What can your Pharmacy do for you NIMDTA

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Aims & Objectives

To provide information about over-the-counter medicines that have relevance for dentistry

- Outline the indications for use
- Understand safety concerns (cautions, contraindications, interaction profile and abuse/misuse potential)
- Appreciate the evidence base (and where to find it)

Session overview

- A little about me
- Community pharmacy – what support is available?
- OTC medicines – safety concerns and the evidence base
- Helpful resources

Ulster University

Section

A little about me

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Section 2

Community pharmacy – what support is available for dentists?

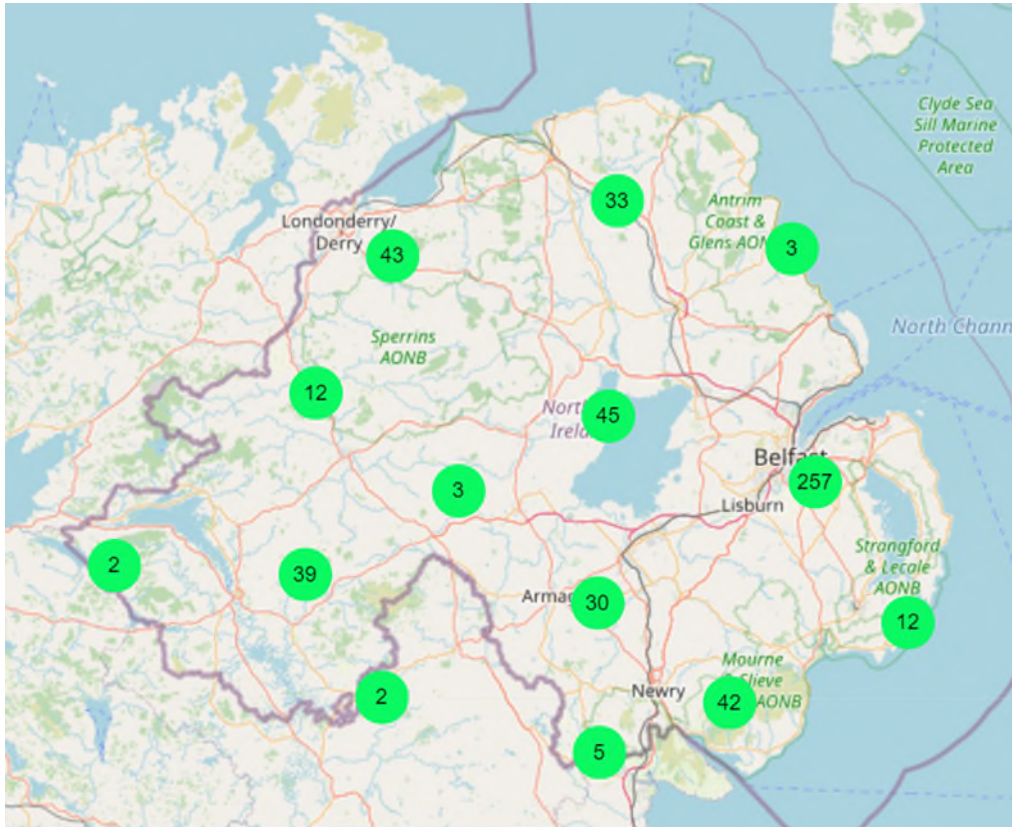
Your local pharmacy

Get to know the pharmacy team in your area

More than happy to help and advise:

- Drug interactions
- Contra-indications
- Cautions
- Use in pregnancy & breast feeding
- Administration issues
- Medicinal forms
- Licensed use

If they don’t know, they will know how to find out…



https://hscbusiness.hscni.net/services/2286.htm

Your local pharmacy

Core services – Funded	Additional services – not funded
Prescription dispensing	OTC services
Prescription advice	Prescription collection
Advice on a health problem	Prescription delivery
NI Minor ailment scheme	Compliance aid support
Disposing of medicines and sharps	Health checks
Healthy lifestyle advice	Vaccines
Stop smoking scheme	Travel clinics
Needle exchange	Sun safety
Substitute prescribing	Emergency contraception
Palliative care service	Stoma care

Pharmacy First – Northern Ireland

Treatment algorithms for:

- Acne vulgaris
- Athlete's foot
- Acute diarrhoea
- Ear wax
- Groin area infection
- Haemorrhoids
- Head lice
- Threadworms
- Vaginal thrush
- Mouth ulcers
- Oral thrush
- Scabies
- Verrucae

Pharmacy First – Sore Throat Service

Aims of the service

- Provide an accessible, efficient and high-quality clinical pathway for patients with a sore throat.
- Better use of pharmacist skills and will free up GP time.
- Use point of care (POC) testing for Group A Streptococcus (GAS) to guide management of the condition and potentially reduce unnecessary antibiotic prescribing

Summary Flow Chart for Community Pharmacy
Pharmacy First Service for Sore Throat in patients aged 5 years and over

FeverPain score
1 point for each:
- Fever
- Purulent tonsils
- Attend <3 days from symptom onset
- Inflamed tonsils
- No cough or coryza
(Max 5 points)

FeverPain score 0 or 1
DO NOT offer a *RADT
Do NOT offer antibiotics

FeverPain score 2 or 3
Is patient likely to benefit from antibiotic?
NO: Do not offer a RADT
YES: Carry out a RADT

FeverPain score 4 or 5
Carry out a RADT

- Refer to the 'Symptom Relief' and 'Advice for Patients' sections
- Return to the pharmacy if symptoms do not improve after 7 days (48 hours if FeverPain score of 2 or more) OR earlier if symptoms worsen.
- Seek medical advice if person becomes systemically very unwell.

If RADT Negative:
- Reassure patient that likely to be viral infection & antibiotics unlikely to help
- If there is symptomatic worsening, or new symptoms, return for reassessment within 48 hours.
- Seek medical advice if the person becomes systemically very unwell

If RADT positive:
- Supply antibiotic if clinically appropriate. If symptoms do not improve within 3 to 5 days seek medical advice.
- If antibiotics are not supplied advise return for reassessment within 48 hours if symptoms have not improved.
- Seek medical advice if symptoms worsen or person becomes systemically very unwell.

