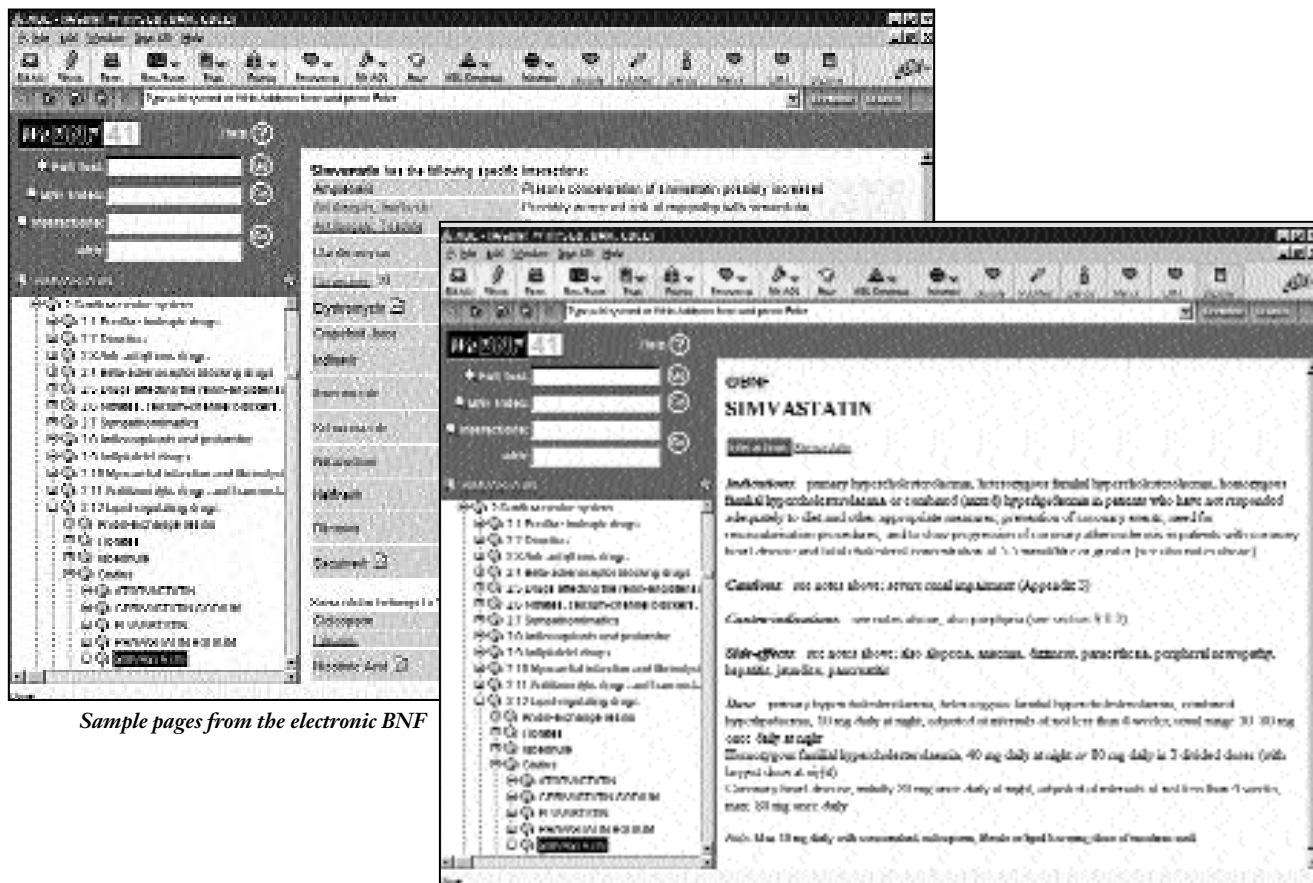


# WHERE TO START TO LOOK FOR MEDICINES INFORMATION ON THE INTERNET

*There is a vast amount of medicines information available on the internet. In this article, Michelle Johnson guides pharmacists towards some useful websites*



Sample pages from the electronic BNF

The pace of change in medicine seems to be constantly accelerating. Today's news is tomorrow's therapy and yesterday's reference book does not include it! But just as no reference book can keep up with change on a daily basis, neither can individual pharmacists. Knowing the answer to everything just is not possible, but knowing where to look is. Whether you are after basic information about a commonly used drug but do not have a British National Formulary to hand, trying to work out the UK equivalent of a foreign pharmaceutical, curious about the date a patent expires, have been asked about an antidepressant and breast feeding or want to know which topical preparations contain peanut oil, the internet has the answer. Unfortunately, one of the greatest strengths of the internet — the sheer volume of accessible information — can also be its greatest drawback if you do not know where to start.

