



Public Health  
England

Protecting and improving the nation's health

# *Shigella* spp. trends in England

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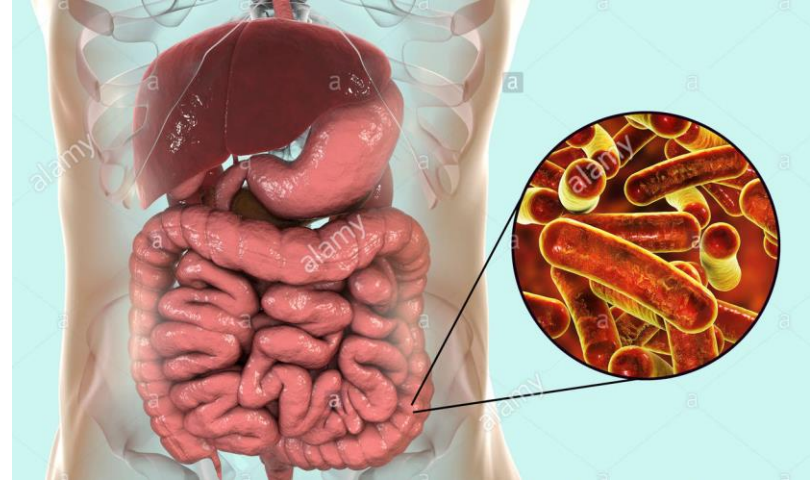
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# Content

- Brief introduction to Shigella
- Update on epidemiology of sexually transmitted Shigella in England
- Evidence of current awareness among MSM

# What is Shigella?

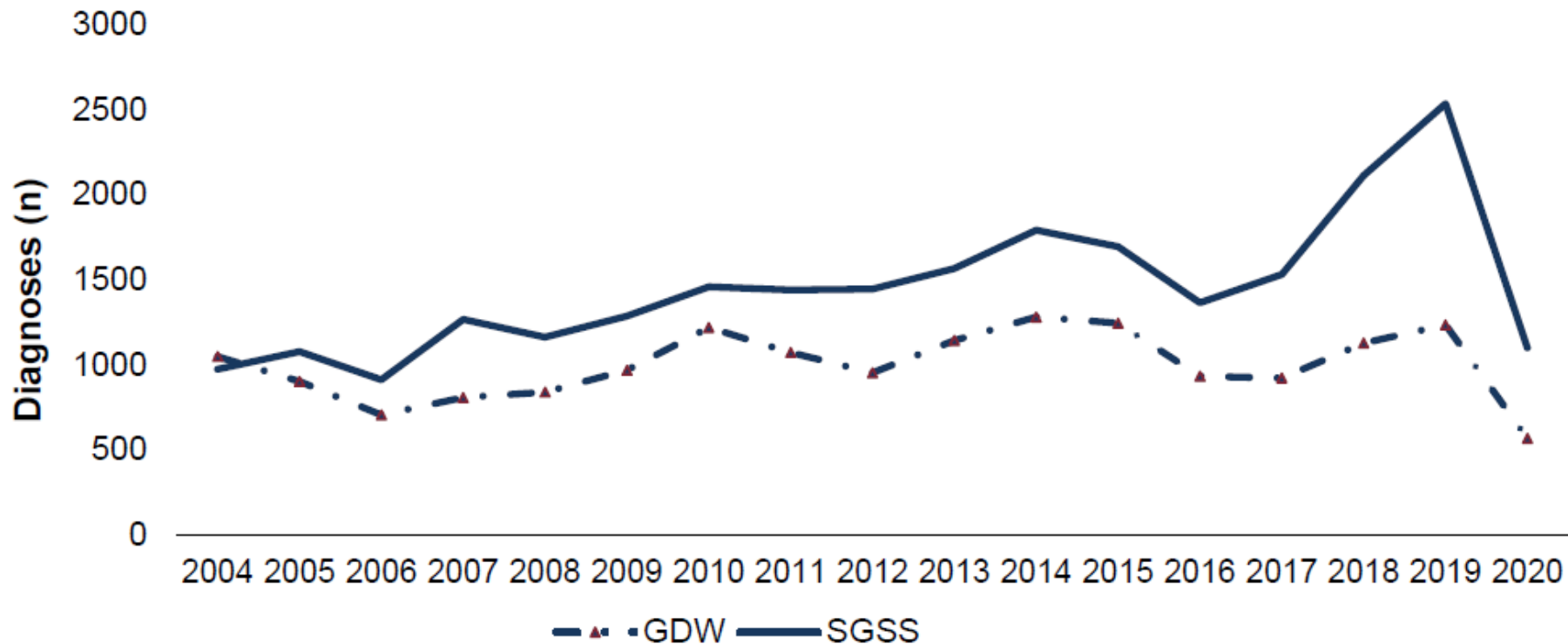
- Shigella bacteria cause dysentery
  - Symptoms = diarrhoea, stomach cramps and bloody stools
  - Ranging from self-limiting to severe
  - Symptoms start 12-96 hours after exposure
  - Symptoms typically last 4-7 days
  
- Four species – focus on *Shigella flexneri* & *Shigella sonnei*
  - *S. flexneri* is a notifiable disease in UK



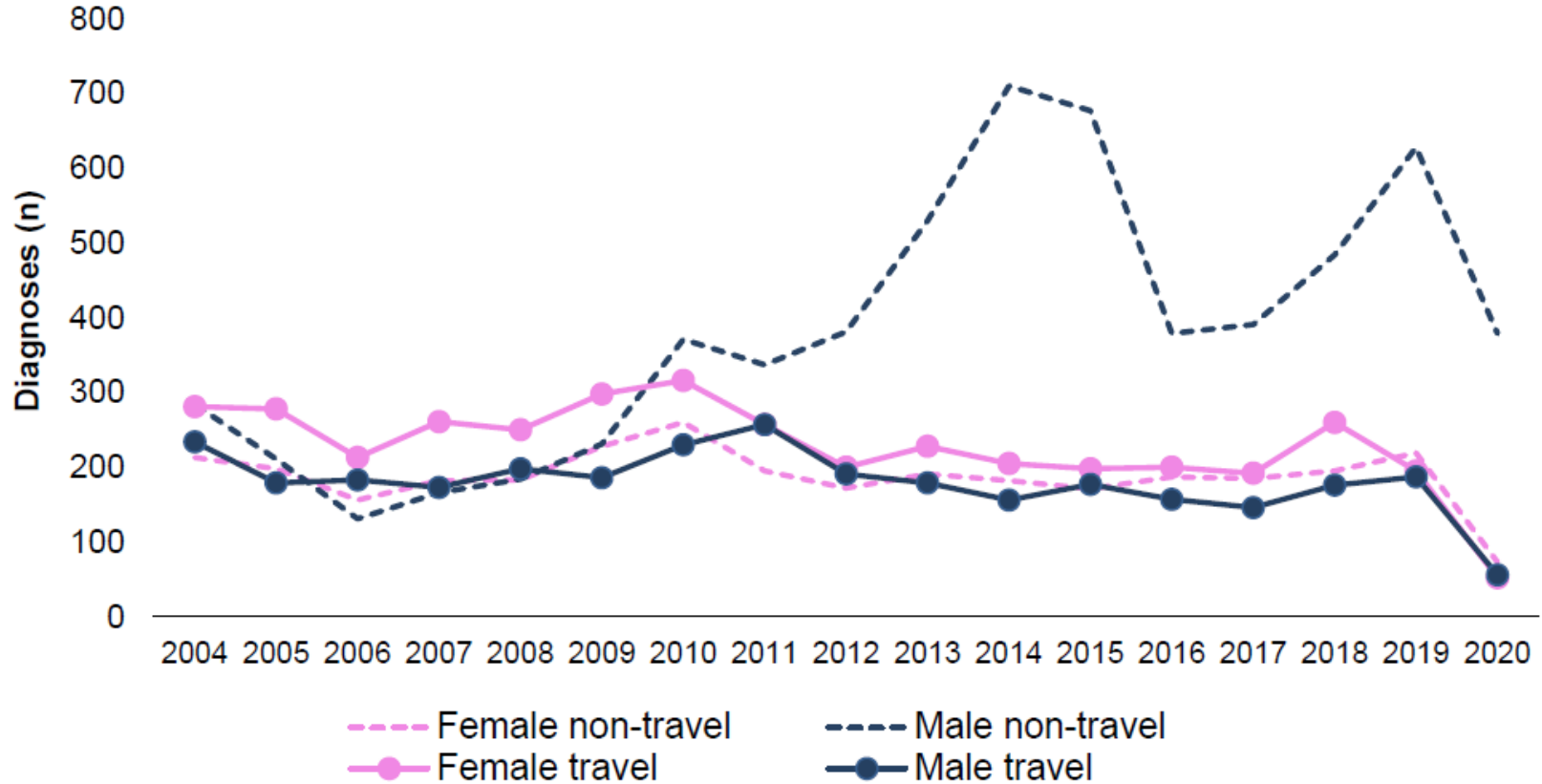
# How is *Shigella* transmitted?

- Faecal-oral transmission
  - foreign travel to endemic countries
  - rarely domestically acquired through food-borne exposure in UK
  - increasingly sexually transmitted
- Predominately affects MSM in UK
  - Focal geography – London and Manchester
- Highly infectious and spread easily

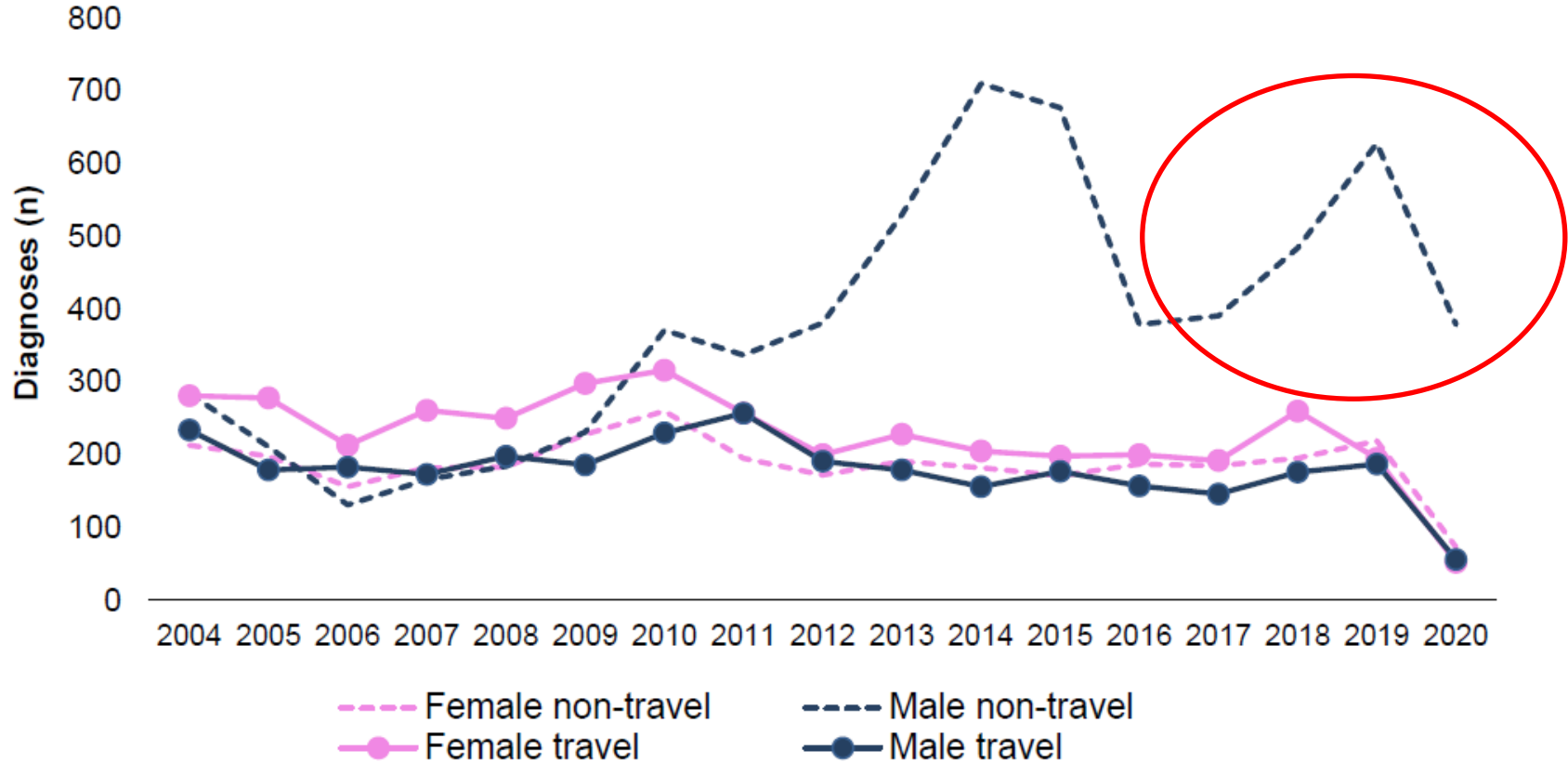
**Figure 1: Number of *Shigella* spp. diagnoses among adults (≥16 years), England, 2004 to 2020, by laboratory surveillance system**



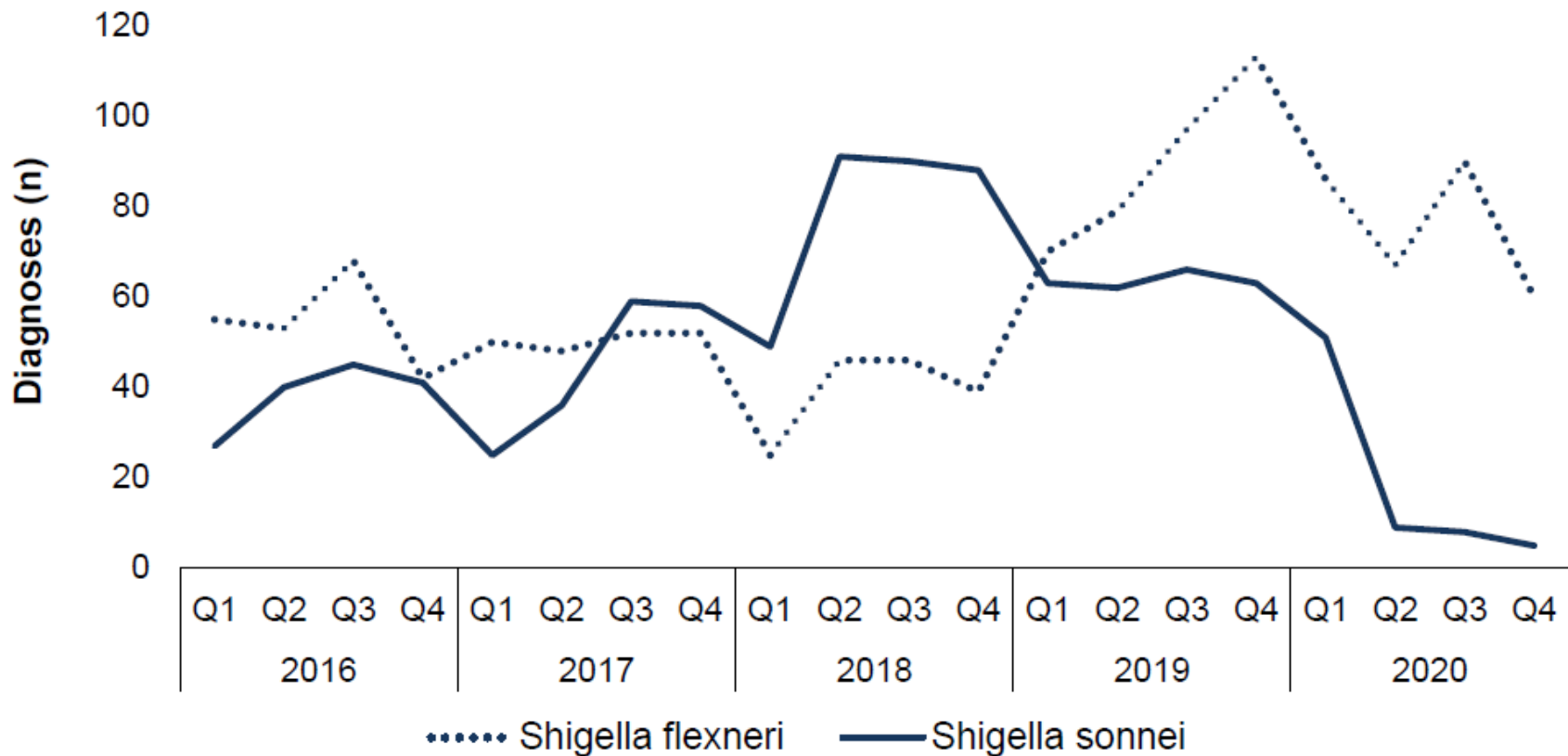
**Figure 2: Number of *Shigella spp.* diagnoses among adults ( $\geq 16$  years) by travel association and gender, England, 2004 to 2020**