Symptom Relief
- Paracetamol or Ibuprofen may help ease pain and fever
- Medicated lozenges may help with pain in adults.
- There is little evidence for benzydamine gargles /spray

Advice for Patients
- Sore throats usually get better within 7 days with or without antibiotics
- Antibiotics can cause side effects.
- Advise adequate intake of fluids
- Provide patient with 'Target' information leaflets

Reassess at any time if symptoms worsen. Consider:
- Alternative diagnosis
- Signs/symptoms of more serious illness
- Previous antibiotic use which may have led to resistance

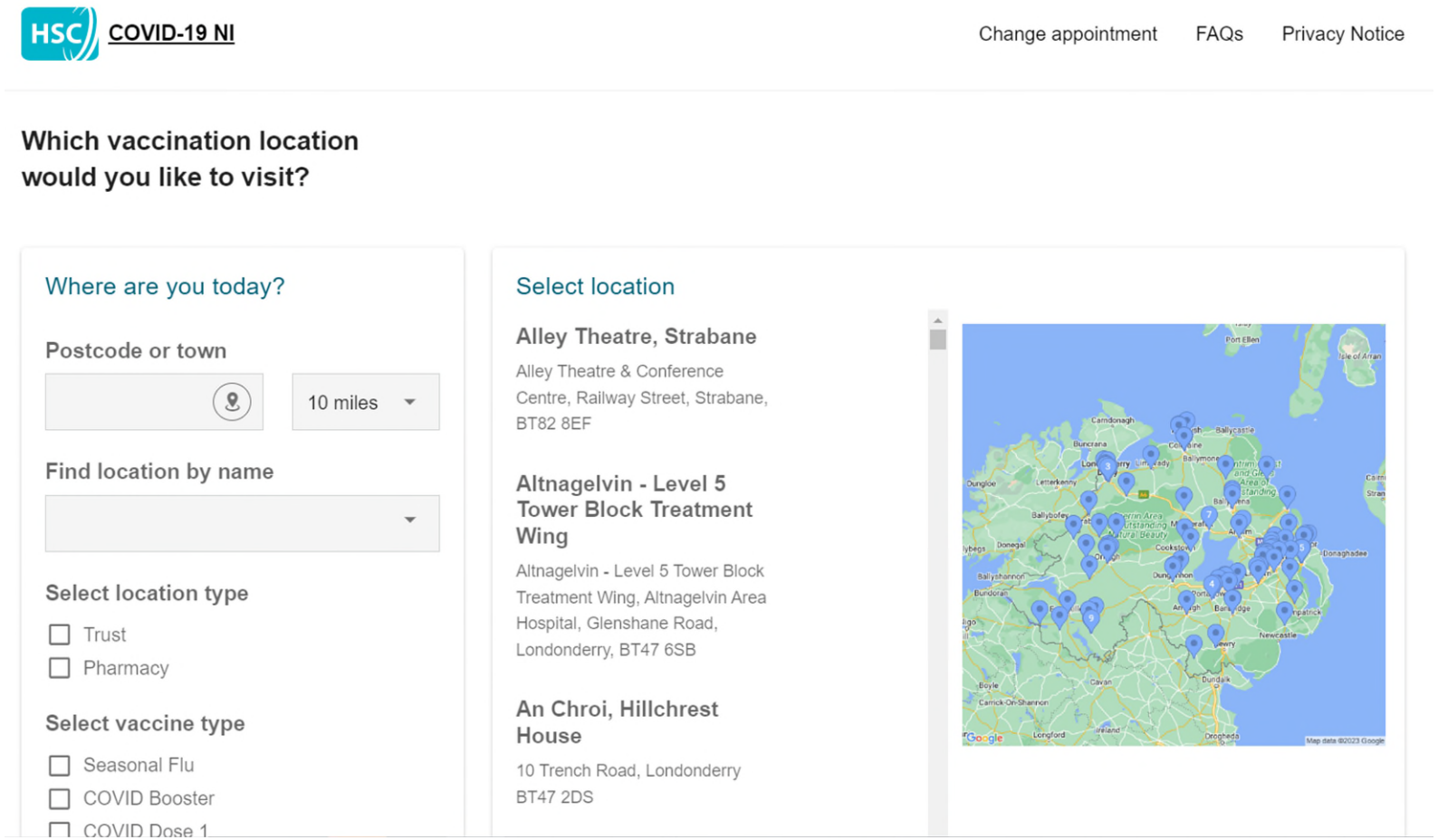
Refer patients with rapid or significant worsening of symptoms.

Refer to GP or OOH if:
- Systemically unwell OR
- Signs of more serious illness OR
- High risk of complications

Refer to Hospital ED if:
- Signs of severe systemic infection OR
- Severe suppurative complications e.g. quinsy

*RADT: Rapid Antigen Detection Test

Vaccination - Pharmacy



COVID vaccines

https://vaccinations.covid-19.hscni.net/location-search

Travel clinics & Malaria chemo-prophylaxis

https://www.fitfortravel.nhs.uk/home

Harm Reduction Services

- Needle and syringe exchange
  - Reduce harms associated with injecting drugs
  - Signpost to treatment /support services
  - Access to sterile needles & syringes and sharps containers for return of used equipment
  - Provide materials e.g. citric acid, sterile water, swabs, foil etc.
  - 26 pharmacies across NI
- Opioid substitution treatment (OST)
  - Mostly for those dependent on heroin
  - Treatment usually started in secondary care
  - Only methadone and buprenorphine are licensed and approved by NICE in the UK for use as an OST
    - Sugar free methadone available
  - Initially: daily dose dispensed and consumed under direct supervision of pharmacists (5-7 days/week)

Needle and syringe provision

Drug equipment available

2mL syringe (different colours available) 	**1mL syringe with needle** (different colours available) 
1" (0.5mm x 25mm) needle 25G orange 	**One hit kit** 
1¼" (0.6mm x 32mm) needle 23G blue 	**2mL water for injection** 
1½" (0.7mm x 38mm) needle 22G black 	**Water amp snapper** 
1½" (0.8mm x 38mm) needle 21G green 	**Foil** (20 sheets) 
Pre-injection swab 	**Citric acid sachet** 
Spoon 	**0.45L Sharps box** (black) 

HSC Public Health Agency
www.publichealth.hscni.net

Feb 2019

Know Check Ask - NI

Medicines are the most commonly used medical intervention in NI, and at any one time, around 70% of our population take prescribed or over-the-counter medicines to treat or prevent ill health.

OTC medicines: dentistry

Part IX (a)

