



Whole blood-prehospital and in-hospital in Sweden

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Short version

- *Where and when is whole blood used in Sweden?*
Since 2019 on two ambulance helicopters in west-Sweden
Since October 2022 pre-hospital in one 24/7 emergency car with a physician and in-hospital at the trauma center at Karolinska in Stockholm
- *Production-logistics*
In West Sweden: 2 units one week on the ambulance-helicopter, then back to the blood bank and packed red cells are prepared. Plasma is discarded.
In Stockholm: one unit one week at the emergency car then up to the trauma fridge. Base production 3 units/week.
- *Material*
CPD, leukoreduced, platelet sparing filter (Terumo), 21 days storage. Blood group O RhD pos/neg, male, low-titer donors.
- *Experiences*
low wastage-0%
the clinicians are very positive; "easy, fast, everything in one bag"
Data from west Sweden after 3 years will be published
Stockholm started Oct-until now; prehospital 3 units, in-hospital 15 units are transfused
Other regions are planning to start- independant routines



Whole Blood



Pro:

- Time "every minute counts"
- balanced transfusion with platelets early
- high concentration of red cells, platelets, coagulation factors compared to blood components diluted in additive solutions

Con:

- logistic challenges for the Blood Bank
- blood groups (incompatible plasma)
- only one supplier of leukocyte reduction and platelet sparing filter

