






Recognising the risks of lone working in the laboratory

What is lone working?

When one member of staff is working by themselves and covering the department/s in the complete absence of on-site colleague support or supervision. Lone working is standard practice in UK laboratories, especially during evenings, at night and during weekends. Clinical staff may experience similar scenarios, but this SHOT bite focuses on the transfusion laboratory.

What risks does lone working present?

Lone working can inherently pose a greater risk of errors as the worker is isolated, without colleagues available for advice or to assist in tasks. There are unique challenges lone workers face including:

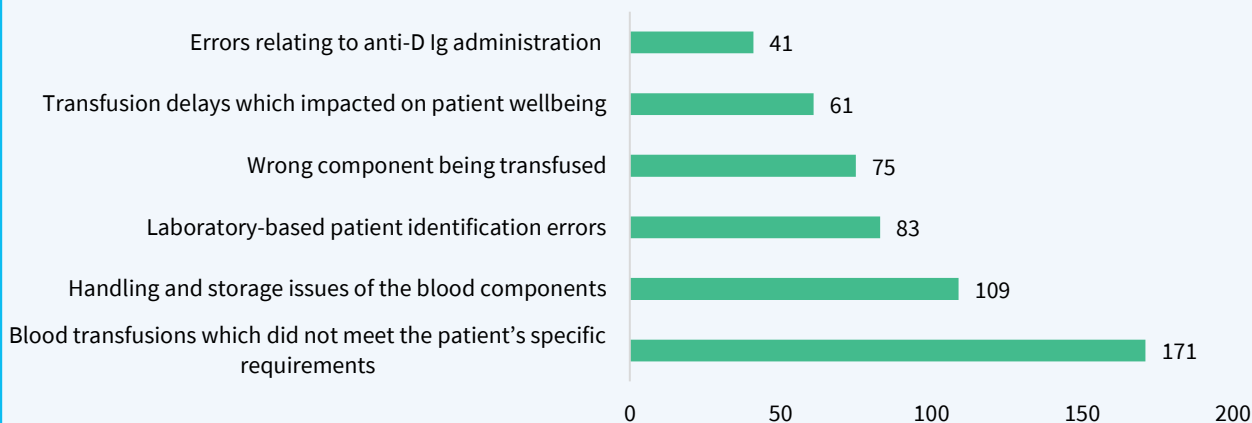
-  High pressure decision making
-  Increased responsibility
-  Limited or no access to support through peers and senior staff
-  Isolation, stress, confidence and competence issues
-  Communication and contact issues

In the laboratory where one staff member may cover several pathology disciplines during their lone working period, these issues are further heightened when dealing with emergencies.

What does SHOT data show?

SHOT incident data consistently identifies lone working as a contributory factor in approximately 30% of preventable laboratory transfusion errors. Swarbrick et al., 2025, analysed SHOT laboratory data from 2020-2023 for errors involving lone working as a contributory factor. During this time 1794 laboratory errors were reported, of which 540 lone working reports were identified (30.1%) (Figure 1). These errors resulted in 2 patient deaths due to transfusion delays (1 possibly related, 1 probably), and 11 cases of major morbidity due to development of anti-K in patients of childbearing potential.

Figure 1. Transfusion laboratory errors occurring during lone working n=540 (2020 - 2023)



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Can risks for lone workers be reduced?

Laboratory management should complete a risk assessment for lone working, identifying any potential risks and mitigating actions. This should be logged on local risk registers and reviewed if service needs change. When completing a risk assessment, the following should be considered:

Staffing

- Rota planning to match staff availability
- Prioritise complex tasks during multi-staff periods
- Automation to reduce individual manual workload

Training & competency assessment

- Planned continuing education and training with on going competency reassessment (minimum annually)
- Ensure staff are appropriately experienced prior to lone working (with specific lone working competency assessment)
- Scenario-based training for high-risk situations

Out-of-hours support for lone workers

- Clear handover mechanisms including equipment, resources and urgent patient requests
- Documented contact details, decision tools and escalation plan
- Access to specialist advice at all times

Resources

- Clear and accessible downtime procedures
- Access to technical support for equipment
- Reliable communication devices

Safety culture

- Staff are encouraged and supported to escalate concerns promptly
- Psychological safety is prioritised, enabling staff to pause or stop the process and obtain advice when needed

Learning from incidents

- Identify and record if lone working contributed to transfusion safety incidents
- Monitor effectiveness of interventions
- Regular incident review and trending

Where can I find supporting resources and guidelines?



Standards (2025)

- Access to support
- Training and education
- Lone working policies
- Just and learning safety culture

Standards (2023)

- Staffing
- Qualifications, knowledge and skills
- Information technology
- Just culture

Recommendations

- Laboratory & clinical training & education review
- Adequately staffed and resourced
- Reporting to SHOT

Regulations

- Adequate staff, qualifications & experience
- Quality management system
- Capacity plans

Transfusion 2024

- Transfusion training hub
- Review of IBMS approved Biomedical Science Bsc for content and provide support



References and resources

Swarbrick et al., 2025: <https://publications.ergonomics.org.uk/uploads/Working-alone-saving-lives-a-focus-on-transfusion-laboratory-safety.pdf>

Lone working - HSE

Guide to the preparation, use and quality assurance of blood components (2025): <https://www.edqm.eu/en/blood-guide>