

Safer Use of Controlled Drugs (CD) - Preventable harm still occurring with CDs administered via MS Syringe Drivers

Patient safety incident reports with CDs administered via MS Syringe Drivers

In December 2010 the National Patient Safety Agency issued Rapid Response RRR019: 'Safer Use of Ambulatory Syringe Drivers'.

This identified 8 deaths and 167 non-fatal that were reported the [National Reporting and Learning System](#) (NRLS) between 1 January 2005 and 30 June 2010.

Many of these incidents described infusions that had either run through much quicker than expected, or had not infused at all. It was recommended that a transition between existing MS syringe drivers and ambulatory syringe drivers with additional safety features, such as ml per hour settings and modern alarms, should take place soon as locally feasible, and within five years of this RRR.

The National Reporting and Learning System is still receiving reports of incident involving MS Syringe Drivers, usually involving Controlled Drugs, where patients are being harmed.

There were 23 reports of harm between 1 January 2011 and 31 November 2012.

Type of incident	Level of Harm				Total
	Death	Severe	Moderate	Low	
Incorrect rate setting		1	1	3	5
Unexplained failure to deliver infusion			3	3	6
Unexplained fast infusion			2	0	2
Syringe incorrectly inserted				4	4
Unexplained slow infusion				2	2
Other			2	2	4
Total		1	8	14	23

(See the [supporting information](#) (PDF) for more details of these incidents)

Checklist for safer use of ambulatory syringe drivers

1. Introduce ambulatory syringe drivers with safer design into practice as soon as possible.

It is recommended that **no MS syringe drivers are used in NHS and independent healthcare providers providing NHS funded care, by December 2015 at the latest.**

2. Take steps to reduce the risks of rate errors while MS syringe drivers remain in use, based on a locally developed risk reduction plan which may include:
 - i. raising awareness
 - ii. providing information to support users with rate setting
 - iii. using lock-boxes