SUPPLEMENT SECTION

SUPPLEMENT TABLE S1

Supplement Table S1. Summary of online questionnaire for data collection for individual outbreaks reported to Public Health England (PHE) during the first half of the autumn term in England

Minimum Data Set (MDS) form

- 1. Name of school
- 2. Postcode
- 3. School type

Overview

- 4. Do you have a linked nursery
- 5. Total number of students in nursery
- 6. Total number of teaching staff in nursery/kindergarten (e.g teachers, teaching assistants and special needs teachers, full time and part time)
- 7. Total number of non-teaching staff in nursery/kindergarten (e.g. kitchen staff, cleaning staff, admin)
- 8. Total number of students by year group (Primary)
- 9. Total number of students by year group (Secondary)
- 10. Total number of teaching staff (Primary) (e.g teachers, teaching assistants and special needs teachers, full time and part time)
- 11. Total number of teaching staff (Secondary) (e.g teachers, teaching assistants and special needs teachers, full time and part time)
- 12. Total number of non-teaching staff (Primary) (e.g. kitchen staff, cleaning staff, admin)
- 13. Total number of non-teaching staff (Secondary) (e.g. kitchen staff, cleaning staff, admin)
- 14. Further comments

Total confirmed cases

- 15. Total number of student confirmed cases in nursery/kindergarten
- 16. Total number of student confirmed cases by year group (Primary)

- 17. Total number of student confirmed cases by year group (Secondary)
- 18. Total number of teaching staff confirmed cases in nursery/kindergarten (e.g teachers, teaching assistants and special needs teachers, full time and part time)
- 19. Total number of teaching staff confirmed cases (Primary) (e.g teachers, teaching assistants and special needs teachers, full time and part time)
- 20. Total number of teaching staff confirmed cases (Secondary) (e.g teachers, teaching assistants and special needs teachers, full time and part time)
- 21. Total number of non-teaching staff confirmed cases in nursery/kindergarten (e.g. kitchen staff, cleaning staff, admin)
- 22. Total number of non-teaching staff confirmed cases (Primary) (e.g. kitchen staff, cleaning staff, admin)
- 23. Total number of non-teaching staff confirmed cases (Secondary) (e.g. kitchen staff, cleaning staff, admin)
- 24. Number of hospitalised cases (staff and students)
- 25. Number of deaths (staff and students)
- 26. Was this setting closed due to COVID-19?
- 27. For how many days was the setting closed?
- 28. Why was the setting closed? (i.e deep cleaning, to break transmission etc.)
- 29. Further Comments

Case 1 (INDEX CASE)

- 30. First name
- 31. Last name
- 32. Date of Birth (dd/mm/yyyy)
- 33. Postcode of residence during term time
- 34. Sex
- 35. Date of symptom onset, if symptomatic (dd/mm/yyyy)
- 36. Date of test (dd/mm/yyyy)
- 37. Was the index case staff, student or other
- 38. Class year (and bubble name if appropriate) of the case (i.e. year 6, yellow bubble)
- 39. If other, please specify
- 40. Why was this index case tested
- 41. If other, please specify
- 42. How many students were sent home as a result
- 43. How many members of staff were sent home as a result

- 44. Did anyone have symptoms after being sent home
- 45. How many students had symptoms after being sent home
- 46. How many members of staff had symptoms after being sent home
- 47. Did anyone test positive
- 48. How many students tested positive for COVID-19 after being sent home?
- 49. How many members of staff tested positive for COVID-19 after being sent home?
- 50. Further comments

Case 2

- 51. First name
- 52. Last name
- 53. Postcode of residence during term time
- 54. Date of Birth (dd/mm/yyyy)
- 55. Sex
- 56. Date of symptom onset, if symptomatic (dd/mm/yyyy)
- 57. Date of test (dd/mm/yyyy)
- 58. Was the case staff, student or other
- 59. Class year (and bubble name if appropriate) of the case (i.e. year 6, yellow bubble)
- 60. If other, please specify
- 61. Why was this case tested
- 62. If other, please specify
- 63. Is this case is linked to the previous case?
- 64. How many students were sent home as a result of this case
- 65. How many members of staff were sent home as a result of this case
- 66. Did anyone have COVID-19 symptoms after being sent home
- 67. How many students had COVID-19 symptoms after being sent home
- 68. How many members of staff had COVID-19 symptoms after being sent home
- 69. Did anyone test positive for COVID-19 after being sent home?
- 70. How many students tested positive for COVID-19 after being sent home?
- 71. How many members of staff tested positive for COVID-19 after being sent home?
- 72. Further comments

Case 3

- 73. First name
- 74. Last name

- 75. Postcode of residence
- 76. Date of Birth (dd/mm/yyyy)
- 77. Sex
- 78. Date of symptom onset, if symptomatic (dd/mm/yyyy)
- 79. Date of test (dd/mm/yyyy)
- 80. Was the case staff, student or other
- 81. Class year (and bubble name if appropriate) of the case (i.e. year 6, yellow bubble)
- 82. If other, please specify
- 83. Why was this case tested
- 84. If other, please specify
- 85. Is this case is linked to any previous case?
- 86. Which case was this linked to
- 87. How many students were sent home as a result of this case
- 88. How many members of staff were sent home as a result of this case
- 89. Did anyone have COVID-19 symptoms after being sent home
- 90. How many students had COVID-19 symptoms after being sent home
- 91. How many members of staff had COVID-19 symptoms after being sent home
- 92. Did anyone test positive for COVID-19 after being sent home?
- 93. How many students tested positive for COVID-19 after being sent home?
- 94. How many members of staff tested positive for COVID-19 after being sent home?
- 95. Further comments

