

A woman wearing a patterned hijab is seated in a hospital bed. She is looking towards the left of the frame. Medical equipment, including a drip chamber and tubing, is visible in the foreground. The background shows a hospital room with other people and furniture.

Safer Anaesthesia from Education (SAFE)

Safer Anaesthesia from Education (SAFE) is a project initially developed in 2010 through a collaboration between the Association of Anaesthetists and the World Federation of Societies of Anaesthesiologists (WFSA) which provides short courses in subspecialty areas of anaesthesia practice

The training initiative aims to equip anaesthesia providers with essential knowledge and skills so they can deliver safe care to their patients, and to create a sustainable training model which can be embedded in the national health system. More than 300 SAFE courses have been run in more than 50 countries, training over 9,000 providers.

Aimed at physician and non-physician anaesthesia providers, the 2-3-day courses use a modular approach and a variety of educational methods including lectures, small group discussions, low-fidelity simulation, and manikin-based skills practice. Flagship courses include:

- **SAFE Obstetrics:** The first SAFE course, developed in 2011, addresses the role of the anaesthesia provider in managing obstetric cases and emergencies, including clinical scenarios based on the conditions causing 80% of global maternal deaths (haemorrhage, sepsis and eclampsia), and maternal and newborn resuscitation
- **SAFE Paediatrics:** Developed in 2014, this course emphasises the principles of safe care for children, including anaesthesia for common elective and emergency conditions in children, pain management, fluid resuscitation, trauma, and newborn and paediatric life

In 2017, the SAFE Operating Room course was developed in recognition of the need for multidisciplinary training to support safe surgery. Developed in partnership with the Royal College of Surgeons of England, the Association for Perioperative Practice, the Royal College of Obstetricians and Gynaecologists, and the Lifebox Foundation, course content is based on the WHO Standards for Safe Surgery and includes sessions on leadership, teamwork, communication, decision making and conflict resolution, as well as surgical site infection prevention, the WHO Surgical Safety Checklist, procurement, and quality improvement.

SAFE courses can be run as standalone training, although are often run as part of broader capacity building projects and in collaboration with national anaesthesia societies, educational institutions, health authorities and partner organisations including Mercy Ships, Smile Train, Operation Smile, International Committee of the Red Cross and other international organisations and teams. This approach, along with training of local trainers, and provision of equipment and materials, contributes to building sustainability.

The initial approach combines visiting anaesthetists with local instructors, who are provided with a one-day SAFE 'Train-the-Trainers' course to become the in-country faculty of the future. Ongoing support is provided thereafter to establish local expertise in course delivery.

Over 1,350 trainers have taken part in the 'Train the Trainers' course and many courses are now being run independently by local and regional trainers.

The SAFE initiative is managed by the Association of Anaesthetists' SAFE Steering Group who oversee the management of SAFE including course materials and updates, language translations, funding, monitoring and evaluation, impact, and strategy.

Program developments: New models & courses

As the SAFE initiative expands, further models of training have been developed and piloted to strengthen the impact and sustainability of SAFE including:

- Adaptations to create context specific courses for delivery in specific regions or countries; the modular nature of SAFE courses lends itself to this
- SAFE course refresher and commitment to change workshops
- SAFE on-site training and mentorship programs to accompany classroom learning
- Incorporation of courses into national anaesthesia curricula or other training programmes
- Combining SAFE modules or courses with other short courses
- Online and hybrid options (see below)



In addition, new versions of SAFE Paediatrics courses have been developed in response to feedback and requests from SAFE partners. These include:

- SAFE Paediatrics GBI: A version of the original course adapted for UK anaesthetists in 2019. To date, 15 courses have been delivered in 10 UK locations, with funds over and above running costs directed back into supporting courses in low-resource settings
- SAFE Paediatrics Cleft: Launched in 2022, this course focuses on the principles of providing safe anaesthesia to children undergoing cleft lip and palate repair surgery including sessions on intercurrent illness and associated conditions and syndromes



Whilst originally designed for low resource settings, there has been increasing interest in SAFE from higher-income settings. The Japanese Society of Pediatric Anesthesiology have been running a locally adapted version of SAFE Paediatrics GBI since 2021, and there is growing interest from other countries, potentially expanding SAFE further as a global education program.

Scan QR code for more information, to apply for SAFE funding, or to register an interest in becoming a trainer



SAFE Online

SAFE Online (<https://safe-anaesthesia.org>) provides online SAFE courses (currently Obstetrics and Paediatrics) via interactive e-learning. Following development in 2021, and a two-year period offering online courses to registered groups, the platform launched open access in March 2024. The learning platform is mobile compatible, minimises data usage and allows users to access materials and work offline, providing flexibility to continue learning when there is no connection, and the potential to reach more providers and enable shared learning across broader geographical locations. Enabling both online and hybrid options, where e-learning is accompanied by interactive online discussions +/- in-person skills days, courses can be completed by individuals, or by groups who complete the courses over a given timescale. Materials can also be used as pre-course preparation and/or post-course refreshers. Since its open access launch in March 2024, the platform has over **800 registered users across 145 countries**.