## DRUGINFOZONE

No single site provides everything, but a good portal site will include links to other reputable sources of information, and an excellent portal for medicines information on the internet is the DrugInfoZone managed by London, South East and Eastern drug information services ([www.druginfozone.org](http://www.druginfozone.org)).

Features of the site accessible to everyone include:

- 1 daily health news stories and an archive of previous news
- 1 product licence changes, updated weekly, and a cumulative list of changes since 1 April 2001
- 1 a comprehensive links page organised both alphabetically and by subject type

In addition to these features, DrugInfoZone produces a number of publications for online viewing or download in pdf format

accessible from the publications link on the home page. These include:

- 1 Primary care journal watch
- 1 One-stop reference shop
- 1 Community health medicines update
- 1 Pharmacy's own magazine
- 1 Therapeutic reviews
- 1 Comparative reviews

**Primary care journal watch** Primary care journal watch is speed reading the easy way. It is a monthly bulletin summarising the main medical, pharmaceutical and health news journals and web stories and is presented in three sections. The first section covers new products and product licence changes, the second drug-related articles in-

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dexed by BNF category and the third articles of general interest to the National Health Service. The document contains hyperlinks to the original information source where possible and an archive of previous issues is available.

**One-stop reference shop** For more in-depth information the one-stop reference shop, a continuously updated resource, is a list of core documents obtained by screening many reference sources, including the internet, for independent evidence-based drug related reviews. Documents are indexed in BNF categories and organised to start with an overview and become more specific.

**Community health medicines update** The community health medicines update is a quarterly bulletin for health care professionals in primary care. It combines clinical, pharmaceutical and health policy updates with topical reviews of interest to primary care practitioners. Hyperlinks are included wherever possible.

**Pharmacy's own magazine** Pharmacy's own magazine is billed as a current awareness bulletin for hospital pharmacists, many of the topics are of broad interest, eg, St John's wort and COX-2 inhibitors. However, the bulletins only run to May 2000.

**Therapeutic reviews** Therapeutic reviews comprise detailed analyses of key therapeutic areas to meet the information needs of purchasers and providers. They provide practical information based on a thorough review of the literature and identify all important and relevant randomised controlled trials and systematic reviews of the therapeutic area. Some reviews have pre-empted National Institute of Clinical Excellence guidance, eg, the glitazones; others cover areas where NICE appraisal is not planned, eg, anti-parkinsonian agents.