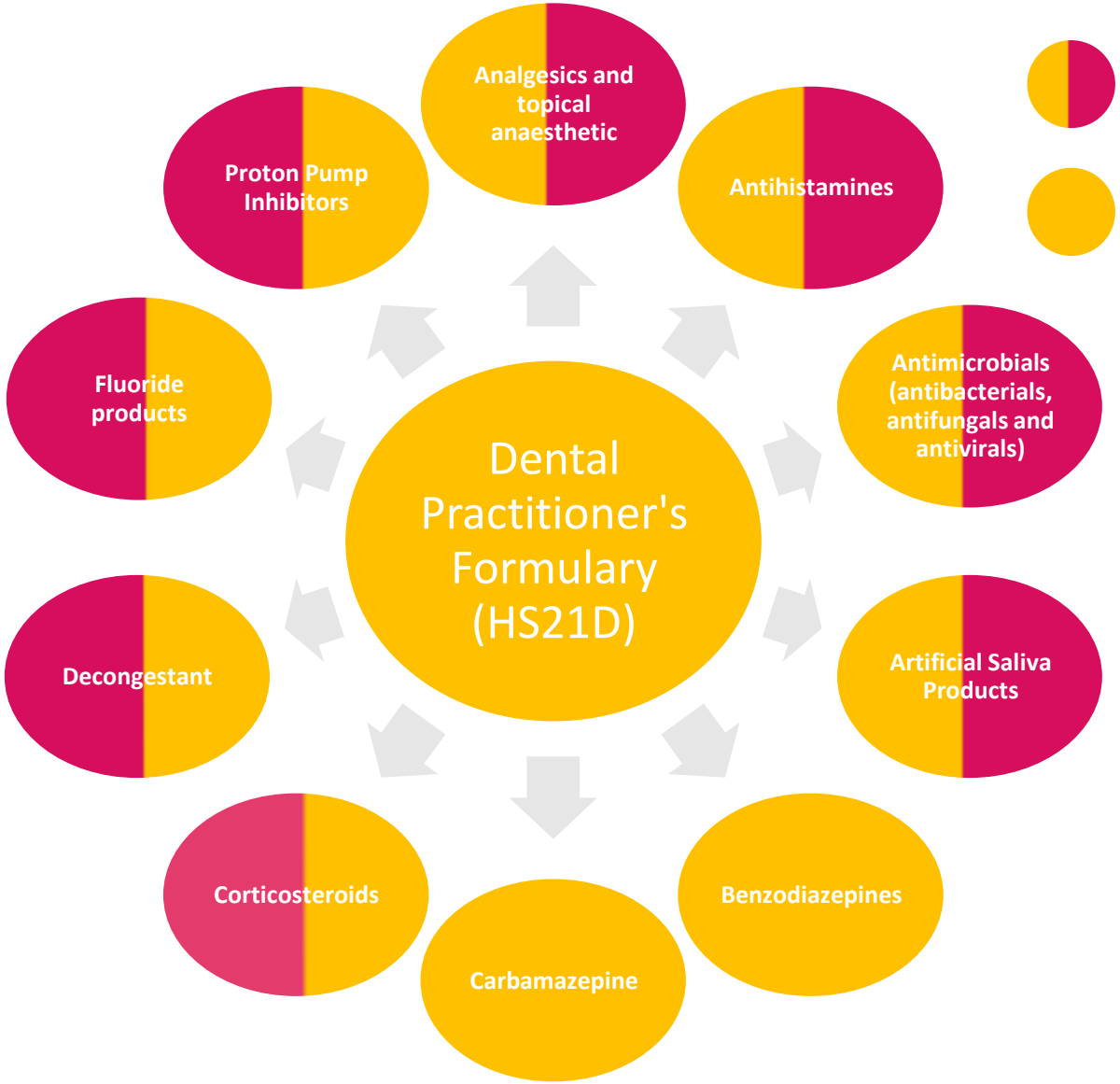
List of Preparations Approved by the Department that may be prescribed On Form HS21D by Dentists

AS Saliva Orthana Spray (a medical device listed in Part III)
Aciclovir Cream BP
Aciclovir Oral Suspension BP 200mg/5ml
Aciclovir Tablets BP 200mg, 800mg
Amoxicillin Capsules BP
Amoxicillin Oral Powder DPF
Amoxicillin Oral Suspension BP (includes sugar-free formulation)
Artificial Saliva Gel DPF
Artificial Saliva Oral Spray DPF
Artificial Saliva Pastilles DPF
Artificial Saliva Protective Spray DPF
Artificial Saliva Substitutes as listed below (to be prescribed only for indications approved by ACBS)
AS Saliva Orthana Lozenges
Bioxtra
Glandosane
Saliveze
Aspirin Tablets Dispersible BP
Azithromycin Capsules 250mg DPF
Azithromycin Oral Suspension 200mg/5ml DPF
Azithromycin Tablets 250mg, 500mg DPF

Beclometasone Pressurised Inhalation BP 50micrograms/metered inhalation CFC-free as: Clenil Modulite
Benzydamine Mouthwash BP 0.15%
Benzydamine Oromucosal Spray BP 0.15%
Betamethasone Soluble Tablets 500microgram DPF

Carbamazepine Tablets BP
Cefalexin Capsules BP
Cefalexin Oral Suspension BP
Cefalexin Tablets BP
Cefradine Capsules BP
Cetirizine Oral Solution 5mg/5ml BP
Cetirizine Tablets 10mg BP
Chlorhexidine Gluconate Gel BP
Chlorhexidine Mouthwash BP 0.2% w/v
Chlorhexidine Oral Spray DPF
Chlorphenamine Oral Solution BP (includes sugar-free formulation)
Chlorphenamine Tablets BP
Choline Salicylate Dental Gel BP
Clarithromycin Oral Suspension 125mg/5ml DPF
Clarithromycin Oral Suspension 250mg/5ml DPF
Clarithromycin Tablets BP
Clindamycin Capsules BP
Co-amoxiclav Oral Suspension BP 125/31 (amoxicillin 125mg as trihydrate, clavulanic acid 31.25mg as potassium salt)/5ml (includes sugar-free formulation)
Co-amoxiclav Oral Suspension BP 250/62 (amoxicillin 250mg as trihydrate, clavulanic acid 62.5mg as potassium salt)/5ml (includes sugar-free formulation)
Co-amoxiclav Tablets BP 250/125 (amoxicillin 250mg as trihydrate, clavulanic acid 125mg as potassium salt)

These products have Advisory Committee on Borderline Substances approval for patients suffering dry mouth as a result of having (or having undergone) radiotherapy or sicca syndrome.



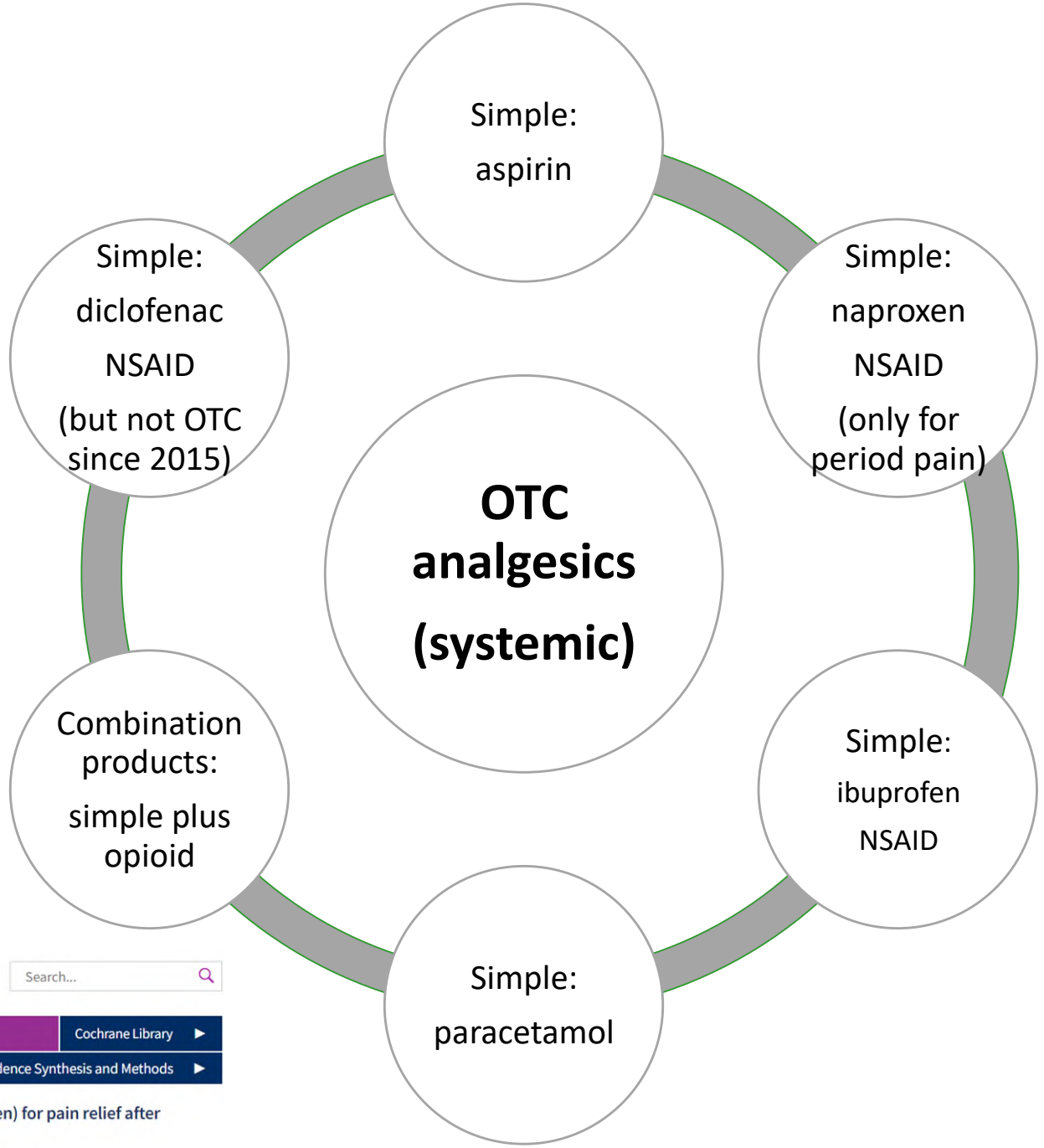
Available on prescription and as OTC medicines