Programme impact

Standardised monitoring and evaluation have been used to evaluate learning and impact across multiple countries in East, Central, and Southern Africa, and in South Asia. These evaluations have demonstrated retention of knowledge and skills and, utilising qualitative methodology, reported improved confidence and positive behaviour changes. In addition, workplace observations following the SAFE Obstetrics Course have shown positive behavioural change, suggesting translation of knowledge into clinical practice (for reference list see 'Impact and Sustainability' page at <https://safe-anaesthesia.org>).

In addition to a continuous medical education opportunity, the courses have provided a platform for the development of support networks and collaboration among anaesthesia providers locally, regionally, and globally.

Jolene Moore
SAFE Program Lead
Consultant Anaesthetist, Aberdeen

SAFE throughout the years



Over **50**
countries



Over **300**
courses delivered

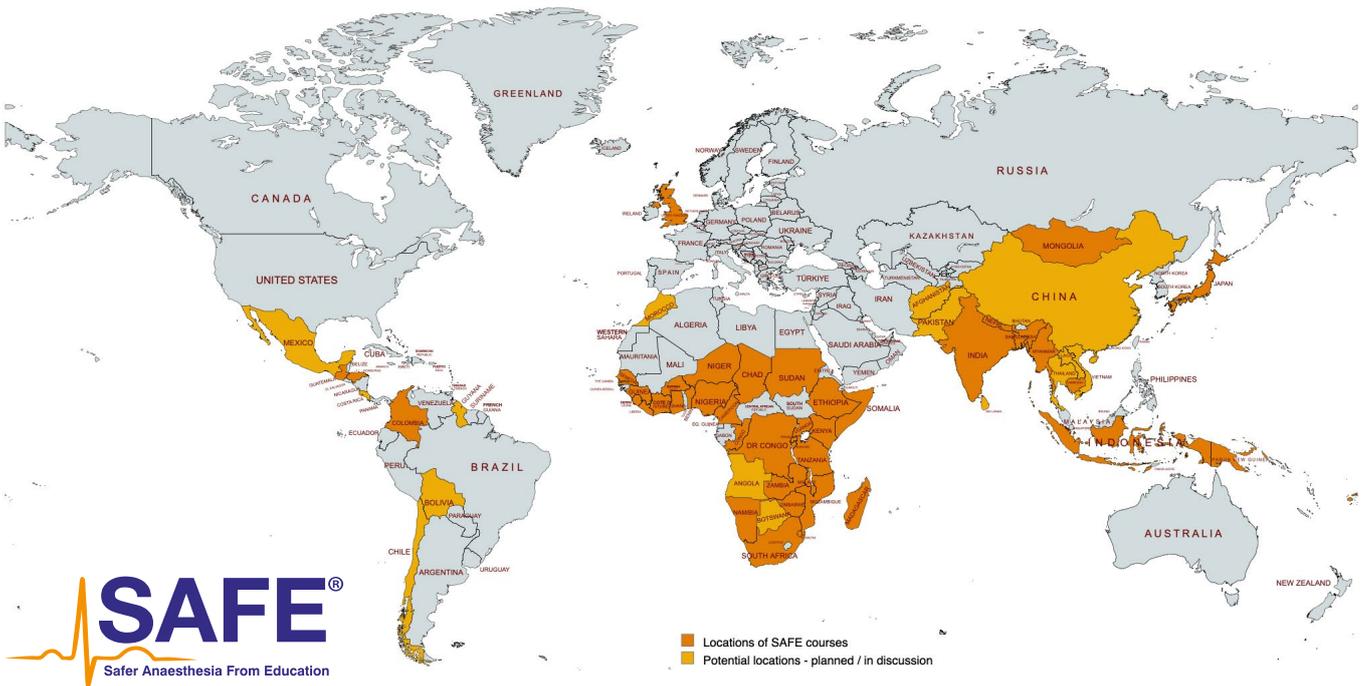


Over **1350**
trainers



Over **9000**
participants trained

Our courses: Obstetrics (since 2011, with Obstetric Fistula module added in 2021), Training of Trainers (since 2012), Paediatric (since 2014), Operating Room (since 2017) and Paediatric-Cleft (since 2021).



"The course was amazing. Previously, I saw these topics as minor issues, but this training has helped me understand their broader impacts on our work. We gained valuable knowledge and shared insights from colleagues in different hospitals. The sessions were brief and clear, so I'll be making some changes in my work based on what I learned. Very productive and educative -it's already helping me improve OR practices with my colleagues".

SAFE OR participant, Dar es Salaam, Tanzania (Participant)

If you would like to make a one-off donation to SAFE, you can do so here:



Donate now!



FUNDRAISING PACK

Safer Anaesthesia From Education (SAFE)

Saving lives through safer anaesthesia

www.anaesthetists.org/SAFE



AAASP Foundation is registered as a charity in England & Wales No. 295215 and in Scotland No. SC040897

Check out our new fundraising pack, full of fun ideas on how you can get involved and raise funds for SAFE:

