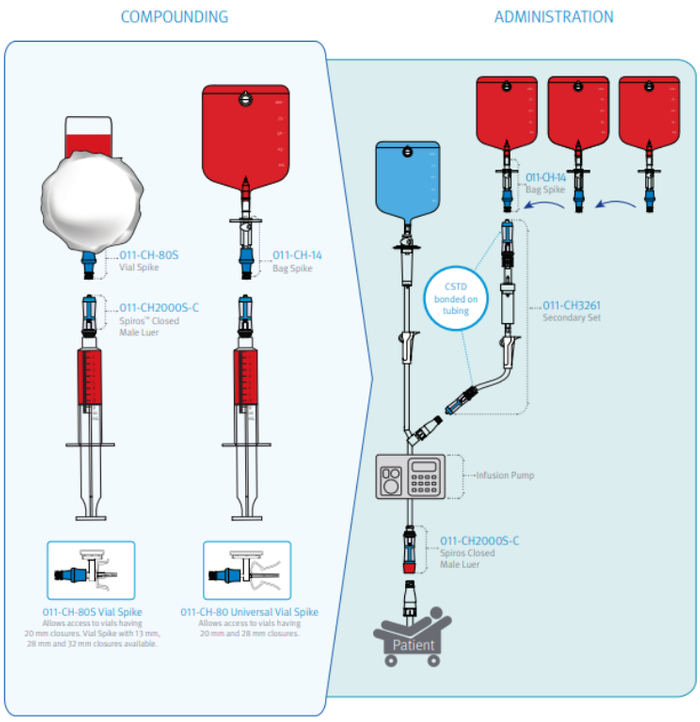
The work we're doing

At Nuffield Health, following a comprehensive review of evidence highlighting the risks hazardous medicinal products (HMP's) can pose to healthcare professionals, we strategically implemented a robust programme aimed at minimising exposure to potentially harmful substances in our hospitals.

This initiative includes the full adoption of Closed System Transfer Devices (CSTDs), standardisation of Personal Protective Equipment (PPE) across all relevant clinical areas, and targeted training and education for all staff in our care environments, including our domestic and portering teams.



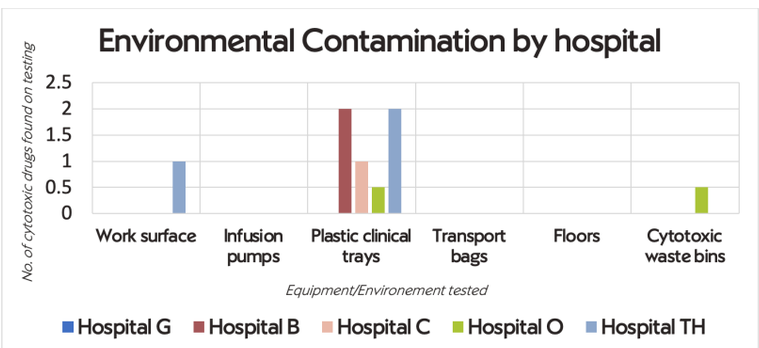
An example closed system transfer device

As part of this detailed approach, we've also introduced environmental monitoring that includes annual surface wipe testing to ensure we're consistently meeting the highest safety and compliance standards across all our hospitals. The breadth and scope of the work we're doing reflects our commitment to protecting staff while maintaining the highest standards of patient treatment and care.

The impact of our programme

Environmental testing

Identifying areas where drug contamination was found through extensive environmental testing allows us to understand more about reducing surface contamination in our hospitals.



The impact of our programme

Before and after our changes

It is important to note that the pre-intervention testing was conducted in environments where initiatives to reduce exposure risks had already been partially implemented.

Before

Cytotoxic drugs tested	Contamination (ng/cm2)	Nothing detected	Trace elements	0.10 – 1.0	1.0 – 10	>10
	PAC (ng/cm²)	30	0	0	0	0
	ETO (ng/cm²)	30	0	0	0	0
	DOX (ng/cm²)	30	0	0	0	0
	CP (ng/cm²)	18	10	0	2	0
	5FU (ng/cm²)	25	0	4	0	1
	GEM (ng/cm²)	16	14	0	0	0
	MTX (ng/cm²)	28	2	0	0	0
	DOC (ng/cm²)	29	1	0	0	0
	IP (ng/cm²)	24	6	0	0	0
	CYT (ng/cm²)	28	2	0	0	0

Analysis of complete data taken from the initial wipe testing results from 5 sites . Showing the number ofareas/equipment contaminated as totals not including hospital information. Drugs analysed: paclitaxel (PAC),etoposide (ETO), doxorubicin (DOX), cyclophosphamide, (CP), 5-fluorouracil (5FU), gemcitabine (GEM), methotrexate(MTX), docetaxel (DOC), ifosfamide (IP), cytarabine (CYT)

After

Cytotoxic drugs tested	Contamination (ng/cm2)	Nothing detected	Trace elements	0.10 – 1.0	1.0 – 10	>10
	PAC (ng/cm²)	59	1	0	0	0
	ETO (ng/cm²)	60	0	0	0	0
	DOX (ng/cm²)	60	0	0	0	0
	CP (ng/cm²)	58	1	1	0	0
	5FU (ng/cm²)	56	3	1	0	0
	GEM (ng/cm²)	60	0	0	0	0
	MTX (ng/cm²)	60	0	0	0	0
	DOC (ng/cm²)	59	0	1	0	0
	CYT (ng/cm²)	59	1	0	0	0

Contamination (ng/cm²)	< 0.10	0.10 – 1.0	1.0 – 10	>10

Analysis of complete data taken from the subsequent wipe testing results from 10 sites . Showing the number ofareas/equipment contaminated as totals not including hospital information. Drugs analysed: paclitaxel (PAC),etoposide (ETO), doxorubicin (DOX), cyclophosphamide, (CP), 5-fluorouracil (5FU), gemcitabine (GEM), methotrexate(MTX), docetaxel (DOC), cytarabine (CYT)

Is our programme expensive?

The short answer is no.

Data shows that using a closed system transfer device can save approximately £1 per patient who is receiveing three drugs during treatment.

IV Secondary Delivery

First Preparation

Open Systems			Closed System		
Primary Set	14001	$3.12			
Secondary Set	14028	$1.53	Bag Spike	011-CH-14	$1.28
100mL fluid bags	0	$0.91	Primary Set	14001	$3.12
100mL fluid bags	0	$0.91	Prime-Less Secondary Set	011-CH3261	$4.55
			1000mL fluid	0	$1.65
			NA		
Single Dose Cost			Single Dose Cost		
$6.47			$7.48		

Second Preparation

Open Systems			Closed System		
100mL fluid bags	0	$0.91			
Secondary Set	14028	$1.53	Bag Spike	011-CH-14	$1.28
NA			NA		
NA			NA		
Two Dose Cost			Two Dose Cost		
$8.91			$8.76		

Third Preparation

Open Systems			Closed System		
100mL fluid bags	0	$0.91			
Secondary Set	14028	$1.53	Bag Spike	011-CH-14	$1.28
NA			NA		
NA			NA		
Three Dose Cost			Three Dose Cost		
$11.35			$10.04		

Total Three Dose Cost Difference
$1.31