Only available as prescription-only medicines

Many DPF items are available as prescription-only and OTC medicines - much greater restrictions imposed on OTC versions
Many OTC medicines are not licensed for use in pregnancy and breast-feeding (lack of trial data)

Community pharmacy OTC: Dentistry

- Allergic rhinitis and upper respiratory tract infections (such as sore throat, acute sinusitis, cough, common cold, flu)
- Angular cheilitis
- Cold sores
- Dry mouth
- Gingivitis
- Heartburn and indigestion
- Minor mouth (aphthous) ulcers
- Oral thrush (candidiasis)
- Toothache and teething



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Ibuprofen versus paracetamol (acetaminophen) for pain relief after surgical removal of lower wisdom teeth

The addition of caffeine (≥100 mg) to a standard dose of commonly used analgesics provides a small but important increase in the proportion of participants who experience a good level of pain relief (5-10% improvement

Safety: ibuprofen (diclofenac/naproxen similar)

- **Cautions:** older adults, cardiac impairment, risk factors for cardiovascular events, uncontrolled hypertension, cerebrovascular disease, heart failure, ischaemic heart disease, peripheral arterial disease, Crohn's disease, ulcerative colitis

- **Contraindications:** past/current gastric ulcer, allergy to NSAIDs/aspirin, severe HF

- **GI and CV events risk**: use lowest effective dose for shortest possible time (see BNF)

Safety: ibuprofen (diclofenac/naproxen similar)

Interaction profile (examples):

- ↑ bleeding risk with antiplatelets, anticoagulants, heparins, SSRIs, other NSAIDs
- ↑ GI irritation risk with systemic corticosteroids, bisphosphonates, nicorandil, other NSAIDs, excess alcohol
- ACE inhibitors (↑ risk of hyperkalaemia and renal failure)
- diuretics (↑ risk of renal failure)
- lithium (increases concentration of lithium)
- methotrexate (↑ risk of toxicity)

[Aspirin: not suitable <16 years, GI irritation/bleed risk, similar interaction profile. Out of all ‘simple’ analgesics, paracetamol currently has the best safety profile]

OTC codeine and dihydrocodeine

- Short term for acute, moderate pain which is NOT relieved by paracetamol, ibuprofen or aspirin alone
- Products state that they are for short term use only (up to three days) and that they can cause addiction or overuse headache if used continuously for >3 days
- Limited evidence at OTC doses; exposed to opioid side-effects and potential interactions

OTC analgesics & anaesthetics (topical/oromucosal)

Name	Age	Notes
Benzydamine mouthwash Benzydamine oromucosal spray	>12 years No age restriction* *<6 years dosed by weight	Mouthwash can be diluted with water, products can cause numbness (care with hot food/beverages), not advisable if hypersensitive to aspirin/NSAIDs, spray may precipitate bronchospasm in patients with bronchial asthma
Clove oil BP	> 2 years	Temporary relief of toothache, repeated use may cause gum damage. Can also cause transient irritation, contact dermatitis, lip inflammation, mouth inflammation/ulceration. May enhance inhibition of platelet activity-care with anticoagulant therapy
Choline salicylate gel	>16 years	Transient local burning sensation and irritation, frequent application can give rise to salicylate poisoning. Not to be used in patients with active peptic ulceration or hypersensitive to aspirin/NSAIDs. May enhance anticoagulant effect and inhibit the action of uricosurics
Lidocaine/benzocaine	No age restricition	Can cause sensitisation and avoid anaesthesia of the pharynx and mouth before meals (due to choking and burn/scald risk)

OTC antibacterials

- Chlorhexidine mouthwash
- Antimicrobial stewardship – Dentistry tends to fair really well here (despite AAA during COVID!)
- Prescription writing

Pharmacists' Independent prescribers** current undergraduate education, foundation training, and post-registration reform across UK

OTC antivirals

Topical: penciclovir (12 years+) and aciclovir, for Herpes labialis

NICE CKS: “do not routinely prescribe topical antiviral preparations, such as aciclovir or penciclovir. These products are available over-the-counter, and may be used by some people if they find them helpful, from the time of onset of prodromal symptoms before vesicles appear, if possible, until lesions have healed”

Interaction profile: nothing of note for topical products

Management: centres on minimising the spread of infection

OTC, we do not typically manage:

- immunocompromised or pregnant patients
- frequent, persistent and/or severe episodes
- systemic symptoms, dehydration, mouth involvement/difficulty swallowing

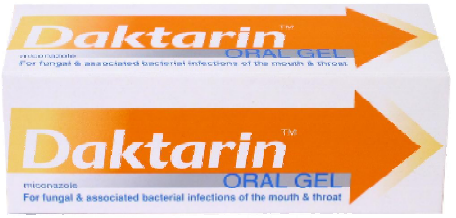
OTC antifungals

Indications:

- miconazole cream: for angular cheilitis (wouldn't typically manage OTC)
- miconazole oral gel: for oral candidiasis (Daktarin® SF 2% oral gel) - usefulness of 15 g tube given dose, dosing frequency and duration of use?