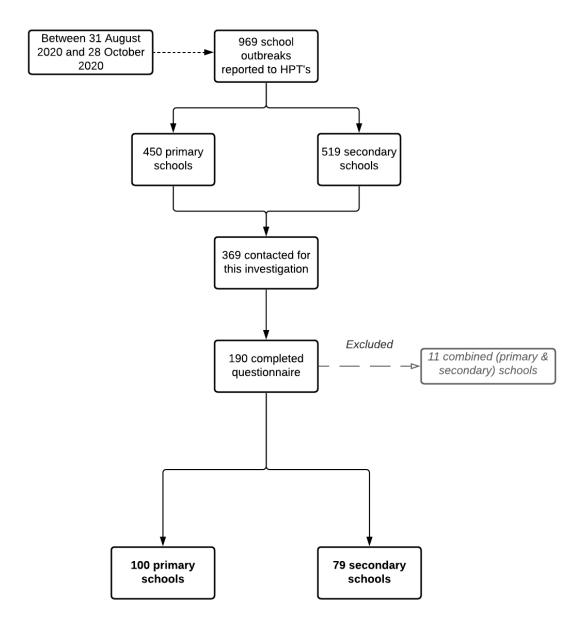
Case 4

- 96. First name
- 97. Last name
- 98. Postcode of residence during term time
- 99. Date of Birth (dd/mm/yyyy)
- 100. Sex
- 101. Date of symptom onset (dd/mm/yyyy)
- 102. Date of test (dd/mm/yyyy)
- 103. Was the case staff, student or other
- 104. Class year (and bubble name if appropriate) of the case (i.e. year 6, yellow bubble)
- 105. If other, please specify
- 106. Why was this case tested
- 107. If other, please specify

108.	Is this case is linked to any previous case?
109.	Which case was this linked to
110.	How many students were sent home as a result of this case
111.	How many members of staff were sent home as a result of this case
112.	Did anyone have COVID-19 symptoms after being sent home
113.	How many students had COVID-19 symptoms after being sent home
114.	How many members of staff had COVID-19 symptoms after being sent home
115.	Did anyone test positive
116.	How many students tested positive for COVID-19 after being sent home?
117.	How many members of staff tested positive for COVID-19 after being sent home?
118.	Further comments

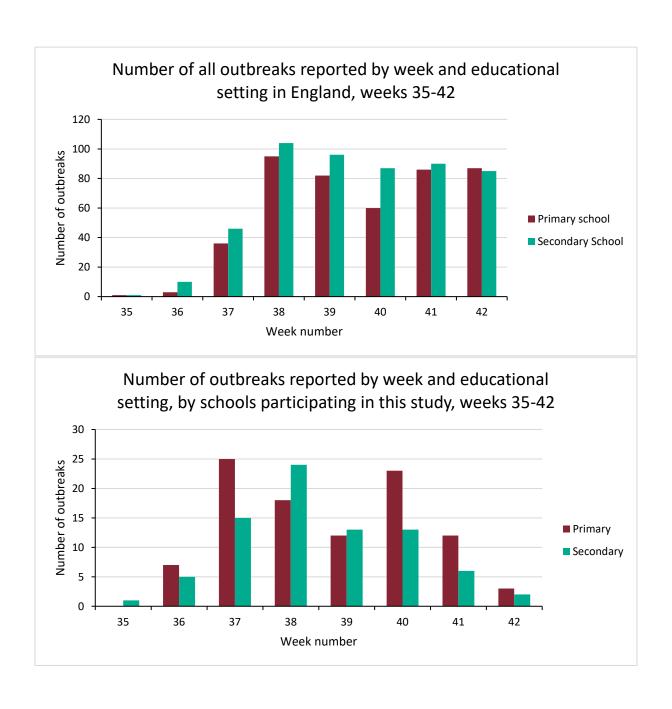
SUPPLEMENT Figure S2

Supplement Figure S2. Flow chart for outbreaks reported and followed by Public Health England (PHE) during the first half of the autumn term in England



SUPPLEMENT Figure S3

Supplement Figure S3. (A) Weekly reports of COVID-19 outbreaks in primary and secondary schools during the first half of the autumn term (31 August to 18 October 2020) in England; (B) Schools recruited in the outbreak investigation by Public Health England (PHE).



Supplement TABLE S4

Supplement Table S4. Reason for testing (where reported) in the first four cases in each outbreak reported to Public Health England during the first half of the autumn term (31 August to 18 October 2020) in England

	Number of cases									
Reason for testing	Case 1 (n=166)		Case 2 (n=166)		Case 3 (n=158)		Case 4 (n=145)		All cases (n=635)	
	n	%	n	%	n	%	n	%	n	%
Symptomatic	118	71%	114	69%	109	69%	92	63%	433	68%
Contact of community case	5	3%	1	1%	3	2%	6	4%	15	2%
Contact of household case	34	21%	28	17%	21	13%	29	20%	112	18%
Contact of a school case	0	0%	13	8%	12	8%	11	8%	36	6%
Other	9	5%	10	6%	13	8%	7	5%	39	6%

Supplement Figure S5

Supplement Figure S5. COVID-19 attack rate 19 by academic year in primary and secondary school students reporting an outbreak to Public Health England (PHE) during the first half of the autumn term (31 August to 18 October 2020) in England. The dotted line represents the line of best fit using linear trends for attack rates in students across the academic years