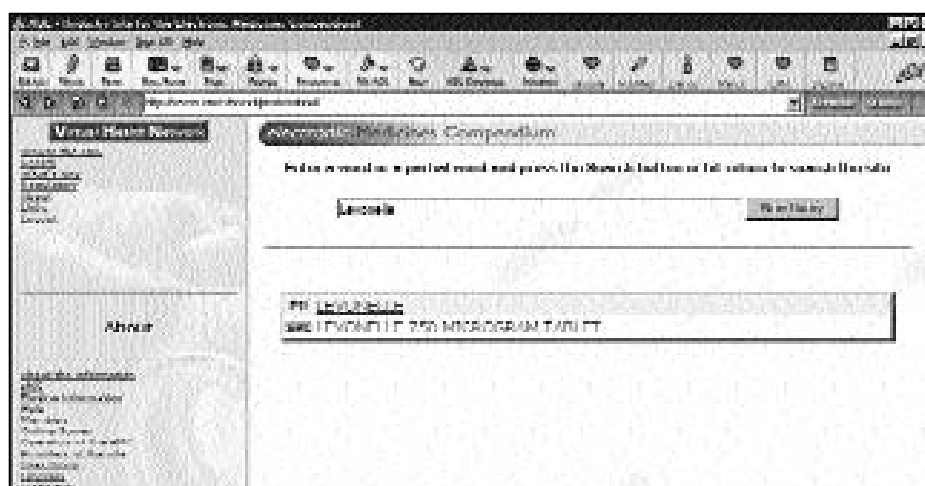
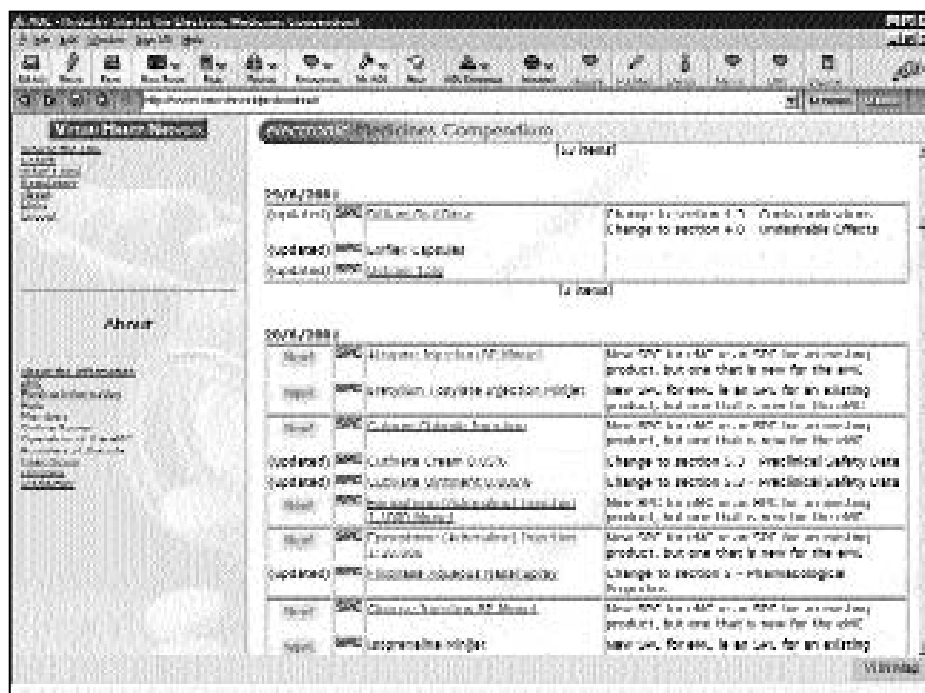
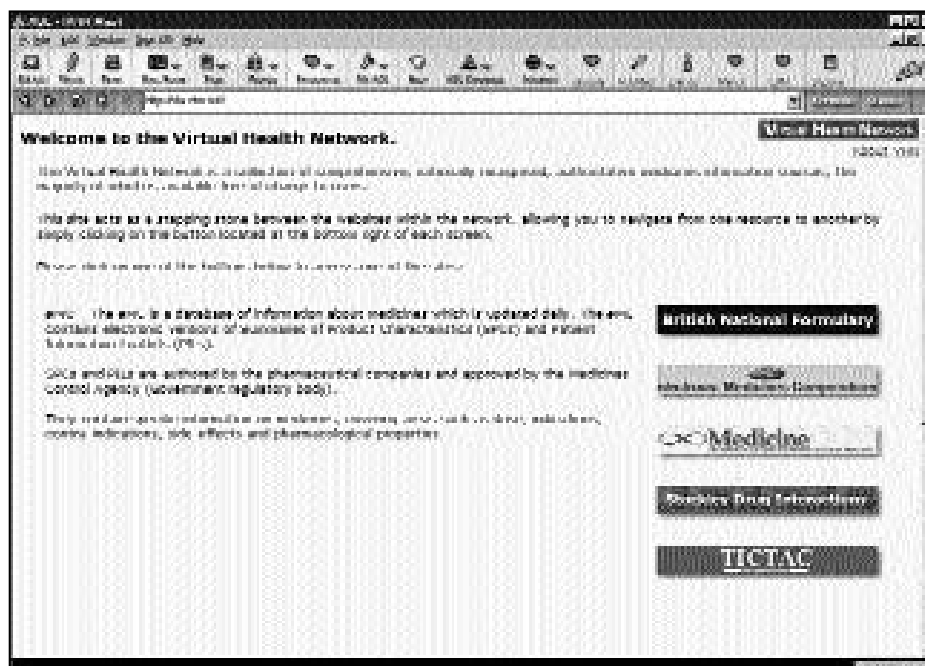
**Comparative reviews** Useful comparative reviews of the products within commonly prescribed drug classes, including statins and proton pump inhibitors, some of which are contributed by South West Medicines Information Service. Further examples can be located on its website at [www.ukht.org.uk/swmit/](http://www.ukht.org.uk/swmit/).

