

Supplement table: phenotypic and genetic characteristics of pneumococci causing meningitis in England and Wales (2004-2009)

Serotypes	No isolates	NO STs	Sequence types (no isolates)
<i>Serotypes included in PCV7</i>			
4	32	9	ST205(8), ST206(2), ST244(1), ST246(14), ST247(3), ST2484(1), ST3886(1), ST3894(1), ST4299(1)
6B	73	29	ST96(1), ST138(15), ST146(4), ST170(1), ST176(25), ST179(1), ST315(2), ST400(1), ST402(2), ST468(1), ST469(1), ST1645(1), ST1720(1), ST2456(1), ST2457(1), ST2465(1), ST2496(1), ST2810(1), ST3443(1), ST3482(2), ST3486(1), ST3505(1), ST3506(1), ST3733(1), ST3738(1), ST3742(1), ST3900(1), ST3909(1), ST4200(1)
9V	35	8	ST156(5), ST162(20), ST163(3), ST334(1), ST1630(3), ST1697(1), ST3479(1), ST4345(1)
14	79	10	ST9(43), ST15(3), ST24(2), ST63(1), ST124(25), ST162(1), ST3448(1), ST3719(1), ST4327(1)* , ST4359(1)
18C	73	26	ST113(35), ST114(7), ST116(5), ST121(3), ST308(1), ST496(1), ST638(1), ST697(2), ST716(1), ST1073(1), ST1233(1), ST1381(1), ST1686(1), ST1711(1), ST1719(1), ST2239(1), ST2453(1), ST2512(1), ST3469(1), ST3470(1), ST3471(1), ST3876(1), ST3884(1), ST4341(1), ST4342(1), ST4350(1)
19F	76	26	ST81(1), ST87(1), ST162(33), ST177(4), ST179(4), ST251(2), ST309(4), ST420(4), ST422(3), ST426(1), ST474(1), ST643(1), ST654(2), ST688(1), ST878(1), ST1258(1), ST1340(2), ST2100(1), ST2307(1), ST2439(1), ST2495(1), ST2525(1), ST3459(1), ST3731(1), ST3897(1), ST4351(2)
23F	52	9	ST33(1), ST36(22), ST311(22), ST1682(2), ST1852(1), ST3739(1), ST3883(1), ST3903(1), ST4293(1)
<i>Additional serotypes included in PCV13</i>			
1	46	8	ST227(9), ST306(31), ST350(1), ST405(1), ST433(1), ST618(1), ST2126(1), ST3446(1)
3	57	3	ST180(55), ST232(1), ST233(1)
5	4	1	ST289(4)
6A	43	18	ST42(1), ST65(21), ST176(1), ST327(4), ST395(1), ST396(1), ST398(1), ST460(3), ST473(1), ST681(1), ST1716(1), ST1752(1), ST1862(1), ST2528(1), ST3449(1), ST3513(1), ST3880(1), ST4300(1)
7F	76	7	ST191(70), ST1176(1), ST2470(1), ST2522(1), ST3462(1), ST3490(1), ST3544(1)
19A	41	12	ST199(24), ST274(1), ST276(2), ST416(3), ST419(2), ST450(1), ST1201(2), ST1756(2), ST2464(1), ST3492(1), ST3499(1), ST3914(1)
<i>Serotypes not included in any PCVs</i>			
10A	11	7	ST97(3), ST461(2), ST1551(2), ST2068(1), ST4084(1), ST4207(1), ST4481(1)
11A	8	1	ST62(8)
12A	1	1	ST3122(1)
12B	3	1	ST218(3)
12F	36	4	ST218(31), ST220(1), ST2964(3), ST3906(1)
13	1	1	ST574(1)
15A	5	3	ST63(3), ST410(1), ST2613(1)
15B	13	4	ST193(1), ST199(7), ST411(1), ST2220(4)

15C	15	5	ST199(7), ST1262(3), ST2220(3), ST3934(1), ST4361(1)
16F	1	1	ST414(1)
17F	5	2	ST392(4), ST4358(1)
18A	2	2	ST1232(1), ST4353(1)
20	13	4	ST235(10), ST591(1), ST4294(1), ST4328(1)
22F	41	7	ST100(1), ST433(22), ST698(12), ST819(3), ST1470(1), ST4325(1), ST4334(1)
23A	12	4	ST190(1), ST436(2), ST438(8), ST4362(1)
23B	10	1	ST439(10)
24F	2	2	ST72(1), ST3461(1)
25A	1	1	ST393(1)
27	9	2	ST1475(8), ST2507(1)
28A	2	2	ST225(1), ST4327(1)*
28F	1	1	ST546(1)
31	2	2	ST444(1), ST568(1)
32A	1	1	ST4296(1)
32F	1	1	ST3736(1)
33C	1	1	ST4326(1)
33F	23	6	ST60(2), ST100(7), ST673(11), ST3740(1), ST3741(1), ST3916(1)
34	2	1	ST547(2)
35B	4	2	ST452(3), ST558(1)
35F	13	3	ST446(7), ST1368(1), ST1635(5)
37	2	1	ST447(2)
38	8	1	ST393(8)
6C	19	11	ST395(1), ST398(1), ST1150(1), ST1390(3), ST1600(1), ST1640(1), ST1692(7), ST1714(1), ST1715(1), ST3507(1), ST4324(1)
7A	1	1	ST191(1)
7C	1	1	ST1201(1)
8	58	12	ST53(41), ST404(1), ST698(1), ST944(4), ST1110(3), ST2234(2), ST2502(1), ST3723(1), ST4301(1), ST4312(1), ST4338(1), ST4357(1)
9N	15	3	ST66(7), ST405(7), ST3732(1)