



## Risk of death and severe harm from ingesting superabsorbent polymer gel granules

**Date of Issue:** 28-Nov-19 **Reference No:** NatPSA/2019/002/NHSPS

This alert is for action by: All organisations using polymer gel products; including hospitals, mental health units, ambulance services, community services, hospices and care homes.

This is a safety critical and complex National Patient Safety Alert. Implementation should be coordinated by an executive leader (or equivalent role in organisations without executive boards) and supported by clinical leaders in nursing, infection prevention and control, continence management, and falls prevention.

### Explanation of identified safety issue:

Superabsorbent polymer gel granules (including sachets, mats and loose powder) are used to reduce spillage onto bedding, clothing and floors when patients use urine bottles or vomit bowls, or when staff move fluid-filled containers (eg washbowls, bedpans).

In 2017, NHS Improvement issued a Patient Safety Alert<sup>1</sup> warning of the asphyxiation risk associated with the use of these gel granules. A patient died after ingesting a sachet of gel granules that had been left in a urine bottle in their room.

Since 2017, there have been a further 12 reported incidents of ingestion by patients; two patients died, and two patients required emergency treatment. These involved polymer gel products left in their urine bottles or vomit bowls or left for nearby patients to use. These incident reports, and NHS purchasing patterns<sup>2</sup>, suggest providers have been relying on local awareness raising rather than reviewing their overall approach to the use of these products.

As a result of these incidents, and new guidance<sup>3</sup> reinforcing that polymer gels are only required for exceptional infection control purposes<sup>4</sup> this alert requires any organisation still using these products to protect patients by introducing strict restrictions on their use.

### Actions required



#### Actions to be completed by 01/06/2020

**1. Hospitals, mental health units, hospices and care homes** must make a single decision for each of their sites<sup>i</sup> to either:

- a)** exclude polymer gel granules (sachets, mats, loose powder) from all patient uses **or**
- b)** restrict them to exceptional use only<sup>ii</sup> via a specialist team<sup>iii</sup>.

If option (b) is chosen, the site must provide risk assessment pro formas<sup>iv</sup> that consider the risk for all patients in the location, not just the patient with whom polymer gel use is intended.

**2. Ambulance trusts** must make a single decision for their service to either:

- a)** exclude polymer gel granules (sachets, mats, loose powder) from all patient uses **or**
- b)** restrict their use to settings where patients are constantly observed (eg emergency ambulances).

**3. Community nursing and community therapy services** must make a single decision for their service to either:

- a)** exclude polymer gel granules (sachets, mats, loose powder) from all patient uses **or**
- b)** provide risk assessment pro formas<sup>iv</sup> that consider risk for all people in the house, not just the patient for whom polymer is required.

**4. All types of setting** must:

- a)** put in place purchasing controls that block unauthorised ordering of polymer gel granules (sachets, mats, loose powder)
- b)** if continued use required, purchase the product<sup>v</sup> that patients are least likely to confuse with food<sup>vi</sup>.
- c)** ensure any polymer gel for non-patient use (eg spill kits, controlled drug destruction, use by cleaning staff) is kept secure and away from patients<sup>vii</sup>.

For further detail, resources and supporting materials see: [improvement.nhs.uk/news-alerts/superabsorbent-polymer-gel-granules-2019](https://improvement.nhs.uk/news-alerts/superabsorbent-polymer-gel-granules-2019)

For any enquiries about this alert contact: [patientsafety.enquiries@nhs.net](mailto:patientsafety.enquiries@nhs.net)

## Additional information:

### Notes

- i. A building or co-located group of buildings that patients could be transferred between without an ambulance.
- ii. Includes exceptional infection control or personal dignity/falls prevention uses.
- iii. If no specialist teams, access should be via a designated senior member of the clinical staff.
- iv. Risk assessment pro formas should assess the risk to all patients/people in the location/house, not just the patient for whom polymer gel use is intended; and introduce procedures that ensure supplies are securely stored away from general use and returned/destroyed when no longer required for that patient.
- v. Discuss with NHS Supply Chain liaison officer where available.
- vi. Confused patients or those with poor vision may be more likely to put polymer gels that resemble sugar sachets or loose sugar into their mouths than fibrous mats containing polymer gel, but all types present a risk of choking/self-harm.
- vii. These products are not covered by CoSHH regulations, but providers of NHS-funded care should consider adding them to their inventory for safe storage as an extra safeguard.

This alert does not preclude the use in future of any polymer products that are designed to be impossible for patients to put in their mouths (eg fixed coatings on the inside of receptacles).

### Patient safety incident reporting

National Reporting and Learning System (reference 5152) was searched on 23 June 2019 for incidents reported as occurring between 5 July 2017 and 31 March 2019. We identified 11 reports, plus one additional incident on Strategic Executive Information System, where patients had ingested polymer granules. Reports described patients opening sachets and tipping the contents onto food or drink, eating the sachet itself or eating the activated or partially activated gel from urine bottles drinking beakers, tea cups and plates of food. Many reports described confused or otherwise vulnerable patients given a dry urine bottle or vomit bowl with a sachet (or multiples) inside, or sachets left on or near patient tables or removed by patients from tables and trolleys. A particular risk are patients who are transferred with these products to areas unfamiliar with their use or that do not realise the patient has these with them, or where temporary or junior staff use the products as they have seen them used in other areas.

### References

1. [NHS Improvement Patient Safety Alert: Risk of death and severe harm from ingestion of superabsorbent polymer gel granules – July 2017](#)
2. Information supplied by NHS Supply Chain
3. Clinical guidance for the appropriate and safe exceptional use of superabsorbent polymer gel granules for the containment of bodily waste - 2019. <https://improvement.nhs.uk/resources/clinical-guidance-for-the-appropriate-and-safe-exceptional-use-of-superabsorbent-polymer-gel-granules-for-the-containment-of-bodily-waste/>
4. Public Health England and infection prevention and control experts confirm these products are helpful in the management of [Hazard Group Four viral haemorrhagic fevers and similar human infectious diseases of high consequence in infectious disease units](#) and not required for routine infection control purposes.

### Stakeholder engagement

- NHS England and NHS Improvement Infection Prevention and Control team
- The Infection Prevention Society
- NHS Supply Chain
- Public Health England (National Infection Service)
- National Patient Safety Response Advisory Panel (see [here](#) for a list of members)

### Advice for Central Alerting System officers and risk managers

This is a safety critical and complex National Patient Safety Alert. In response to CHT/2019/001 [The introduction of National Patient Safety Alerts issued](#) via CAS on 17 September 2019, your organisation should be developing new processes to ensure executive oversight and co-ordination of safety critical and complex National Patient Safety Alerts. CAS officers should send this Alert to the executive leader nominated in their new process to co-ordinate implementation of safety critical and complex National Patient Safety Alerts, copying in the leads identified on page one. If CAS officers do not yet know which executive leader will do this, they should send this Alert to their Chief Nurse and Executive Medical Director (or equivalent roles, including in organisations without executive boards). This alert asks for co-ordinated implementation across the trust/organisation, and so should not be disseminated to individual teams or departments by the CAS officer.