**Figure 2: Number of *Shigella spp.* diagnoses among adults (≥16 years) by travel association and gender, England, 2004 to 2020**

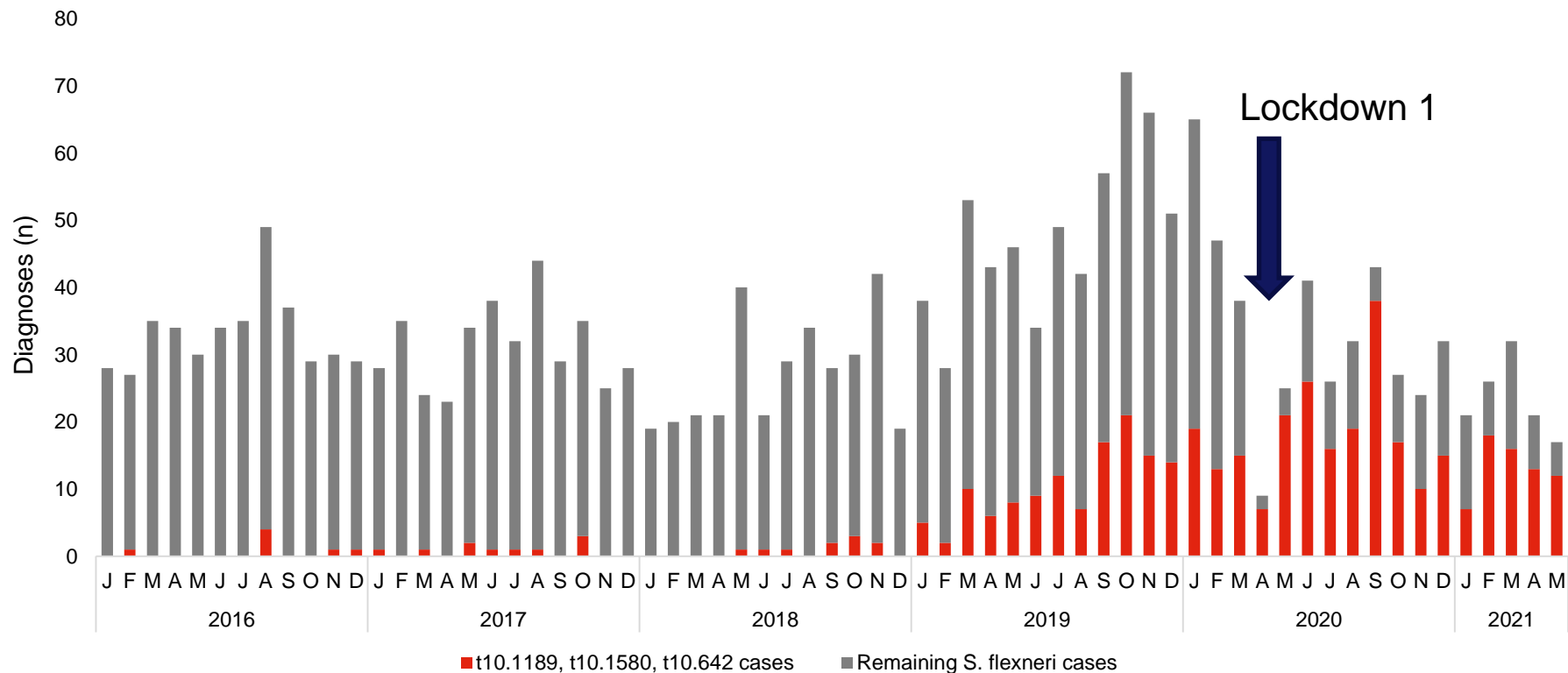


