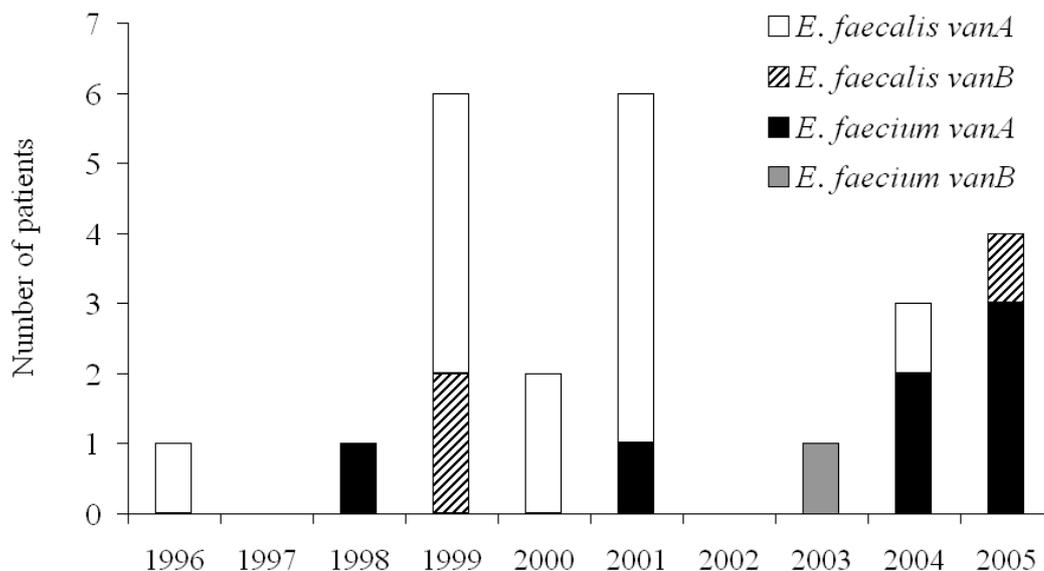


Vancomycin-resistant enterococci (VRE) confirmed in 2005

Four VRE isolates were referred to ESR in 2005:

- Three *Enterococcus faecium* with the *vanA* genotype. The first of these VRE was a catheter urine isolate from a patient transferred to Auckland City Hospital from a United States Hospital. The second VRE was a urinary isolate from a patient in Wellington Hospital who had a history of hospitalisation in the United Kingdom. The third VRE was isolated from a faecal screen of a patient transferred to Auckland City Hospital from a Chinese Hospital. The isolates had different DNA macrorestriction patterns after digestion with *SmaI* and pulsed-field gel electrophoresis (PFGE).
- One *E. faecalis* with the *vanB2* genotype. This VRE was a urinary isolate from an Auckland City Hospital patient who had no known history of overseas travel or hospitalisation.

Figure 1. Species and van genotype of VRE isolated in New Zealand, 1996-2005



Since the first reported isolation in New Zealand in 1996, VRE have been isolated from a total of 24 people. *E. faecalis vanA* dominated in the earlier years, but since 2004 *E. faecium vanA* has been dominant (Figure 1). Based on PFGE typing, all but two of the *E. faecalis vanA* isolates belonged to the same strain (Table 1, PFGE pattern A). On the other hand, a variety of strains have been identified among the *E. faecium vanA* isolates and only one strain (Table 1, PFGE pattern H) has been isolated from more than one patient.

Besides the shift in species evident in recent years, in the last two years most VRE have been isolated from patients who have been hospitalised overseas or at least recently travelled overseas (Figure 2). In contrast, before 2004, most patients with VRE were reported as not having recently travelled or been hospitalised overseas. The five *E. faecium vanA* isolated in 2004 and 2005 were all from patients hospitalised or recently travelled overseas.

Figure 2. Overseas travel and hospitalisation history of patients from whom VRE isolated, 1996-2005

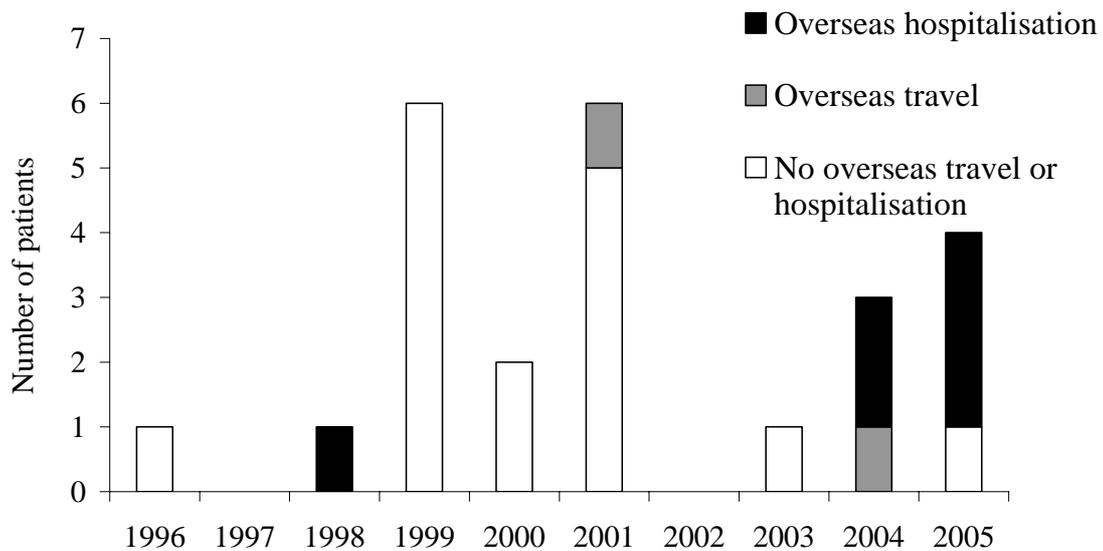


Table 1. Vancomycin-resistant enterococci (VRE) isolated in New Zealand, 1996-2005

Species	Van gene	PFGE pattern ¹	Number of patients ²	Years isolated	Area ³
<i>E. faecalis</i>	<i>vanA</i>	A	12 ⁴	1996, 1999, 2000, 2001 and 2004	Hamilton Christchurch Auckland Wellington
		B	1 ⁴	1999	Christchurch
		E	1	2001	Christchurch
	<i>vanB</i>	Z	1	1999	Christchurch
		B	1	1999	Christchurch
		J	1	2005	Auckland
<i>E. faecium</i>	<i>vanA</i>	C	1	1998	Hamilton
		D	1 ⁵	2001	Auckland
		F	1 ⁵	2001	Auckland
		H	2	2004 and 2005	Auckland
		I	1	2004	Hamilton
		K	1	2005	Wellington
		L	1	2005	Auckland
	<i>vanB</i>	G	1	2003	Whangarei

¹ In-house PFGE pattern designations

² Repeat isolations from the same patient excluded, unless the isolates differed (see footnotes 4 and 5).

³ In chronological order of place of first isolation.

⁴ Isolates with PFGE patterns A and B were isolated from the same patient.

⁵ Isolates with PFGE patterns D and F were isolated from the same patient.