



“Stop Before You Block” poster: Background notes

The updated “Stop Before You Block” (SBYB) posters are cognitive aids designed to be displayed in locations where major regional anaesthesia is conducted to minimise the risk of wrong side and/or site regional blocks. They are endorsed by the Australian and New Zealand College of Anaesthetists (ANZCA), the Australian Society of Anaesthetists (ASA) and the New Zealand Society of Anaesthetists (NZSA) and are supported by Australia and New Zealand Regional Anaesthesia (ANZ RA). They are presented in full and brief forms which contain the same core messaging, but with more detail in the full version.

Wrong sided blocks continue to occur as has been identified by Australian and New Zealand WebAIRS reports, the Association of Anaesthetists in the United Kingdom, and other morbidity reporting bodies. Incidence in the UK ranges from one in 6250 to one in 7812.¹ This is despite the widespread promulgation of advice regarding “block time out” and SBYB processes and posters since 2011 and the recommendations in ANZCA *PG03(A) Major regional analgesia 2014*.

Contributing factors to the ongoing incidence of wrong sided blocks are many but include variable checking policies, time pressure, patient repositioning between multiple blocks, lack of two-factor confirmation of the side and site of the block prior to the undertaking the block and lack of visibility of the surgical marking on the skin just prior to preparing for the block. This has led to a review of the evidence and modification of the recommended processes.^{1,2}

In preparing the updated ANZCA SBYB poster, the recommendations of the Safe Anaesthesia Liaison Group (SALG) in the UK¹ were considered in the context of Australian and New Zealand anaesthesia practice. Recent guidelines from Queensland Health were also noted.³ Finally, much discussion and trialling occurred through ANZ RA. Simplicity and clarity were considered important for clear messaging. Colours alone are not a single solution for prioritising steps or purpose, as room lighting may vary (especially when observing ultrasound imaging), some staff have red/green colour blindness, and printing may be in greyscale rather than full colour.

The SALG poster has steps of “PREP”, “STOP” and “BLOCK”, emphasising that “STOP” is immediately before skin penetration and is to be repeated if this step is interrupted. This timepoint is considered too late in the procedure because significant “momentum” will be present to check and proceed without delay. Hence, on advice, the point of skin *preparation* has been adopted as the final pre-block check step.

This updated version incorporates the SALG concepts but also emphasises the World Health Organization (WHO) Anaesthesia “sign-in” pre-anaesthesia check, followed by a stopping and specific re-check at the time of skin preparation.

The two poster versions allow choice for individual sites to reflect emphasis on the different steps. If alternative designs of posters are used, retention of the principles will ensure consistency across institutions and jurisdictions.

Step 1. Anaesthesia sign-in

The “sign-in” timepoint of the Surgical Safety Checklist is included and is considered. It should be conducted by the anaesthetist and anaesthetic assistant, ideally when the patient arrives in the anaesthetic room, or operating/procedure room if they are not being prepared in an anaesthetic room. (Some hospitals have a “check-in” section which is separate and precedes the “sign-in” and occurs on arrival and reception into the theatre holding area.)

- The “sign-in” constitutes the first step in patient, procedure and site confirmation. The surgical site must be marked before or by the completion of sign-in, if applicable.
- There was much discussion regarding whether the anaesthetist should make an additional mark to indicate the side/site of block at this time, which is verified as part of the “sign-in” process. This approach is not a primary emphasis of these cognitive aids, as there are risks associated with incorrect marking, but if undertaken it must be done after the surgical site marking has occurred and be checked by a second person.

Step 2. Procedure set-up

Following the two-person “sign-in”, the patient is positioned, the ultrasound machine is positioned and a pre-scan performed (if desired), and the block equipment is set-up and opened.

Step 3. Stop immediately before prepping

Readiness to prep the skin, with everything else ready, constitutes the major final step in patient, procedure and site confirmation. This is an intermediate step between the WHO checklist “sign-in” and “surgical time out”. Ideally the anaesthetic assistant and anaesthetist conduct this check, verifying the patient identification and side of procedure against the consent, and confirming against the skin mark. On advice, stopping at needle insertion moment (as in the first poster and UK and Queensland posters) may be too late as there is too much “momentum” at this point.

Step 4. Perform block

The skin is prepped, draped, and the block is then conducted.

Any delay or interruption to performing the block after the check before prepping the skin requires a repeat of patient, procedure and site confirmation as above. The importance of the site/site mark being visible is emphasised by this possibility.

References

1. Haslam, N., et al. (2022). "'Prep, stop, block': refreshing 'stop before you block' with new national guidance." *Anaesthesia* 77(4): 372-375.
2. Nottingham University Trust (2020) Stop Before You Block Campaign 2020 RCoA www.rcoa.ac.uk/sites/default/files/documents/2020-08/SBYB-Supporting-Info.pdf Accessed 25 April 2025
3. Queensland Health. (2024) Communique – Stop before you Block www.health.qld.gov.au/_data/assets/pdf_file/0027/1438245/stop-before-you-block-guide-communique.pdf Accessed 25 April 2025