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## **The 2004 Dental Implant Yearbook**

The Finnish Dental Implant Register



LÄÄKELAITOS  
LÄKEMEDELSVERKET  
NATIONAL AGENCY  
FOR MEDICINES

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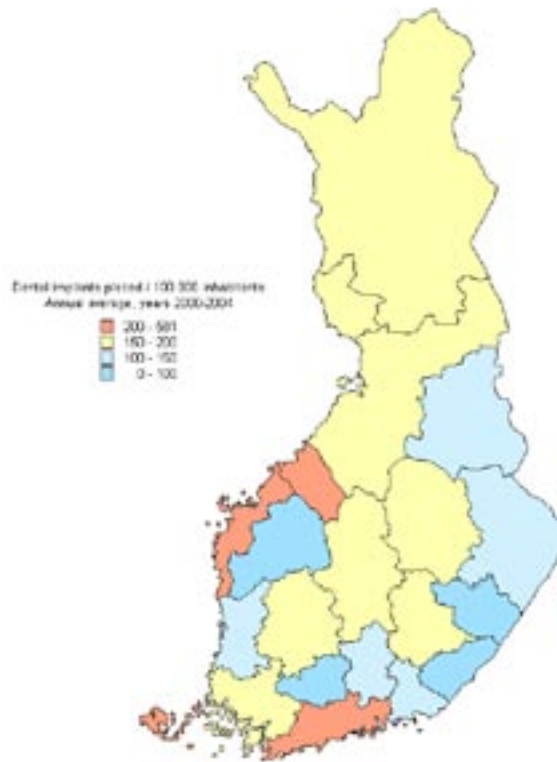