Management: in many cases, this centres on minimising the spread of infection

Miconazole oral gel (Daktarin®) & warfarin



Advice for healthcare professionals:

- bleeding events have been reported by patients on warfarin
- patients taking warfarin should not use OTC miconazole oral gel
- if the concomitant use of miconazole oral gel with an oral anticoagulant such as warfarin is planned, exercise caution and ensure that you monitor and titrate the anticoagulant effect carefully
- advise patients taking prescription-only miconazole oral gel and warfarin that if they experience signs of over-anticoagulation, such as sudden unexplained bruising, nosebleeds, or blood in urine, to stop using miconazole and seek immediate medical attention

https://www.gov.uk/drug-safety-update/miconazole-daktarin-over-the-counter-oral-gel-contraindicated-in-patients-taking-warfarin

Fluoride products

- We wouldn't typically initiate these (advocate patient seeks dental advice first). OTC: follow NHS information on toothpaste strengths, amount and frequency of use (e.g. "an adult should brush at least twice daily with a toothpaste containing 1350-1500ppm fluoride")

- Fluoride gel – large reduction in tooth decay in permanent and baby teeth. As children may swallow gel, more research is needed on these effects. [Marinho VCC, Worthington HV, Walsh T, Chong LY (Cochrane Review, 2015)]

Children received a fluoride rinse formulated with sodium fluoride (NaF), mostly on either a daily or weekly/fortnightly basis at two main strengths, 230 or 900 ppm F. A large reduction in caries increment in permanent teeth was found. Future research should focus on comparisons between different fluoride rinses or against other preventive strategies and evaluate adverse effects and acceptability [Marinho VCC, Chong LY, Worthington HV, Walsh T (Cochrane Review, 2016)]

Xylitol-containing products

- Some low quality evidence that fluoride toothpaste containing xylitol may be more effective than fluoride-only toothpaste for preventing caries in the permanent teeth of children but interpret findings with caution due to high risk of bias

- The remaining evidence is of low to very low quality and is insufficient to determine whether any other xylitol-containing products can prevent caries in infants, older children, or adults

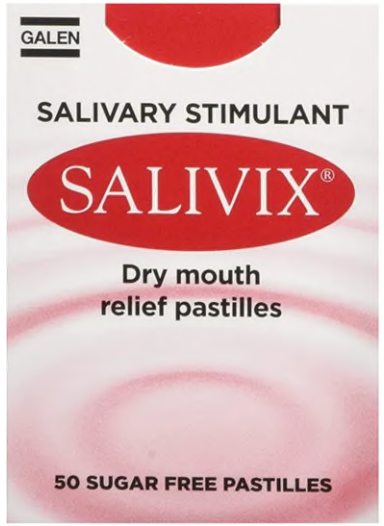
Riley P, Moore D, Ahmed F, Sharif MO, Worthington HV. Xylitol-containing products for preventing dental caries in children and adults. Cochrane Database of Systematic Reviews 2015, Issue 3. Art. No.: CD010743

Dry mouth and artificial saliva

No real safety concerns with artificial saliva products (no side-effects/interaction profile of note), but weak evidence-base

However, we wouldn't typically initiate OTC as it could be due to:

- underlying condition requiring further investigation (salivary gland issues/tumour, Sjögren's syndrome, diabetes, liver disease, amyloidosis, sarcoidosis, thyroid disease, stroke)
- side-effect of medication requiring discussion with prescriber (such as antidepressants, hypnotics, antipsychotic agents, antiparkinsonian drugs, antiepileptics, sedating antihistamines, radiation/chemotherapy)
- mouth-breathing and smoking (smoking cessation would be advocated)



PPIs esomeprazole, omeprazole, pantoprazole OTC

Antacids, Alginates, Ranitidine all > 16 years

Certain products can be given to children but dyspepsia is unusual in children and therefore pharmacy is more likely to refer to GP for treatments.

PPIs OTC for > 18 years

Side effects: Headache, diarrhoea, constipation, nauseas and vomiting, abdominal pain, insomnia, dizziness, dry mouth, rash

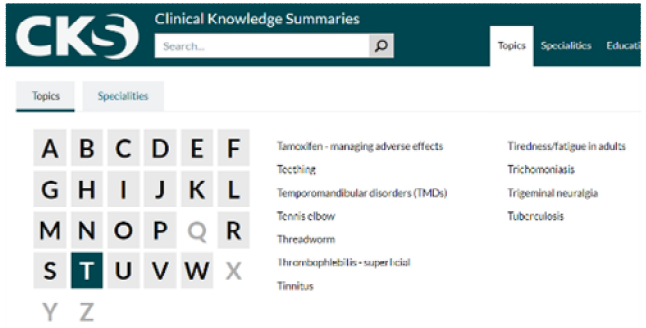
Interactions: Clopidogrel, diazepam, fluvoxamine, cilostazol, atazanavir

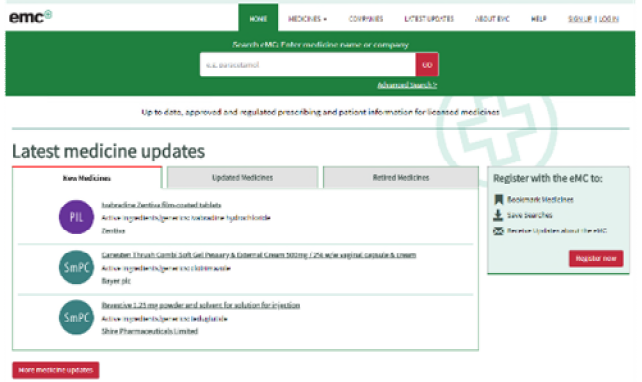
Pregnancy & breast feeding - license dependent, some manufacturers advice avoid but guidance says it can be used

