Link adrenaline (epinephrine) 1 in 10,000 prefilled syringe – device failure

Background
An incident report has been received regarding the failure of the **Link brand of adrenaline (epinephrine) 1 in 10,000 prefilled syringe 10 mL.** This product is indicated for use as an adjunct in the management of cardiac arrest.

The tip of a Link adrenaline (epinephrine) 1 in 10,000 prefilled syringe 10 mL was reported to be blocked resulting in the liquid being unable to be expelled from the syringe. Another Link adrenaline (epinephrine) prefilled syringe was then used without issue. It was reported that a compatible connector device was in use, and that user error was not a contributing factor.

Reports from South Australia Health have indicated that blockages have occurred in the tip of the syringe and cannot be seen without removing the syringe cap and the interlink connector on the end of the syringe. Similar isolated incidents have been reported in the NSW Incident Information Management System in 2016, 2017 and 2018.

In addition to the incident described above, facilities should be alert to the fact that not all connector systems are directly compatible with the Link adrenaline (epinephrine) 1 in 10,000 prefilled syringe 10 mL. In 2017 Link distributed a Safety Alert regarding this issue. Facilities are advised to only use compatible connector and adaptor systems with this prefilled syringe.

As a blockage is thought to have occurred while using a compatible connector, facilities using the Link adrenaline (epinephrine) prefilled syringe should ensure the availability of additional stock or alternative adrenaline (epinephrine) products for emergency situations.

Facilities should conduct a local risk assessment to determine the most appropriate adrenaline (epinephrine) product for use in the management of cardiac arrest. This should include an assessment of any connectors in use to ensure that they are compatible with any prefilled adrenaline (epinephrine) syringes.

Further Information

**SAFETY ALERT** - ADRENALINE-LINK 1:10,000 1mg/10mL adrenaline (epinephrine) acid tartrate injection BP pre-filled syringe AUST R 210672

Suggested actions by Local Health Districts/Networks

1. Distribute this notice to all relevant staff and all clinical departments.
2. Assess usage of the Link adrenaline (epinephrine) 1 in 10,000 prefilled syringe 10 mL in each facility, ensuring all locations of stock are identified.
3. Conduct a risk assessment to determine the most appropriate adrenaline (epinephrine) product for use in cardiac arrest. This should include an assessment of any connectors in use to ensure that they are compatible with any prefilled adrenaline (epinephrine) syringes.
4. In facilities where Link brand of adrenaline (epinephrine) 1 in 10,000 prefilled syringe 10 mL is stocked facilities should:
   a. Only use compatible connector and adaptor systems as listed in Link’s Safety Alert.
   b. Ensure the availability of additional stock or alternative adrenaline (epinephrine) products for emergency situations. Alternative adrenaline (epinephrine) products include adrenaline (epinephrine) 1 in 10,000 ampoules and Juno brand of adrenaline (epinephrine) 1 in 10,000 prefilled syringe 10 mL.
   c. Report any malfunction failure of the Link brand of adrenaline (epinephrine) 1 in 10,000 prefilled syringe 10 mL in the facilities incident management system and to the TGA.
5. Ensure a system is in place to document actions taken.
6. Confirm receipt of this notice to CEC-MedicationSafety@health.nsw.gov.au