Breaking the cycle

Multiple errors resulting in transfusion of incorrect blood components

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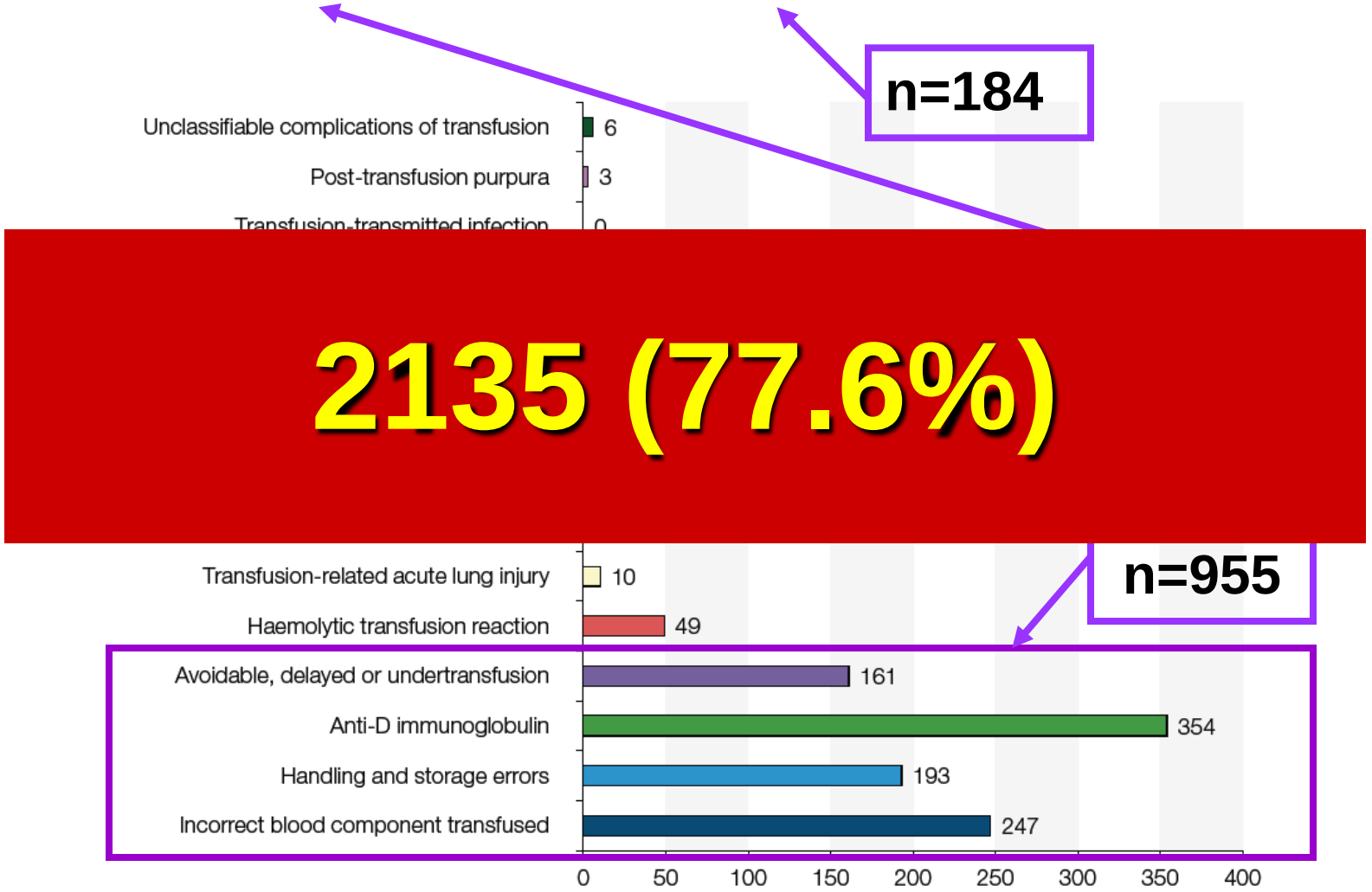
Reports analysed 2013

(excluding near miss and right blood, right patient)