**Figure 3: Number of *Shigella* spp. diagnoses among presumptive MSM by species, England, 2016 to 2020**

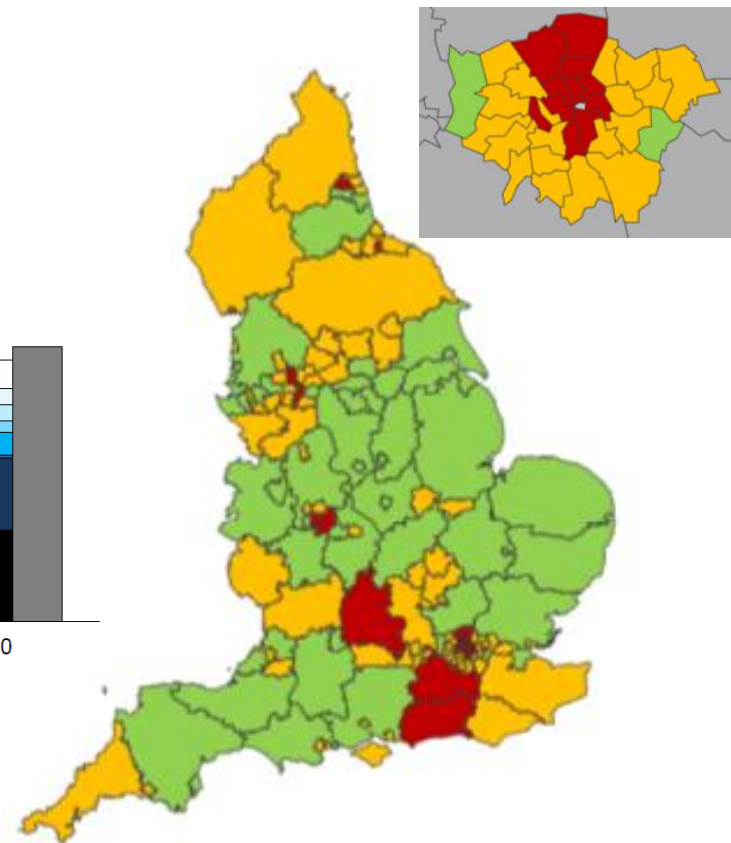
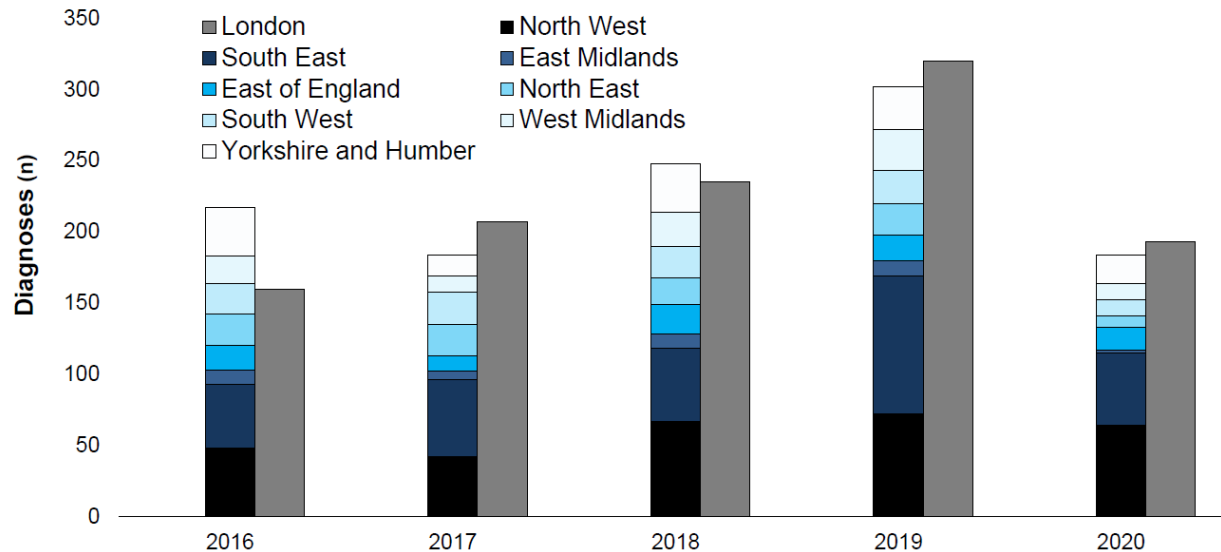




