



DRUG SHORTAGES

Across the world, drug shortages have a dramatic impact on patient care, including many aspects of anaesthesia including intra-operative and obstetric care.

The anaesthesia community has led much of the discussions on the drug shortage issue through its national societies and the [World Federation of Societies of Anaesthesiology \(WFSA\)](#). The Association has been at the forefront of work to highlight the challenges of drug shortages with its [National Essential Anaesthetic Drug List](#) (NEADL) document. NEADL aims to ensure there's a safe and sustainable supply of essential drugs for patients requiring anaesthesia. It provides advice to anaesthetists, as well as suppliers and managers, on a minimum set of drugs that should be available wherever anaesthesia is to be conducted safely.

The extent of the drug shortage issue in the UK

Despite NEADL, drug shortages in the UK are still an issue with problems of supply being reported. Drug shortages present significant risks for patients and threaten the stability of our health care systems. Anaesthetists have to change their care of patients because of a shortage of drugs.

The Specialist Pharmacy Service currently reports a national shortage of diamorphine 5mg and 10mg (July 2018). Other drugs missing from the anaesthetic drug cupboard in the recent past include lidocaine 10% spray, salbutamol, hydrocortisone, remifentanyl, vecuronium, cyclizine and lorazepam. There are reports of local shortages of some drugs (currently propofol) which probably relates to individual inability to source from alternative providers.

Which drugs are affected?

According to anaesthetic societies, shortages tend to be in the areas of:

- Injectable opioids
- Local anaesthetics
- Adrenaline
- Some antibiotics

Drug shortages across the world

The Association is in active communication with other national societies of anaesthesia to share information about drug shortages and their impacts. A recent survey by the [American Society of Anesthesiologists \(ASA\)](#) found:

- 98 per cent of respondents regularly experience anaesthesia drug shortages
- 95 per cent of respondents said those shortages adversely affect patient care

A report by the [US Government Accountability Office \(GAO\)](#) in 2014 noted that shortages have resulted in: 'delays in or rationing of care, difficulties finding alternative drugs, risk associated with medication errors, higher costs, reduced time for patient care, and hoarding or stockpiling of drugs in shortage. During a shortage, providers may have to cancel or delay procedures, which can have detrimental health effects on patients.'

Causes of drug shortages



Association of Anaesthetists

The causes of these shortages are multiple and include:

- The fragility of supply chains
- Consolidation of manufacturers
- The impact of the generic drug market
- The regulatory and logistical barriers to sourcing replacements from other markets

These issues are common worldwide and potentially impact on safe anesthesia care everywhere.

Unforeseen events can also cause significant problems. For example, in September 2017, Hurricane Maria virtually wiped out production of intravenous fluids manufactured in Puerto Rico. In the UK, the NHS England Chief Executive has confirmed 'significant planning' is happening to try and avoid shortages of medicines in the event of a 'no-deal' Brexit.

Shortages can last for months or longer and affect all classes of medications used in a variety of settings, such as emergency departments, hospitals and ambulatory surgical centres.

Solving the issue of drug shortages

Solutions to drug shortages will need to be geared to each country's economic, healthcare, legislative and regulatory system. However, common approaches have included the following:

Legislative: Raising awareness among law makers, implementing studies and giving direction to regulatory agencies to monitor and report shortages. Developing contingency plans where critical shortages are identified.

Regulatory: Engaging relevant drug approval agencies to act on tracking, reporting, working with manufacturers and contingency planning, and authorising imports of critical supplies.

Suppliers: Working with pharmaceutical companies, drug supply chain organisations and others to understand the impact of shortages and develop appropriate manufacturing contingencies. The Association does not support stockpiling by pharmaceutical companies as we believe this adds to the issue. Instead we aspire to a steady and secure supply chain.

Public and media: Raising awareness.

Professional medical societies: Raising awareness, educating all stakeholders and helping develop and disseminate information on alternatives in short supply situations, such as NEADL.