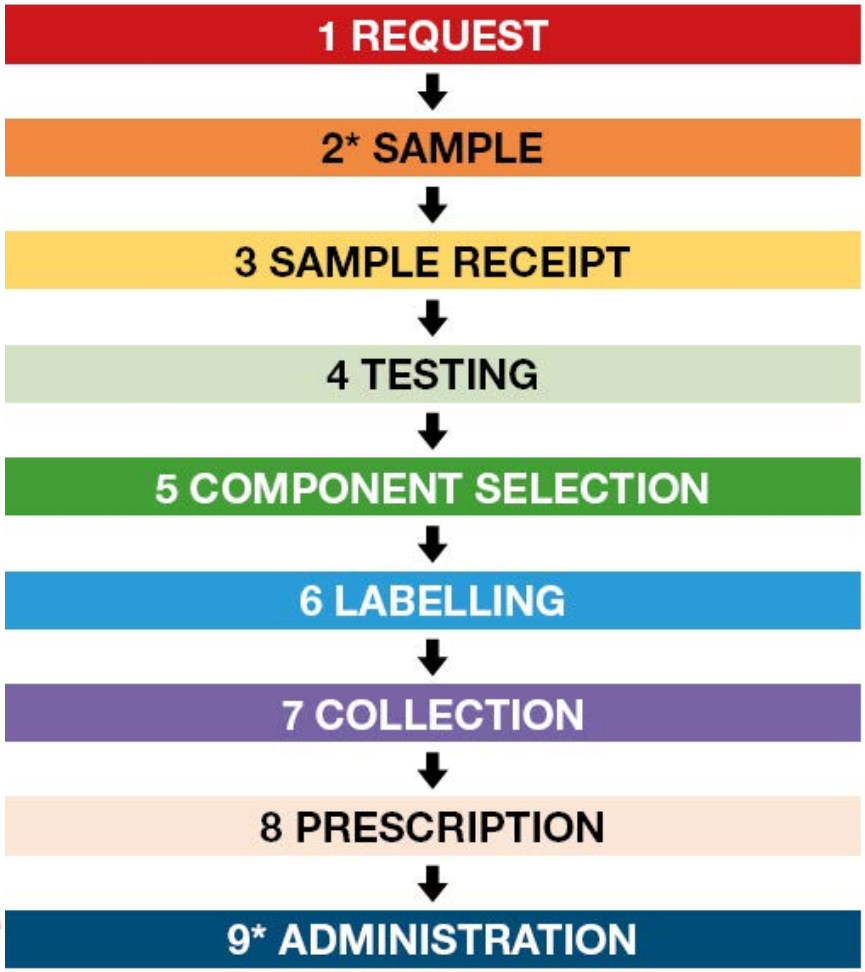
Deaths & serious harm associated with error reports 2013

