



Québec

Distribution of *Streptococcus suis* capsular types in 2000

S*treptococcus suis* is still an important pathogen in swine and the determination of the serotypes remains a valuable tool for the veterinary practitioner, or the diagnostician, to understand the epidemiology of some outbreaks or to make sure that a bacterin comprises all of the *S. suis* serotypes that seem to be involved in a given herd. From January to December 2000, 600 streptococcal isolates were received as *Streptococcus suis* in our laboratory for serotyping. They all originated from tissues of diseased pigs sent for analyses at the veterinary diagnostic laboratories in Quebec. A variety of clinical signs were noted in these animals, including respiratory problems, arthritis, nervous signs, abortion, sudden death, etc. Serotyping was carried out by using the coagglutination test. The reagents for serotyping are prepared in our laboratory according to a procedure already described (1). The distribution of capsular types of the 600 isolates is given in Table 1. These data are only informative and are not intended to suggest that *S. suis* was the sole causative agent of the pathological conditions.

Table 1. Numerical distribution of capsular types of *Streptococcus suis* in 600 isolates recovered from diseased pigs in 2000

Capsular type	Number of isolates	%	Capsular type	Number of isolates	%
1	16	3	18	3	<1
2	94	16	19	2	<1
1/2	59	10	20	11	2
3	78	13	21	5	<1
4	23	4	22	12	2
5	24	4	23	17	3
6	0	0	24	2	<1
7	44	7	25	5	<1
8	40	7	26	1	<1
9	21	4	27	6	<1
10	3	<1	28	9	1
11	5	<1	29	0	0
12	3	<1	30	0	0
13	0	0	31	11	2
14	5	<1	32	0	0
15	4	<1	33	1	<1
16	5	<1	34	3	<1
17	0	0	NT	88	15

NT = Untypeable isolates

In 2000, capsular type 2 represented 16% of all isolates, which is similar to the prevalence of 15% reported for 1999. In 1990, the prevalence of this serotype was 32% (2). Capsular types 1/2 and 3 accounted for 10% and 13% of isolates, respectively, followed by capsular types 7 (7%) and 8 (7%). Three capsular types, 4, 5, and 9, had a prevalence of 4%. Isolates belonging to serotypes 6, 13, 17, 29, 30, and 32, were not found. The percentage of untypeable isolates was 15%. Most of the time, these isolates were not capsulated or showed autoagglutination upon arrival. In our opinion, there is no valuable justification, at the present time, for the characterization of new capsular types.

Table 2 compares the distribution of the 6 most prevalent *S. suis* capsular types between 1993 and 2000. As mentioned in previous reports, variations over the years are minor, which could indicate that the importance of *S. suis* infections in swine is stable (3).

Table 2. Distribution in percentages of the 6 most prevalent *Streptococcus suis* capsular types between 1993 and 2000

Capsular type	1993	1994	1995	1996	1997	1998	1999	2000
2	19	24	18	18	18	22	15	16
1/2	8	9	14	8	11	13	13	10
3	10	10	12	14	11	12	10	13
4	3	5	8	5	5	3	4	4
7	7	6	8	10	7	6	4	7
8	8	7	7	6	7	6	7	7

References

- Higgins R, Gottschalk M. An update on *Streptococcus suis* identification. *J Vet Diagn Invest* 1990;2:249-252.
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