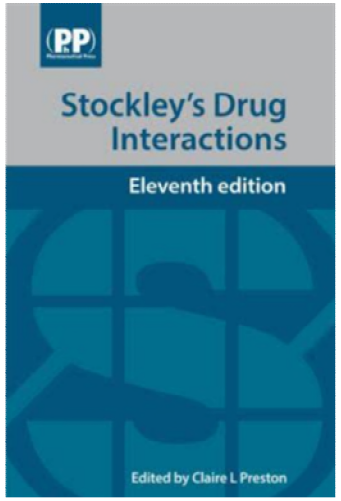
Useful resources

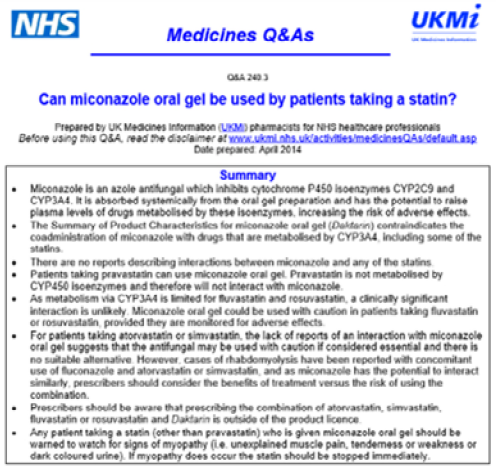
section 4

Useful resources

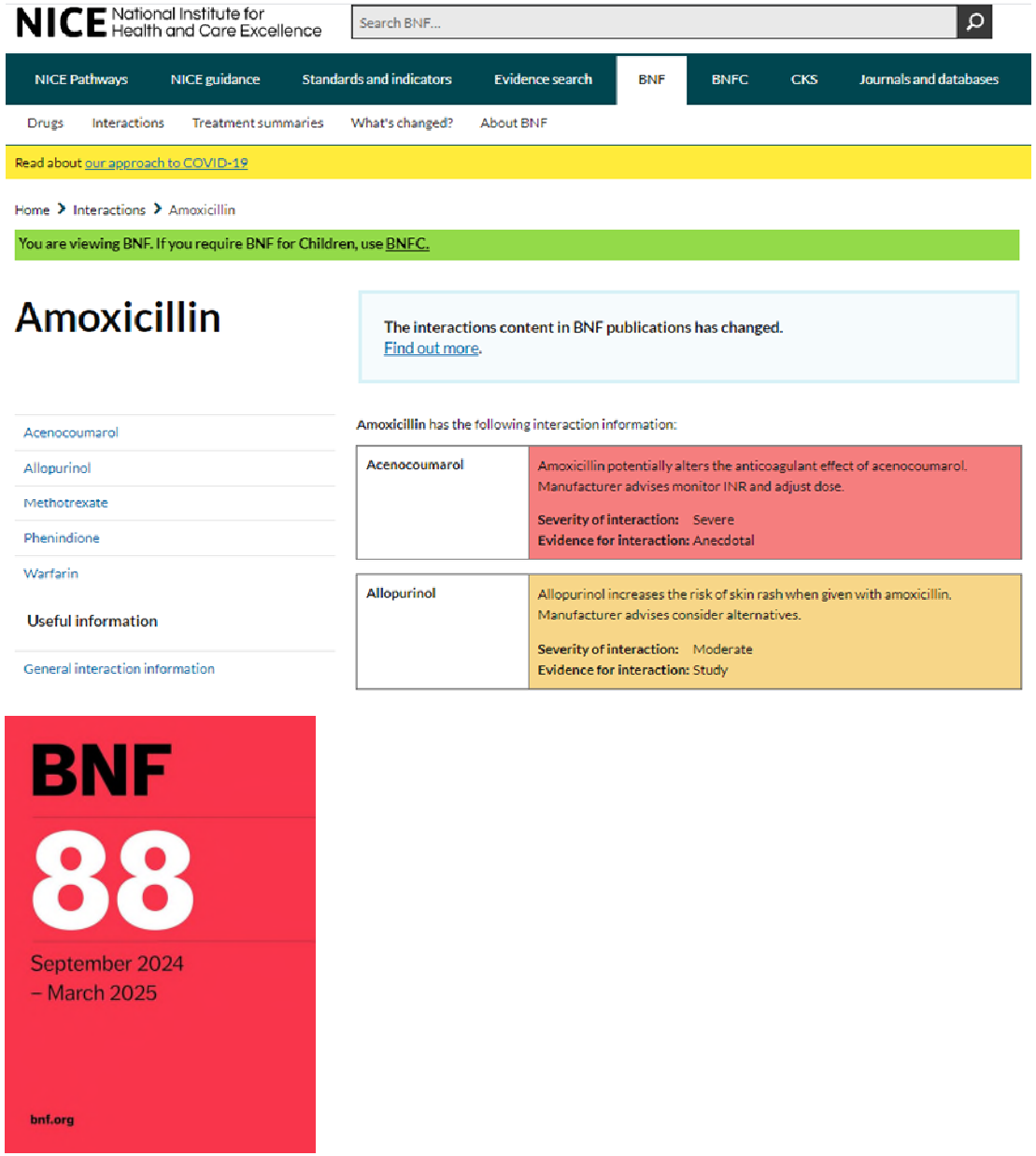








NICE Medicines Awareness Daily (medicinesawareness@nice.org.uk)


NICE National Institute for Health and Care Excellence
Search BNF...
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Treatment summaries
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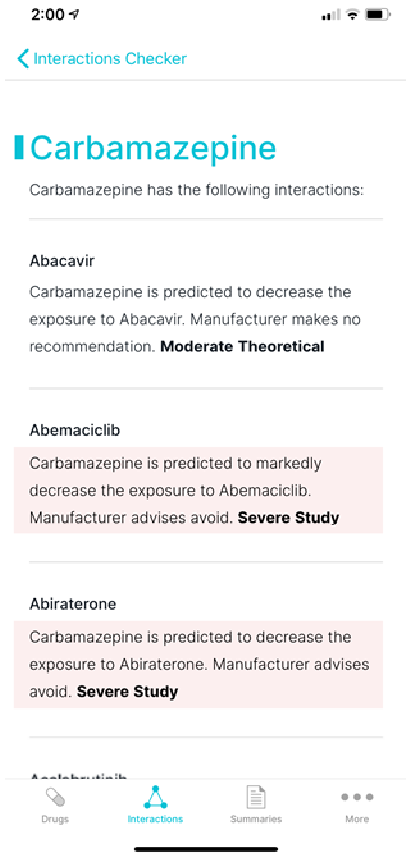
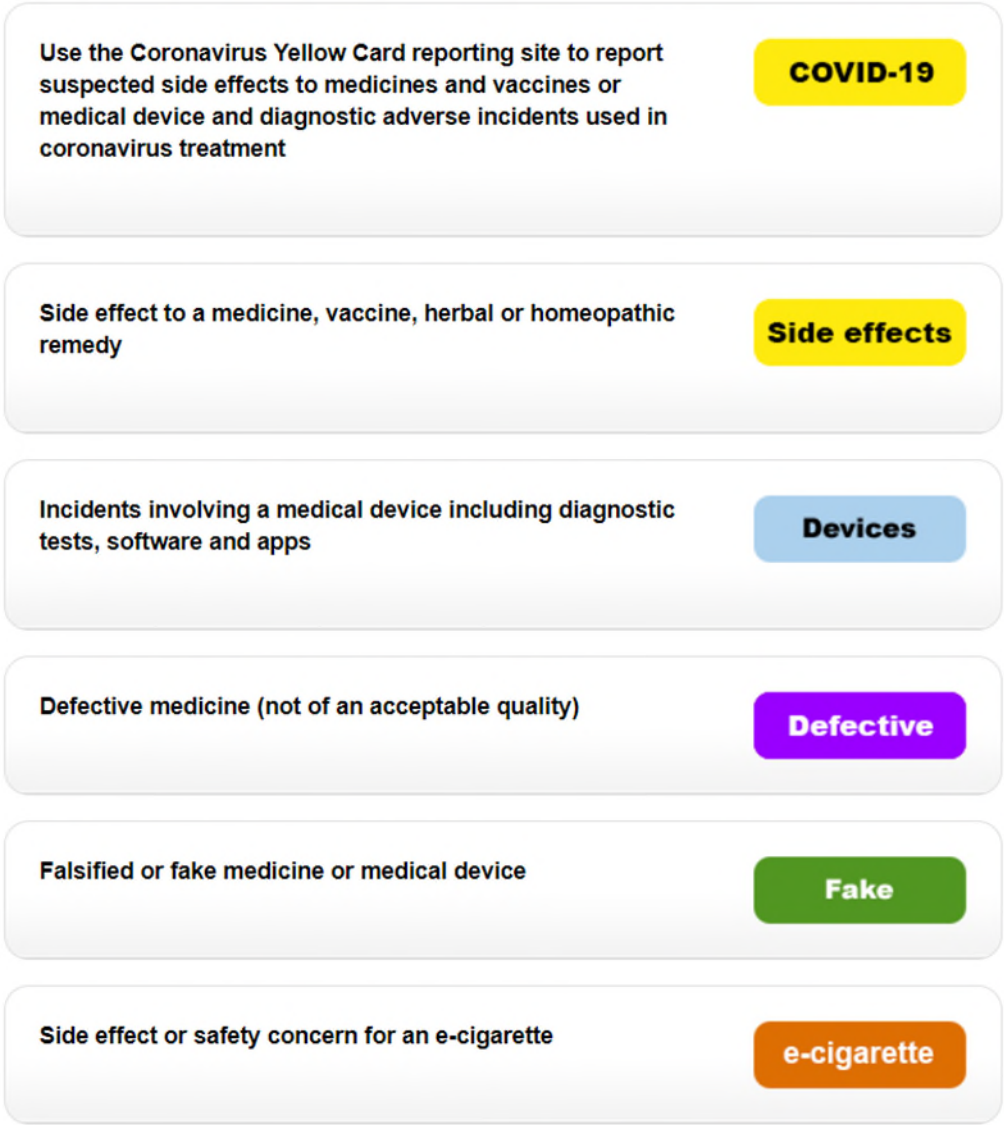
Home > Interactions > Amoxicillin
You are viewing BNF. If you require BNF for Children, use BNFC.
Amoxicillin
The interactions content in BNF publications has changed.
Find out more.
Acenocoumarol
Allopurinol
Methotrexate
Phenindione
Warfarin
Useful information
General interaction information
Amoxicillin has the following interaction information:
Acenocoumarol
Amoxicillin potentially alters the anticoagulant effect of acenocoumarol. Manufacturer advises monitor INR and adjust dose.
Severity of interaction: Severe
Evidence for interaction: Anecdotal
Allopurinol
Allopurinol increases the risk of skin rash when given with amoxicillin. Manufacturer advises consider alternatives.
Severity of interaction: Moderate
Evidence for interaction: Study