**Figure 4: Number of *S. flexneri* diagnoses among presumptive MSM highlighting clusters of interest, England, 2016 to 2021**



**Figure 5: Number of *Shigella* spp. diagnoses among presumptive MSM by PHE centre, England, 2016 to 2020**



# Antimicrobial resistance

- *Shigella spp.* isolates show high levels of antimicrobial resistance
- Among presumptive MSM, the proportion of isolates that are multi-drug resistant or extensively-drug resistant is very high (often >90%)
- Prescribing decisions based on resistance testing

# Hospitalisations

**Shigellosis in adults: A retrospective study of clinical and epidemiological features in East London. McGuire E et al International Journal of STD & AIDS 2019**

- 27% *S. flexneri* cases hospitalised
- 11% *S. sonnei* cases hospitalised

***Shigella flexneri* A Cause of Significant Morbidity and Associated With Sexually Transmitted Infections in Men Who Have Sex With Men. Cresswell F et al, 2015 Sex Transm Dis**

- 50% *S. flexneri* cases hospitalised

# Current awareness level

- **Online, self-completed survey among MSM in UK (Wayal et al, 2019)**
  - 27% heard of Shigella (92% for GC and syphilis)
  - Knowledge about transmission and morbidity poor
- **Focus group discussions with MSM in England (Datta et al, 2019)**
  - Majority of men had never heard of Shigella symptoms, transmission or treatment

Wayal, S., Reid, D., Weatherburn, P., Blomquist, P., Fabiane, S., Hughes, G. and Mercer, C.H., 2019. Association between knowledge, risk behaviours, and testing for sexually transmitted infections among men who have sex with men: findings from a large online survey in the United Kingdom. *HIV medicine*, 20(8), pp.523-533.

Datta, J., Reid, D., Hughes, G., Mercer, C.H., Wayal, S. and Weatherburn, P., 2018. Awareness of and attitudes to sexually transmissible infections among gay men and other men who have sex with men in England: a qualitative study. *Sexual health*, 16(1), pp.18-24.

# Key messages

- Prior to COVID-19 – Shigella diagnoses among MSM were increasing
  - London, North West and South East
- COVID-19 response led to a decrease – with a marked reduction in *S. sonnei*
- Antimicrobial resistance is concerning
- People continue to be hospitalised
- Awareness among MSM is low

# Thank you for listening

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## Acknowledgements:

Colleagues from NIS and GBRU at PHE Colindale

## Further information:

- Shigella report published recently by PHE can be found here
- <https://www.sexwise.org.uk/stis/shigella>
- <https://www.hperesources.org.uk>



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## HPE Webinar

Helen Corkin  
Sexual and Reproductive Health Lead - London  
Public Health England



# Qualitative Observations

**Awareness of Shigella** (or lack of) among cases and their social/sexual networks.

**Where cases present** GP, pharmacy and A&E (sometimes Shigella is missed – STI Link & MSM awareness)

**Severity of the experience** getting VERY sick.

**Chemsex scene assumption** it happens here, but Shigella not always Chemsex related .

**Prevention (and limitations)** . Pragmatic message : consider that it may be Shigella and do not have sex if you or your partner has/ had diarrhoea recently