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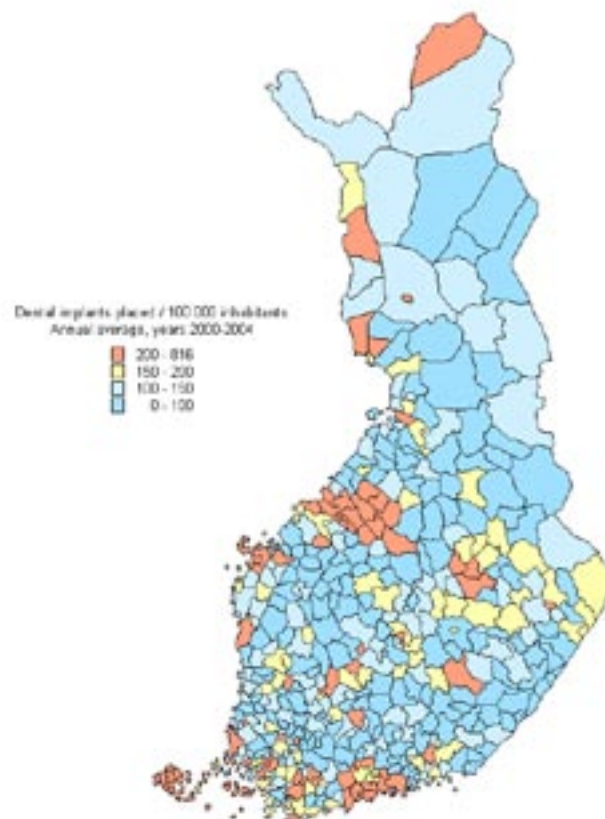
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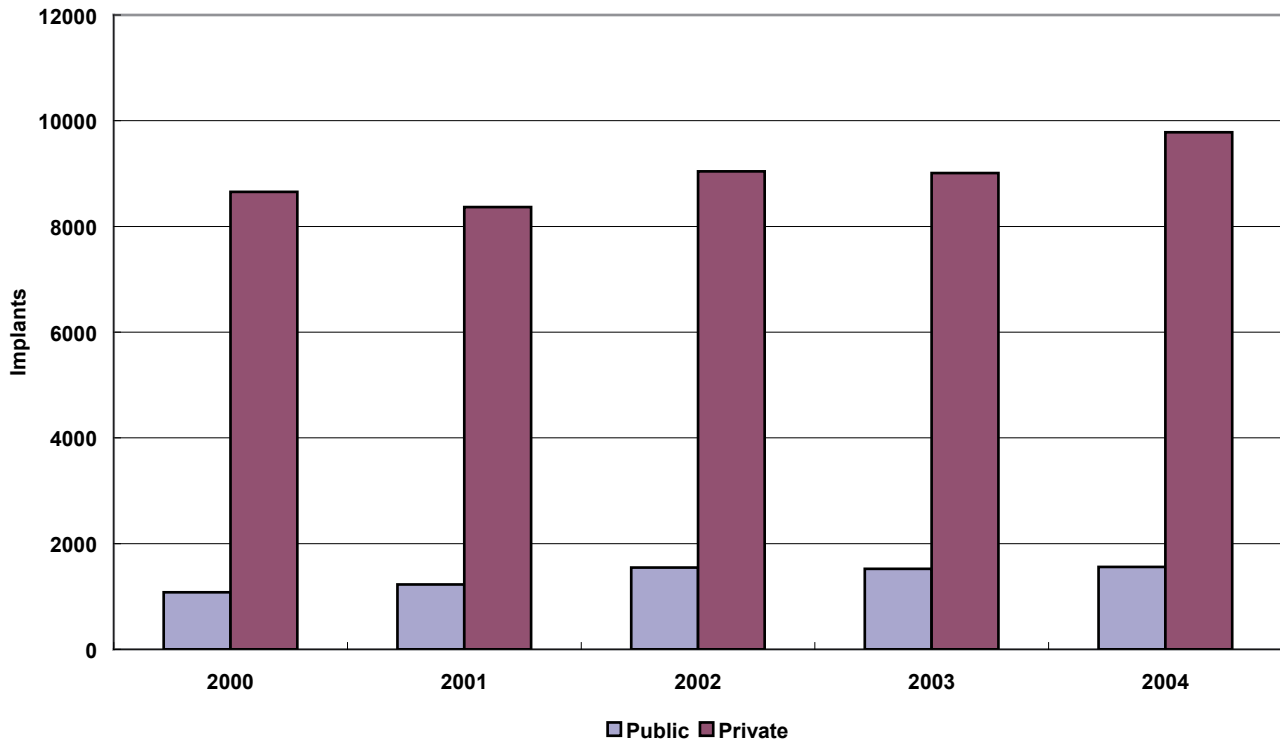
**Figure 1a. Dental implants placed in different Health Care Districts in 2000-2004**