- **5 deaths – delayed transfusions**
  - certain n=1
  - possible n=4

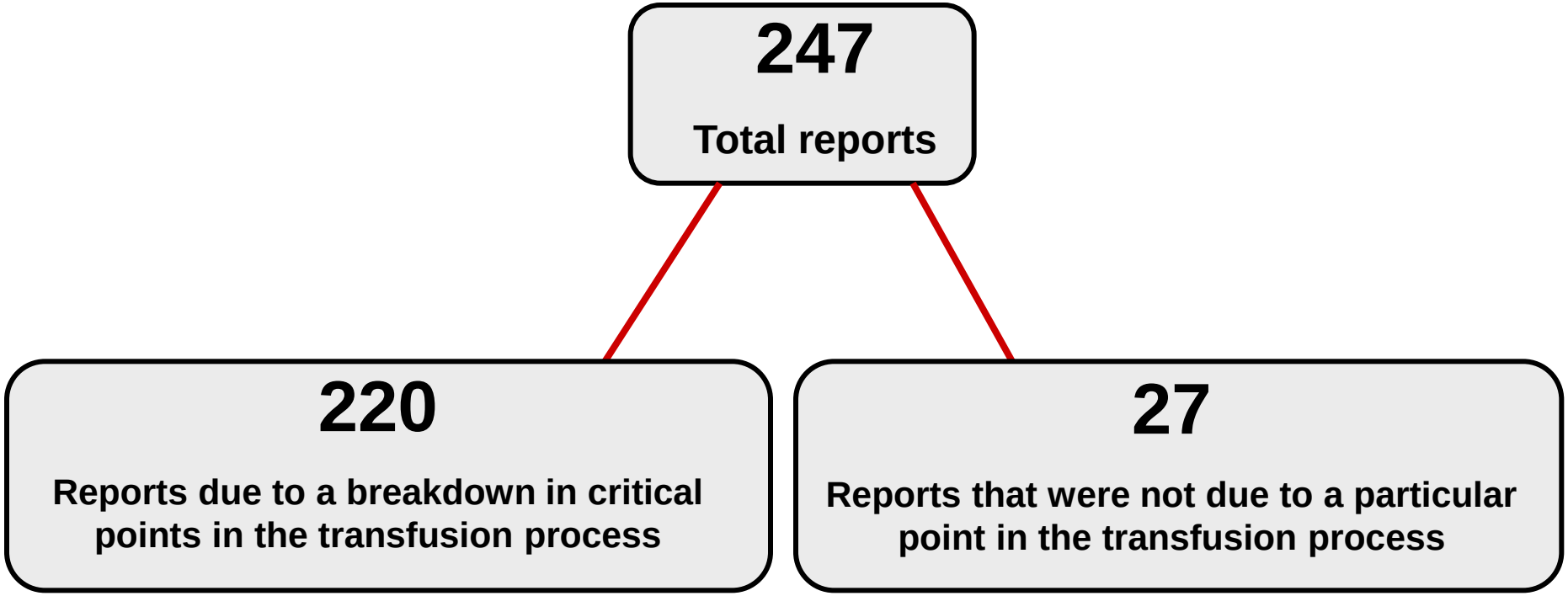
- **14 instances of major morbidity**
  - 7 delayed transfusions
  - 6 wrong component transfused
  - 1 anti-D sensitisation

SHOT analysis diagram

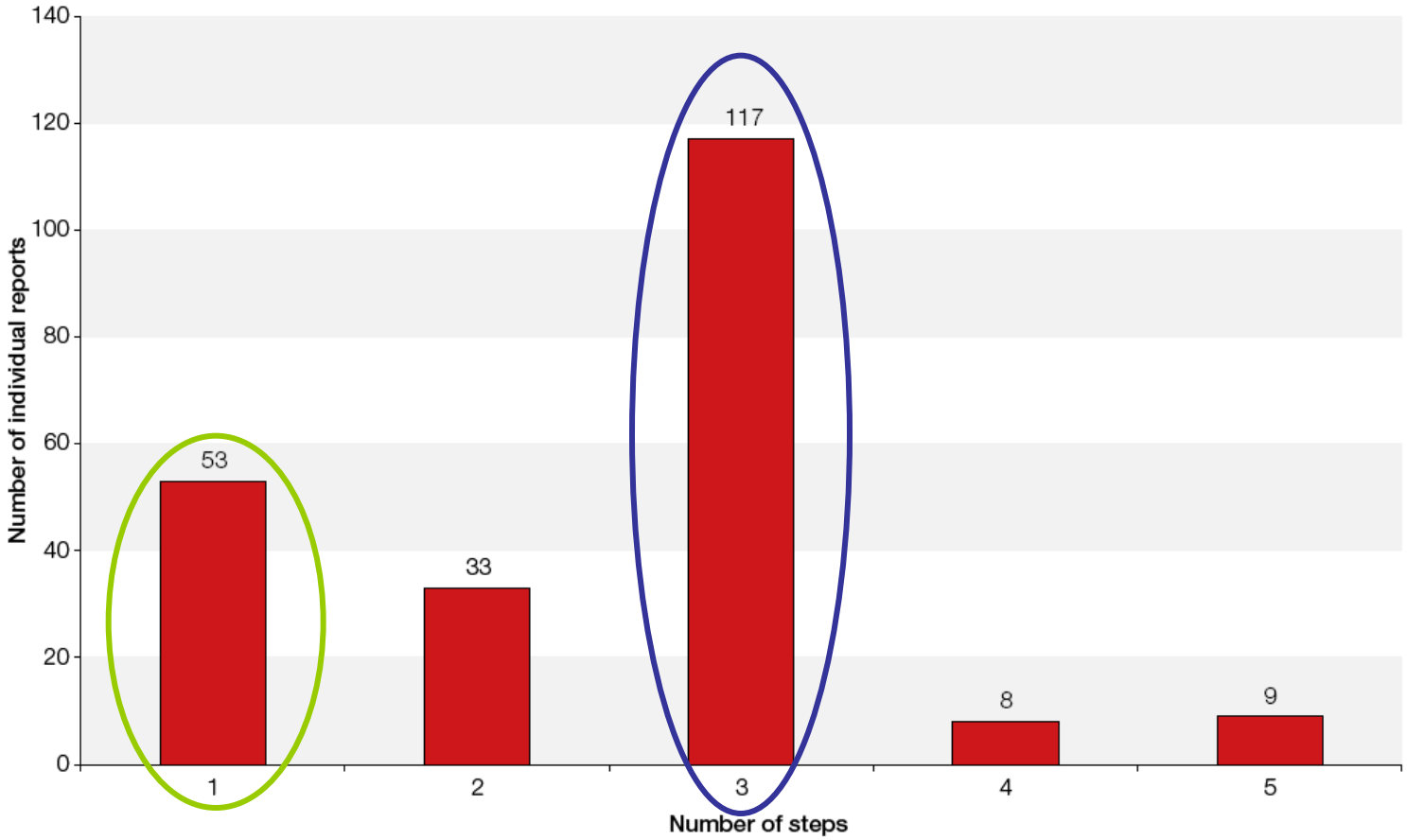
Critical points:
Positive patient identification essential



