

S1. Supplementary Materials

Results for Task 2 without the added steps

S1 Table. Means for Both (BG-0_{max}) and (Average BG-0) Values for Each CSTD Task in Parts per Million (ppm)

CSTD Device (n=10)	Task 1		Task 2		Task 2+ added steps	
	Mean BG-0 _{MAX}	Mean of Average BG-0	Mean BG-0 _{MAX}	Mean of Average BG-0	Mean BG-0 _{MAX}	Mean of Average BG-0
ChemoLock™	173	71.14	51.11	22.61	55.49	25.81
Equashield®	0.101	0.042	0.213	0.107	0.297	0.135
HALO®	0.47	0.182	0.476	0.2	0.566	0.255
OnGuard™ with Tevadaptor®	14.9	8.226	14.13	7.319	14.13	7.011
PhaSeal™	0.543	0.252	0.543	0.25	0.622	0.25
Texium™ with SmartSite™ VialShield	6.524	1.234	7.795	2.751	9.43	3.942

Note: BG = background; CSTD = closed system drug-transfer device; n = number of repetitions.

S1 Fig. Level of IPA vapor escape detected in parts per million (ppm) throughout 16 steps repeated for 10 repetitions in Task 2 for six different CSTDs. (NIOSH performance threshold set at 1.0 ppm). Data represent mean and range values. IPA= 70% Isopropyl Alcohol, CSTD = closed system drug-transfer device. Graph scale= A (0-200), B, C, E (0-1), D (0-20), F (0-50). Note: ppm scaling differences between graphs