BNF
88
September 2024
– March 2025
bnf.org


2:00
Interactions Checker
Carbamazepine
Carbamazepine has the following interactions:
Abacavir
Carbamazepine is predicted to decrease the exposure to Abacavir. Manufacturer makes no recommendation. Moderate Theoretical
Abemaciclib
Carbamazepine is predicted to markedly decrease the exposure to Abemaciclib. Manufacturer advises avoid. Severe Study
Abiraterone
Carbamazepine is predicted to decrease the exposure to Abiraterone. Manufacturer advises avoid. Severe Study
Drugs
Interactions
Summaries
More

Yellow card scheme - MHRA



https://yellowcard.mhra.gov.uk/

Drug safety updates

https://www.gov.uk/drug-safety-update

Guidance

Drug Safety Update: monthly PDF newsletter

Monthly PDF editions of the Drug Safety Update newsletter from MHRA and its independent advisor, the Commission on Human Medicines

From: Medicines and Healthcare products Regulatory Agency
Published 22 January 2015
Last updated 26 April 2023 — See all updates

Get emails about this page

Documents

Drug Safety Update April 2023
PDF, 345 KB, 17 pages
This file may not be suitable for users of assistive technology.

Related content

Innovation Accelerator
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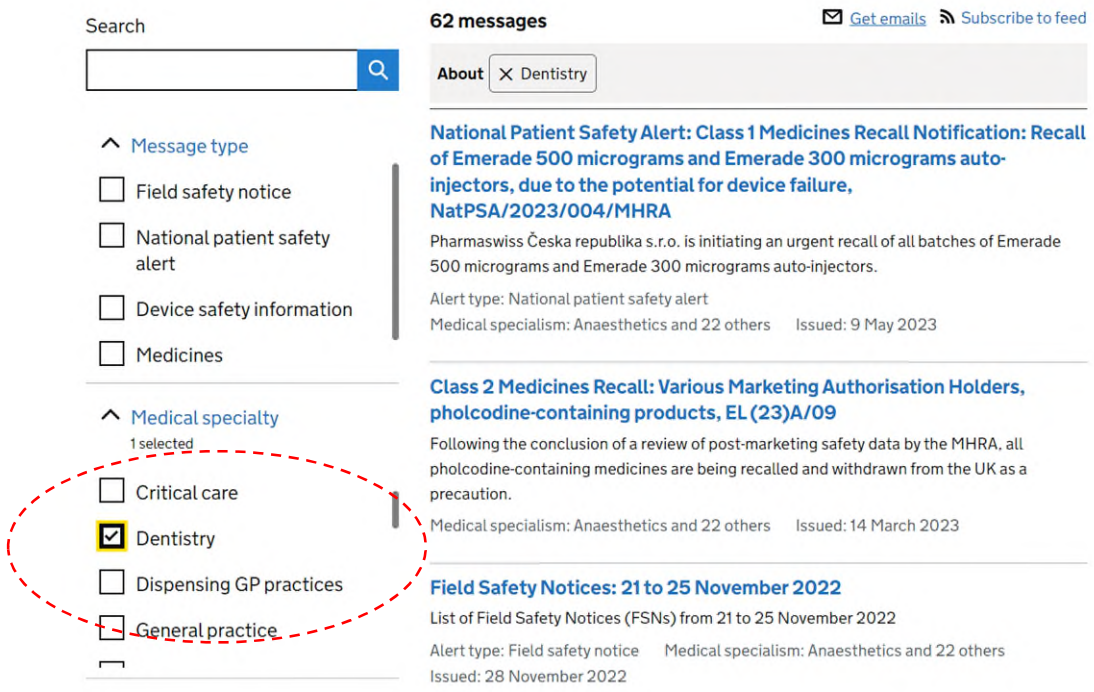
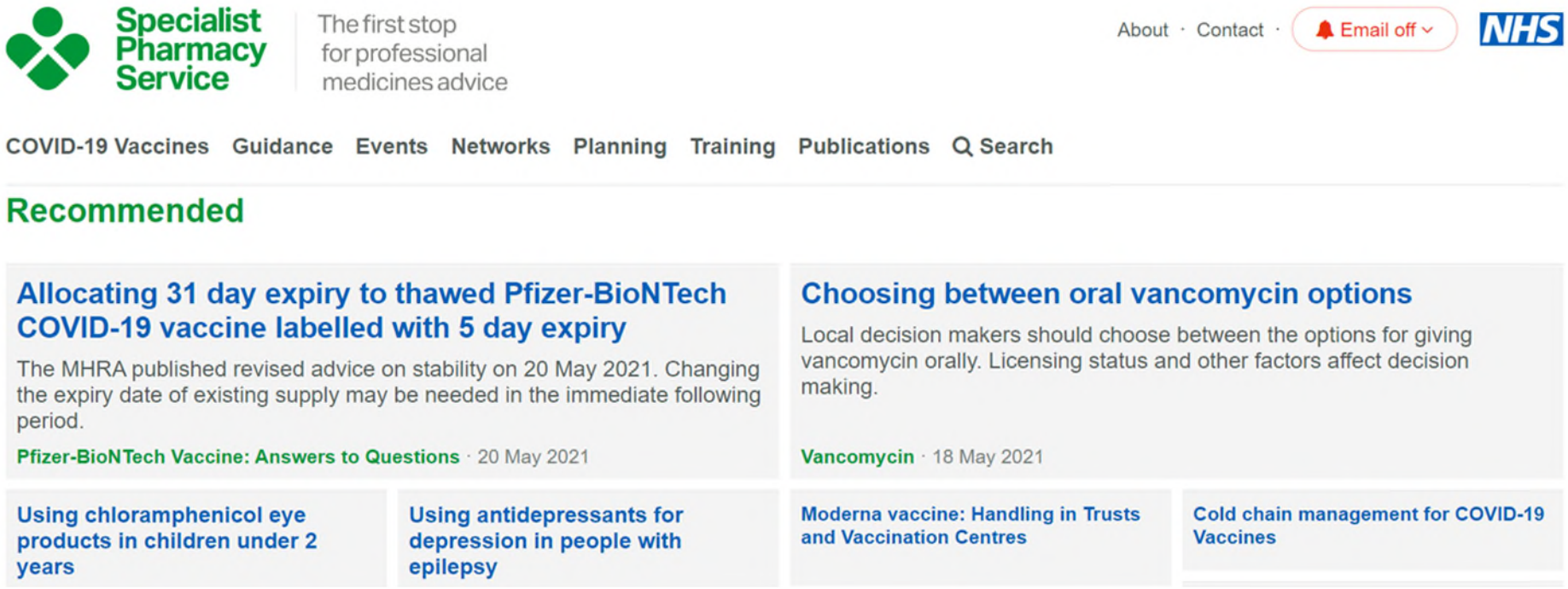
Drugs and pharmaceutical electronic