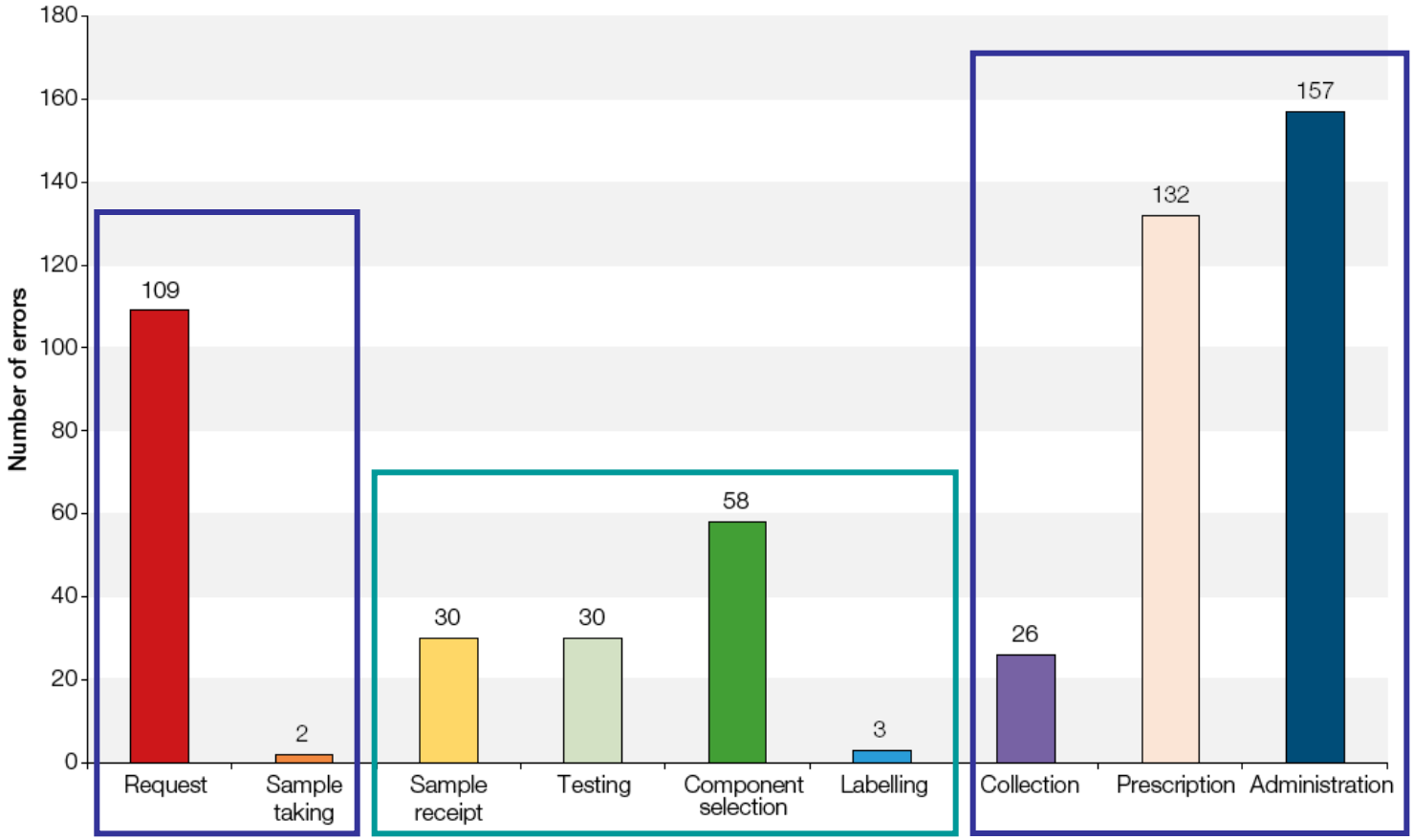
Overview of cases where the wrong component was transfused in 2013



