already taken the maximum dose of paracetamol in the last 24 hours (consider ibuprofen) • Hepatic impairment • Renal impairment • The suspension and soluble tablets may contain sorbitol and/or maltitol. As sorbitol and maltitol are metabolised to fructose, individuals with hereditary fructose intolerance (HFI) should not take the suspension/soluble tablet if either are present. • The suspension may contain sucrose. Individuals with hereditary fructose intolerance (HFI), glucose-galactose malabsorption or sucrase-isomaltase insufficiency should not take the suspension if sucrose is present.
Precautions and Special Warnings	As per main Protocol Precautions and warnings and additionally: Caution is advised if paracetamol is administered concomitantly with flucloxacillin due to increased risk of high anion gap metabolic acidosis (HAGMA), particularly in individuals with severe renal impairment, sepsis, malnutrition and other sources of glutathione deficiency. Close monitoring, including measurement of urinary 5-oxoproline, is recommended. The speed of absorption of paracetamol may be increased by metoclopramide or domperidone and absorption reduced by colestyramine. Paracetamol is extensively metabolised by the liver and can therefore interact with medicinal products with the same metabolic pathway or induce/inhibit the same metabolic pathway. Chronic use of medicinal products which induce liver enzymes like rifampicin, barbiturates, some anti-epileptic drugs (e.g. carbamazepine, phenytoin,

<table>
<tr><th colspan="2">Paracetamol Oral Suspension 250mg in 5mL or Paracetamol 500mg Tablets or 500mg Soluble Tablets</th></tr>
<tr><td></td><td>phenobarbital, primidone) and St John’s Wort can increase the hepatotoxicity of paracetamol as a result of an increased and fast formation of toxic metabolites. Caution is therefore necessary with concomitant use of enzyme-inducing drugs.

The tablets and effervescent tablets may contain sodium (quantity is brand-specific) which should be considered for any individuals on a sodium-restricted diet.

The suspension may contain sucrose (quantity is brand-specific) which should be considered for any individuals with diabetes mellitus.</td></tr>
<tr><td>Legal Status</td><td>Paracetamol 250mg in 5mL oral suspension, 500mg tablets and 500mg soluble tablets are General Sales List (GSL) or Pharmacy (P) medicines dependent on pack size.</td></tr>
<tr><td>Dose/Maximum total dose</td><td><table><tr><th>Age Range (weight)</th><th>Dose</th></tr><tr><td>Adult and Adolescents over 16 years (>50kg)</td><td>500mg - 1g every four to six hours, to a maximum of 4g in 24 hours.</td></tr><tr><td>Adult and Adolescents over 16 years (<50kg)</td><td>Consider reducing dose in individuals weighing less than 50kg to 500mg every four to six hours, to a maximum of 2g in 24 hours.</td></tr></table>
A minimum of 4 hours is required between doses.</td></tr>
<tr><td>Frequency of dose/Duration of treatment</td><td>See Dosage/Maximum total dose section above.</td></tr>
<tr><td>Maximum or minimum treatment period</td><td>A maximum of 4 doses only can be given in 24 hours, but only a single dose can be administered under this protocol.</td></tr>
<tr><td>Route/Method of Administration</td><td>Route of administration is oral.

For the oral suspension it is important to shake the bottle for at least 10 seconds before use.</td></tr>
</table>

Paracetamol Oral Suspension 250mg in 5mL or Paracetamol 500mg Tablets or 500mg Soluble Tablets	
Quantity to be administered	Only one dose can be administered under this protocol. Dose as per Dosage/Maximum total dose section above.
Potential Adverse Reactions	Refer to the product Summary of Product Characteristics (SmPC) for full details of known adverse effects. Adverse effects of paracetamol are rare but hypersensitivity including skin rash may occur.
Advice	Advise individual what to expect and what to do for minor and major reactions. The individual should be advised that they should not take any other paracetamol containing products at the same time. A maximum of 4 doses can be given in any 24 hour period at 4-6 hourly intervals, i.e. if the individual has been given a dose in the Emergency Department, they need to wait at least 4 hours before re-dosing. If maximum dose is exceeded they should seek medical advice. The individual should be told to inform the nursing staff of any adverse effects experienced while waiting for treatment. If serious adverse or persistent effects occur, the individual/parent/carer should be advised to contact their GP/Accident and Emergency department/NHS24. Individuals/parents/carers should be advised to report suspected adverse reactions to the Medicines and Healthcare products Regulatory Agency (MHRA) using the Yellow Card reporting scheme.
Follow up (If applicable)	Advise of the possible adverse effects and where to seek advice in the event of a suspected adverse reaction developing.
Storage	For tablets/soluble tablets, store below 25°C in the original package. For oral suspension store below 25°C. Protect from light. Store in the original package.