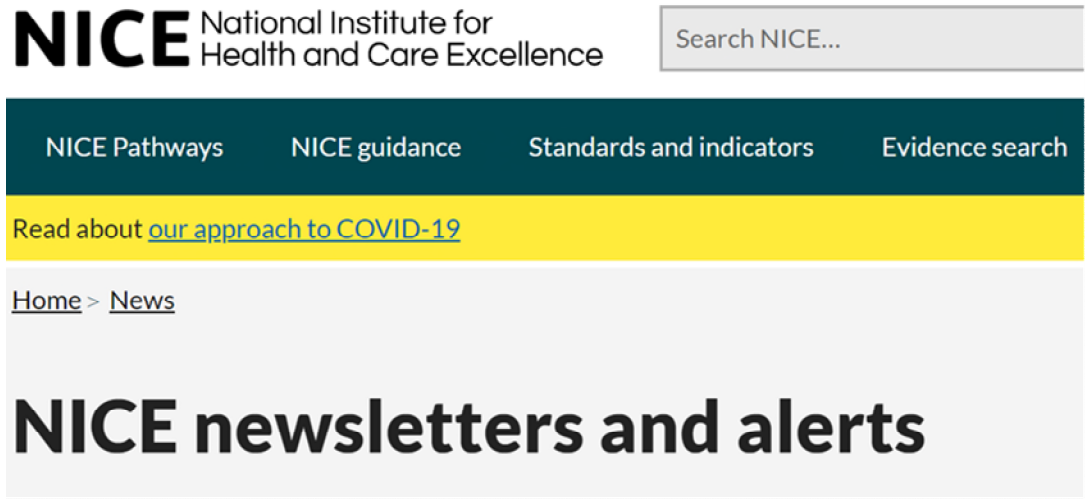


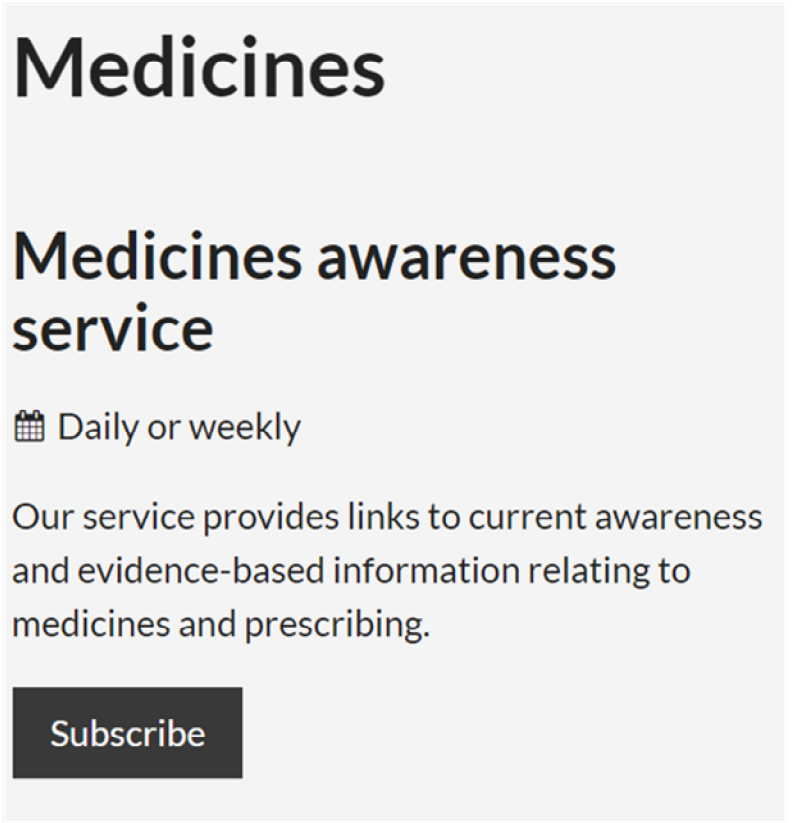
And the extended pharmacy profession

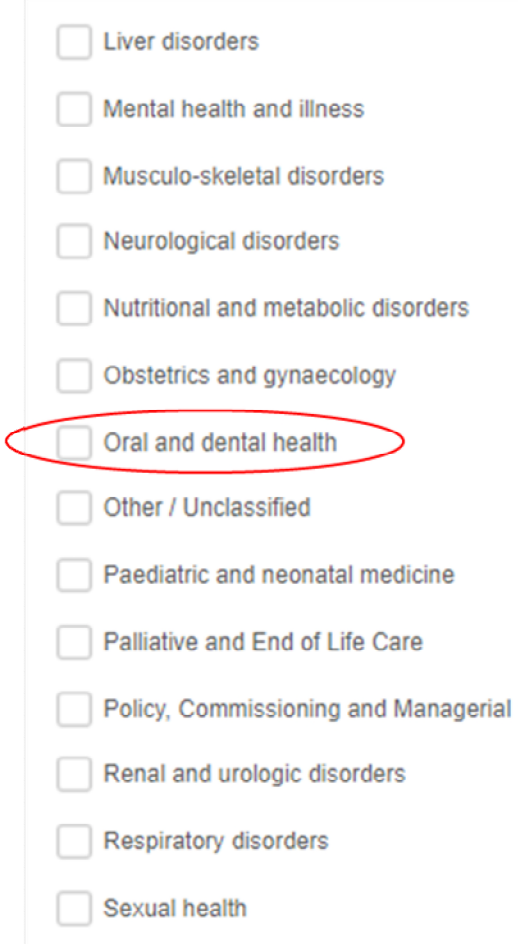


https://www.sps.nhs.uk

NICE - Medicine's awareness service







https://www.nice.org.uk/news/nice-newsletters-and-alerts

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