Number of steps where there was a critical breakdown in the transfusion process n=**220**



Steps in the process where an error was made or where an opportunity was missed to detect the primary error n=**547 in 220 cases**



CASE STUDIES

Case study 1

- Two units of blood were requested for a patient with no indication on the request that the patient had specific requirements
- The patient was flagged as requiring irradiated blood products in the historical transfusion database (treatment with fludarabine and cyclophosphamide)
- During the laboratory enquiry procedure this was missed and not transferred to the new laboratory database.
- 2 non-irradiated units were crossmatched: 1 unit was transfused but the error noted prior to the 2nd unit which was returned to the lab and an irradiated unit was crossmatched

Case study 2

- Following shift handover a staff nurse went to perform the 15 minute transfusion observations for her patient
- She noticed that the blood was not being transfused to this patient (O RhD positive) and was instead being administered to another patient on the ward (A RhD positive)
- The staff nurse had checked the unit of blood outside the patient's room with another member of staff and then departed to give handover to day the staff
- The second person attached the unit of blood to a different patient

Main issues in Incorrect Blood Component Transfused?

- **155/220** (70.5%) of reports, the error could have been detected at the final pre-administration check
- **109/220** (49.5%) of reports, the primary error was made at the request step and not detected at a subsequent step
- **31/220** (14.1%) had combined laboratory & clinical errors which were not detected by either area

Main issues in Incorrect Blood Component Transfused?

- Assumption
- Team work
- Communication failures
- Shared care and other influences outside the process
- Prescription

Recommendations

- Redesign of the transfusion process

- A simple 5 point aide-memoire at the final step at the ‘bedside’

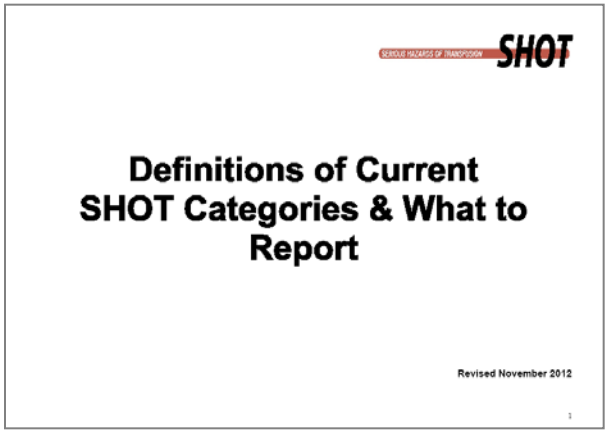
5 step aide-memoire

1. Positive patient identification
   (ask patient to state name and date of birth)
2. Check identification against the patient's wristband
3. Check the prescription: has this component been prescribed?
4. Check the prescription: Is this the correct component?
5. Check for any specific requirements – does the patient need irradiated components or specially selected units?

Additional Information

Following documents available on website to help with reporting:
www.shotuk.org

- SHOT reporting definitions
- SHOT reporting toolkit
- Clinical Lessons
- Laboratory Lessons



Also available:

- SHOT reports
- SHOT summaries
- Supplemental data

Acknowledgements

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2015 Annual ISBT/SHOT Symposium

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at the ISBT/BBTS Congress,
Excel Centre, London, E16 1XL