DrugInfoZone is fully searchable using Boolean operators and the results sorted by relevance or date order. Unfortunately, many potentially interesting articles retrieved are "subscriber access only" but this is not evident until the link is followed.

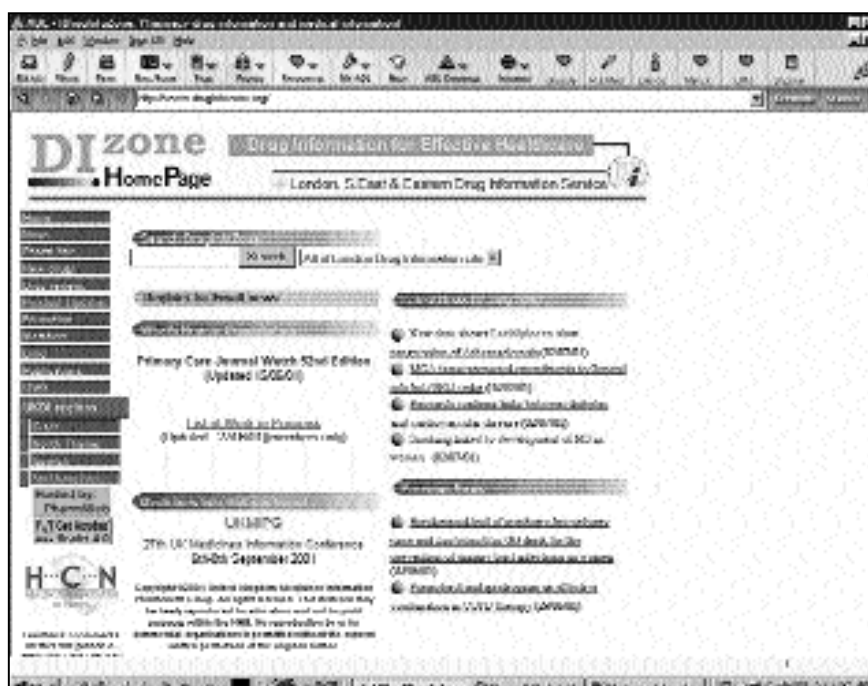
**NHS CENTRES**

Since NHS medicines information centres have been the backbone of drug information in the past, it is not surprising that they are good places to start in the electronic age.

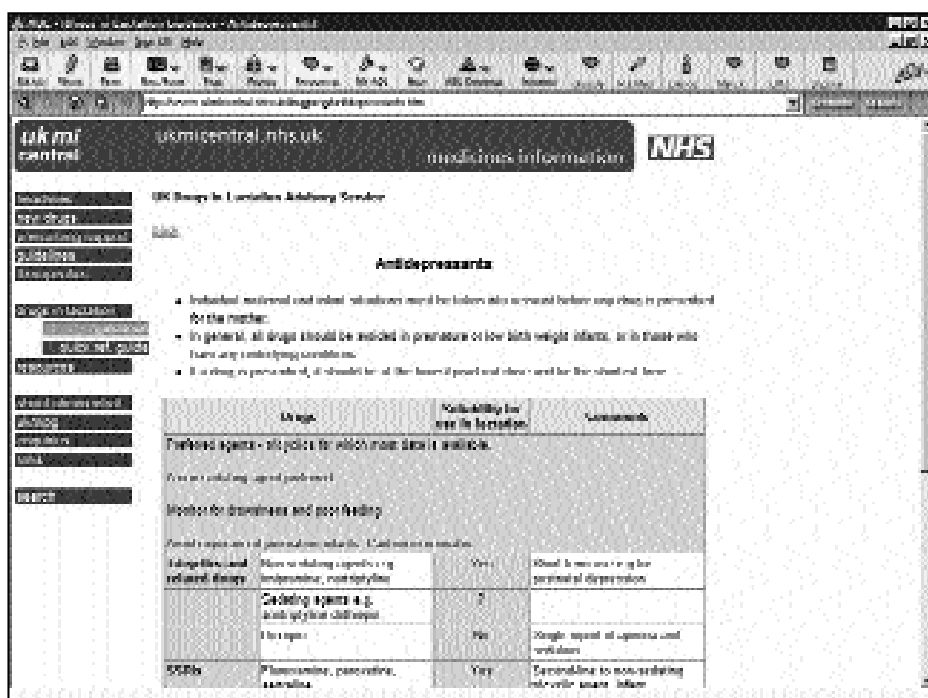
The Northern and Yorkshire regional drug and therapeutics centre website is at [www.nyxdtc.nhs.uk](http://www.nyxdtc.nhs.uk). Although it is home to the National Teratology Information Service, online information about the safety of