Ibuprofen 100mg in 5mL Oral Suspension and Ibuprofen 200mg or 400mg Tablets	
Indication	To treat pyrexia or mild to moderate pain as a result of minor injury or minor illness.
Inclusion Criteria	As per main protocol inclusion criteria
Exclusion Criteria	As per main protocol exclusion criteria and additionally: • Already had ibuprofen administered within the last 6 hours – do not give more ibuprofen until at least 6 hours after last dose • Has already taken the maximum dose of ibuprofen in the last 24 hours (consider paracetamol) • Is asthmatic • Has a bleeding disorder • Has renal impairment • Has severe heart failure • Has severe hepatic impairment • Has had previous sensitivity to aspirin or other non-steroidal anti-inflammatories (NSAIDs) • Has gastro-intestinal problems including history of GI bleeding or ulceration • Pregnancy • The suspension may contain sorbitol and/or maltitol. As sorbitol and maltitol are metabolised to fructose, individuals with hereditary fructose intolerance (HFI) should not be given the suspension if either are present. • The tablets may contain sucrose. Individuals with hereditary fructose intolerance (HFI), glucose-galactose malabsorption or sucrase-isomaltase insufficiency should not take the tablets if sucrose is present. • Currently taking any of the following medicines; o Anticoagulants o Aspirin or other NSAIDs o Ciclosporin or tacrolimus o Methotrexate o Ciprofloxacin and other quinolone antibiotics o Lithium o Zidovudine.
Precautions and Special Warnings	As per main protocol Precautions and warnings and additionally: The tablets may contain sucrose (quantity is brand-specific) which should be considered for any individuals with diabetes mellitus.

Ibuprofen 100mg in 5mL Oral Suspension and Ibuprofen 200mg or 400mg Tablets	
	Caution should be advised in individuals receiving concomitant medications which could increase the risk of gastrotoxicity or bleeding, such as corticosteroids and selective serotonin reuptake inhibitors. The elderly have an increased frequency of adverse reactions to NSAIDs, including renal impairment and gastro-intestinal bleeding. Ibuprofen can mask symptoms of infection, which may lead to delayed initiation of appropriate treatment. When ibuprofen is administered for fever or pain relief in relation to infection, monitoring of infection is advised. Ibuprofen may diminish the effect of antihypertensive medicines and/or cause hyperkalaemia in individuals receiving antihypertensive therapy. Caution is required prior to starting ibuprofen in individuals with a history of hypertension as fluid retention, hypertension and oedema have been reported in association with NSAID therapy. Additionally, diuretics can increase the risk of neurotoxicity of NSAIDs including ibuprofen. NSAIDs including ibuprofen increase plasma glycoside levels. Concomitant administration of ibuprofen with CYP2C9 inhibitors (such as voriconazole and fluconazole) may increase exposure to ibuprofen. Caution is advised and a dose reduction of ibuprofen may be required.
Legal Status	Ibuprofen 100mg in 5mL oral suspension* and 200mg tablets are General Sales List (GSL) or Pharmacy (P) medicines, dependent on pack size. Ibuprofen 400mg tablets is a Pharmacy (P) medicine. ***Note:** It is now also available in a 200mg/5mL oral suspension but this is not currently stocked in the NHSG acute sector.

<table>
<tr><th colspan="2">Ibuprofen 100mg in 5mL Oral Suspension and Ibuprofen 200mg or 400mg Tablets</th></tr>
<tr><td>Dose/Maximum total dose</td><td>
<table>
<tr><th>Age Range (Est. weight ranges)</th><th>Dose</th></tr>
<tr><td>Adult and Adolescents over 16 years</td><td>400mg every six to eight hours after food, up to maximum of 3 doses in 24 hours.</td></tr>
</table>
A minimum of 6 hours is required between doses.
</td></tr>
<tr><td>Frequency of dose/Duration of treatment</td><td>See Dosage/Maximum total dose section above.</td></tr>
<tr><td>Maximum or minimum treatment period</td><td>A maximum of 3 doses only can be given in 24 hours, but only a single dose can be administered under this protocol.</td></tr>
<tr><td>Route/Method of Administration</td><td>Route of administration is oral.

For the oral suspension it is important to shake the bottle well before use.</td></tr>
<tr><td>Quantity to be administered</td><td>Only one 400mg dose can be administered under this protocol.</td></tr>
<tr><td>Potential Adverse Reactions</td><td>Refer to the product Summary of Product Characteristics (SmPC) for full details of known adverse effects.

Gastrointestinal upset is the most common side effect of ibuprofen. Bleeding, exacerbation of asthma symptoms and cardiovascular side-effects may occur.

Serious skin reactions, including exfoliative dermatitis, Stevens-Johnson syndrome, and toxic epidermal necrolysis, have been reported rarely in association with the use of NSAIDs. Ibuprofen should be discontinued at the first appearance of signs and symptoms of severe skin reactions, such as skin rash, mucosal lesions, or any other sign of hypersensitivity.

The suspension may contain sorbitol and/or maltitol, which may cause gastrointestinal discomfort and can have a mild laxative effect.</td></tr>
</table>

Ibuprofen 100mg in 5mL Oral Suspension and Ibuprofen 200mg or 400mg Tablets	
Advice	Advise individual what to expect and what to do for minor and major reactions. The individual should be advised that the maximum of 3 doses of ibuprofen in 24 hours should not be exceeded. They should also wait at least 6 hours before giving a further dose. To minimise the incidence of GI upset, ibuprofen is best taken with or just after food if not being fasted. The individual/ parental responsibility should be told to inform the nursing staff of any adverse effects experienced while waiting for treatment. If serious adverse or persistent effects occur, the individual/parent/carer should be advised to contact their GP/Accident and Emergency department/NHS24. Individuals/parents/carers should be advised to report suspected adverse reactions to the Medicines and Healthcare products Regulatory Agency (MHRA) using the Yellow Card reporting scheme.
Follow up (If applicable)	Advise of the possible adverse effects and where to seek advice in the event of a suspected adverse reaction developing.
Storage	Store tablets and oral suspension below 25°C in original package.