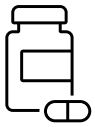
Child Death Overview Panel
Leicester, Leicestershire & Rutland

Case Learning: Safe storage of adrenaline on neonatal units

Situation	A preterm neonate collapsed on the neonatal unit, became bradycardic and required resuscitation. During resuscitation, 1:1000 concentration adrenaline was given in error instead of 1:10 000 (a 10 times dosing error). The emergency resuscitation drug box had contained both concentrations. Pre-prepared emergency prescriptions on the drug card and lack of staff awareness of the presence of both concentrations also contributed to the error. As anaphylaxis is incredibly rare in neonatal care, and 1:1000 strength adrenaline remained available in the NNU drug storage cupboards should it be required, a Trust-wide action was undertaken to remove 1:1000 adrenaline vials from all neonatal resuscitation boxes.
Takeaway	Co-storage of 1:1000 & 1:10 000 concentrations of adrenaline in neonatal resuscitation boxes increases the risk of drug errors during resuscitation.
Actions	 • **Neonatal services are advised to review their emergency drug box contents.**  • **If both 1:1000 and 1:10 000 concentrations of adrenaline are present in emergency drug boxes, risk assessment and raising staff awareness of this are also advised.**
Resources	NHS Specialist Pharmacy Service: Managing medicines safely in clinical areas

For more information about the LLR Child Death Overview Panel click here.