Three samples of pages from the Virtual Health Network



The home page of DrugInfoZone



Data about drugs in breast milk can be found at the West Midlands and Trent medicines information centres' website

drugs in pregnancy is restricted to NHSnet access and approved subscribers only. However, useful information available without registration includes local publications similar to those found on DrugInfoZone. In addition to the usual drug and disease management reviews, there is an excellent document on the management of poisoning.

West Midlands and Trent regional drug information centres share the maintenance of the national "Drugs in breast milk" data. Launched in June 2001, their joint website at [www.ukmidcentral.nhs.uk](http://www.ukmidcentral.nhs.uk) carries detailed information on safety in breastfeeding for several classes of drug commonly prescribed

in primary care. The site also includes some other useful features.

The prescribing support section has cost comparison information for a variety of BNF categories, but since prices change frequently the charts are of limited use in the long term. However, the support data option reveals a table linking directly to new product guidance issued by the Midland Therapeutic Review and Advisory Committee (MTRAC), based at Keele University ([www.keele.ac.uk/depts/mm/MTRAC](http://www.keele.ac.uk/depts/mm/MTRAC)). At that site, patent expiry can be searched by using the patent option from the prescribing support menu.

The guidelines section includes key publications on therapeutic management of many disease states. Some non-clinical guidelines are also included that may be useful in practice, including an exemplar confidentiality agreement, patient group direction and shared care protocols.

The site also hosts six local information publications in pdf format, three intended for primary care and three for secondary care. All are accessible from the therapeutics link on the home page. The FAQ (frequently asked questions) link currently covers three questions pharmacists often ask, including what topical dermatological preparations contain peanut oil. It is to be hoped that these will be regularly updated.

For a full listing of United Kingdom medicines information centres, visit [www.ukdipg.org.uk/html/directory.html](http://www.ukdipg.org.uk/html/directory.html).

## OTHER MATERIAL

In addition to news and reviews, the internet offers a considerable amount of printed material online with the added advantage of regular update and revision.

The BNF can be accessed directly at [www.bnf.org](http://www.bnf.org) and offers considerably more than the print version, including news, product updates, calculators and links — all accessible from a menu on the home page. The web BNF is easy to navigate using an expanding directory and is fully searchable. Direct links to drug interactions are provided within monographs.

For more detailed information and patient information, an electronic version of the Association of the British Pharmaceutical Industry's summaries of product characteristics and patient information leaflets can be found online at [www.emc.vnn.net](http://www.emc.vnn.net). An updated version of the Electronic Medicines Compendium was launched on 18 June. It allows new and updated summaries of product characteristics to be posted live as soon as they are authorised.

The Virtual Health Net site is one to watch because, in addition to live links to the eMC and BNF, it plans to bring Stockley's 'Drug interactions' and TicTac drug identification to the web for subscriber access in the near future.

For non-British pharmaceuticals, RxList.com at [www.rxlist.com](http://www.rxlist.com) is helpful and fuzzy logic searching takes account of dubious spelling. However this can be switched off if it returns too many options. Simply select alternatives from the options at the top of the home page and enter the drug name. The site is American but advertising makes that obvious, and the list of web links is long. None the less, RxList identified Inhibitron as Mexican omeprazole in one click. Once located, a monograph link brings up a generic information page with options to browse brand details and all the information normally incorporated in a summary of product characteristics and patient information leaflet. The site suffers from hyperlink overdose, with every third word linked to a java applet providing (often inappropriate) definitions, but despite the minor irritations, the site is useful.