

# Outbreak of *Klebsiella pneumoniae* CPE (OXA-48)

## Aim

There was a prolonged outbreak of *Klebsiella pneumoniae* CPE (OXA-48) at King's College Hospital, between September 2020 and November 2021. The cases were linked epidemiologically to an Elderly Care ward. The outbreak coincided with the SARS-CoV-2 pandemic.

## Methods

A number of factors were identified as contributing to the outbreak:

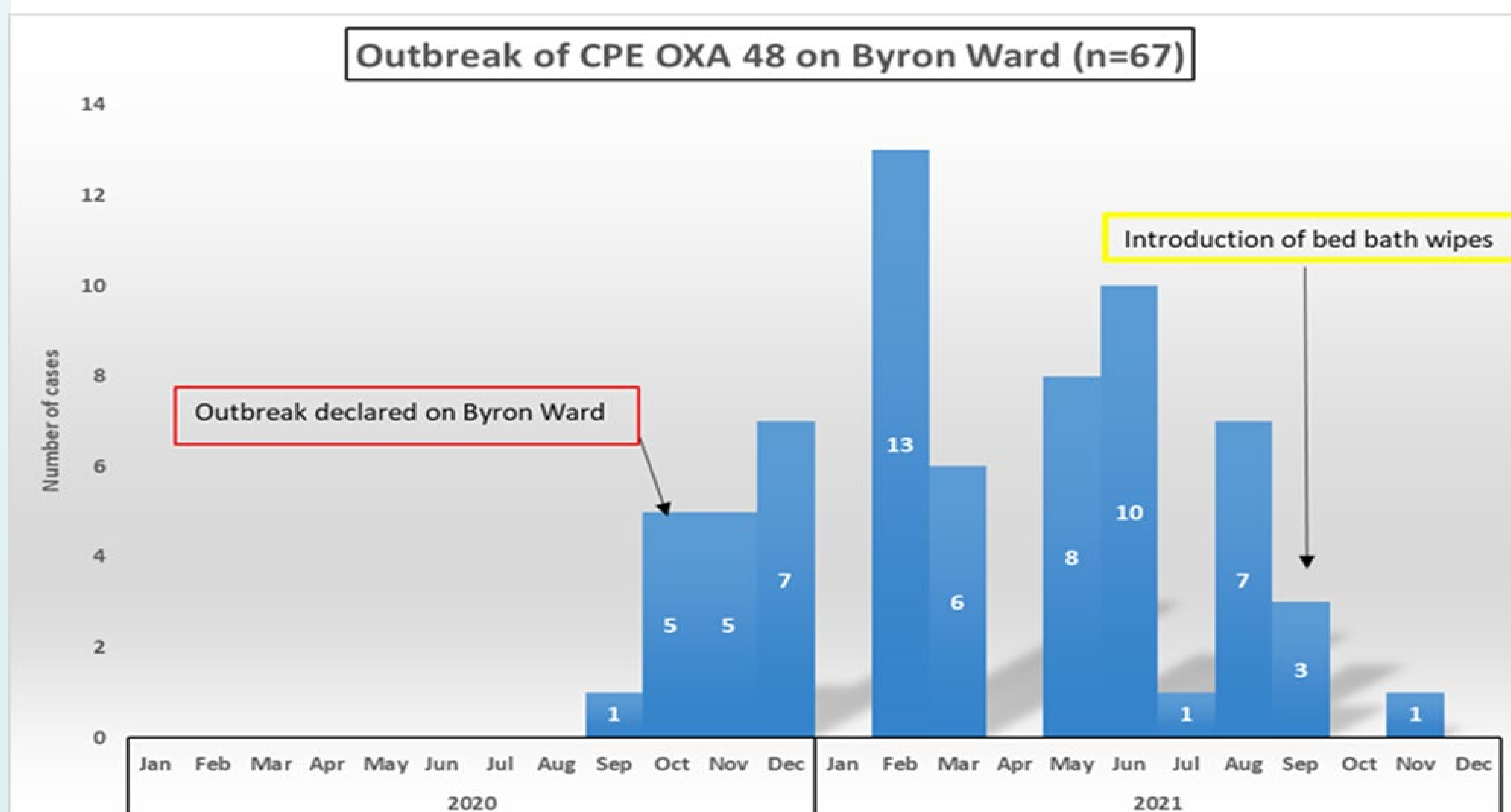
- Overuse of gloves and inappropriate glove use, which impacted on hand hygiene compliance
- Variability in infection control practice
- Cleanliness of equipment and the environment
- Fabric of the Estate

Interventions to control the outbreak included ward closure, replacement of the hand wash basins, environmental swabbing, enhanced cleaning, repair of the damaged environment, daily surveillance, increased patient screening, ward based audit and education. Clinell bed bath wipes and chlorhexidine wash cloths were introduced in September 2021, to replace the use of disposable wash bowls, soap and water. A short questionnaire was used to evaluate staff and patient feedback.

## Results

Following the introduction of the Clinell products, (see Figure 1), there was only one further Trust apportioned CPE OXA-48 case in November 2021, with no subsequent cases to date. This was a significant drop in the number of cases, which peaked in February 2021. 75% of patients said would recommend the wipes to other patients, and 84% of staff would recommend the use of wipes to other healthcare providers.

**Figure 1: Outbreak of CPE OXA 48 Byron ward (n=67)**



## Conclusion

Despite implementation of the recommended actions in the 'PHE Framework of Actions to Contain CPE', case ascertainment remained high. Management of the outbreak was challenging due to the SARS-CoV-2 pandemic and the PPE guidance, which may have contributed to the inappropriate use of gloves, including overuse. Introduction of the Clinell bed bath wipes and chlorhexidine wash cloths were successful in bringing the outbreak under control. It is hypothesised that this intervention interrupted the chain of transmission associated with the use of sinks, wash bowls and associated equipment. Use of CHG washcloths may have reduced any potential reservoir of microorganisms on patients' skin.