**Figure 1b. Dental implants placed in different municipalities in 2000-2004**



**Figure 2: Implants placed, Health care district 2000 - 2004**



**Figure 3: Number of operations and implants placed 1994 - 2004**  
Operations, Implants

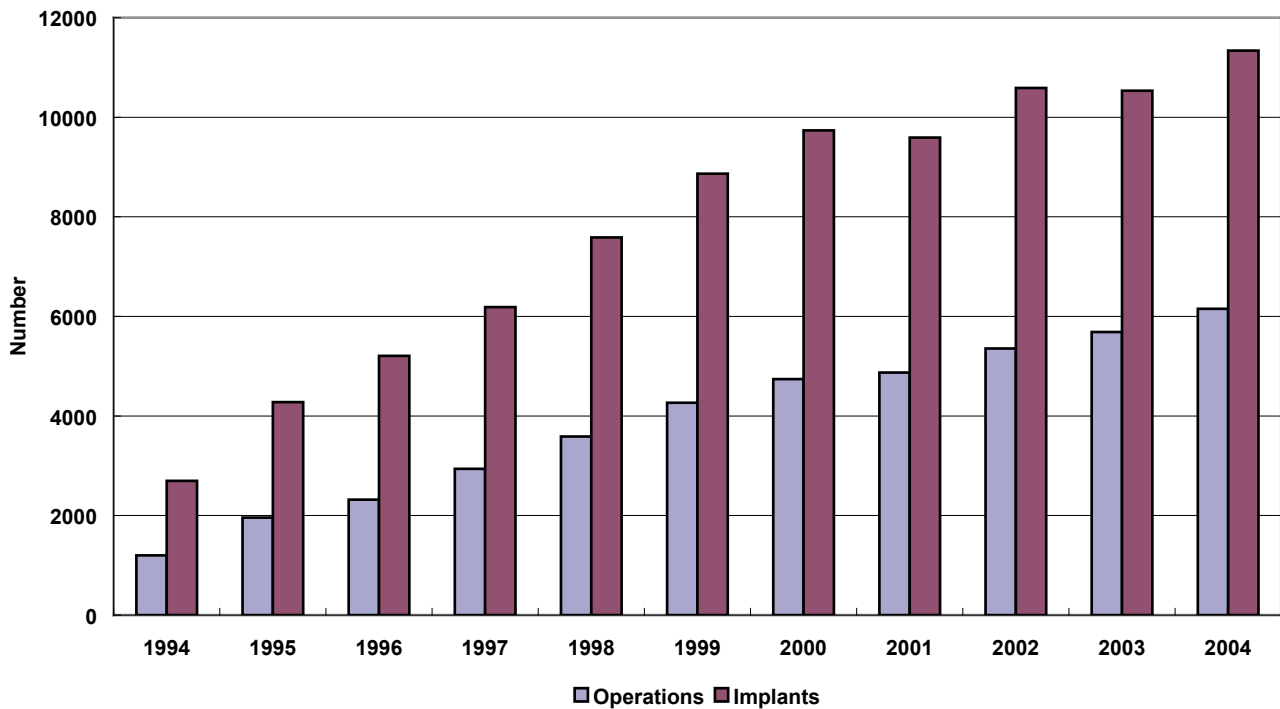


Figure 4a: Implants placed by age group, female 2000 - 2004

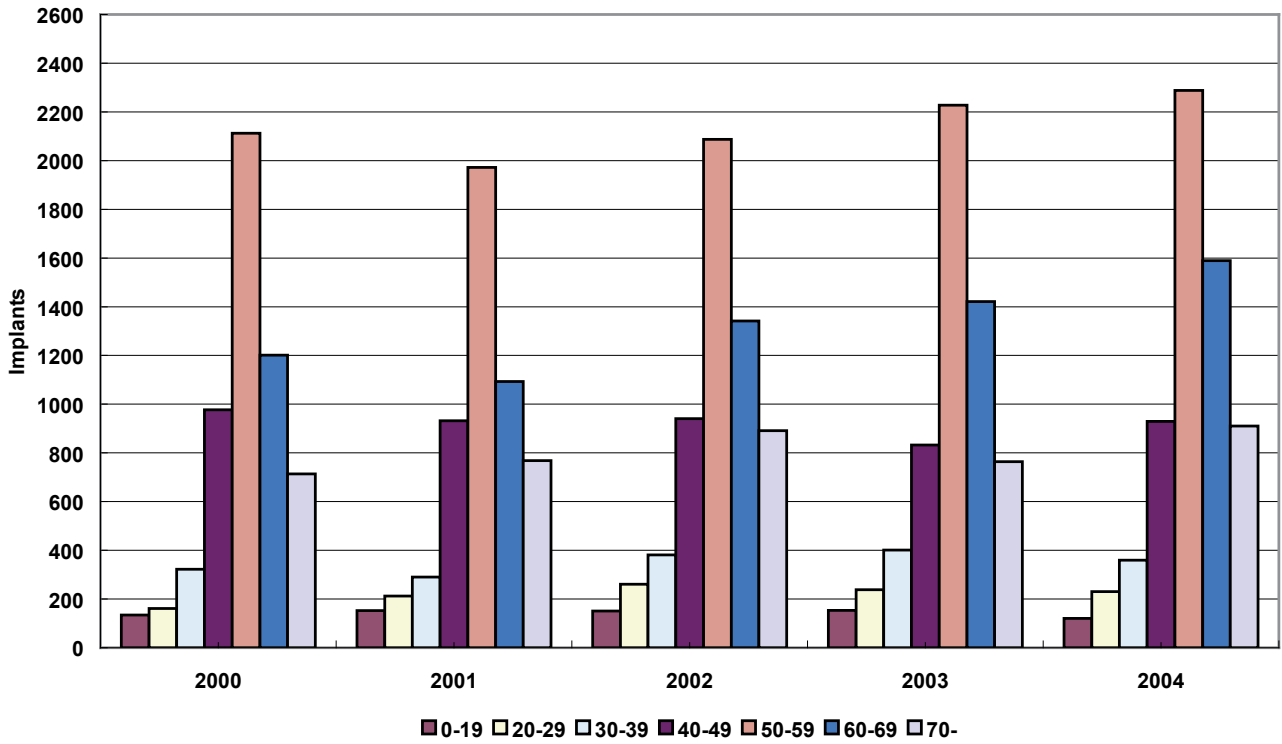


Figure 4b: Implants placed by age group, male 2000 - 2004

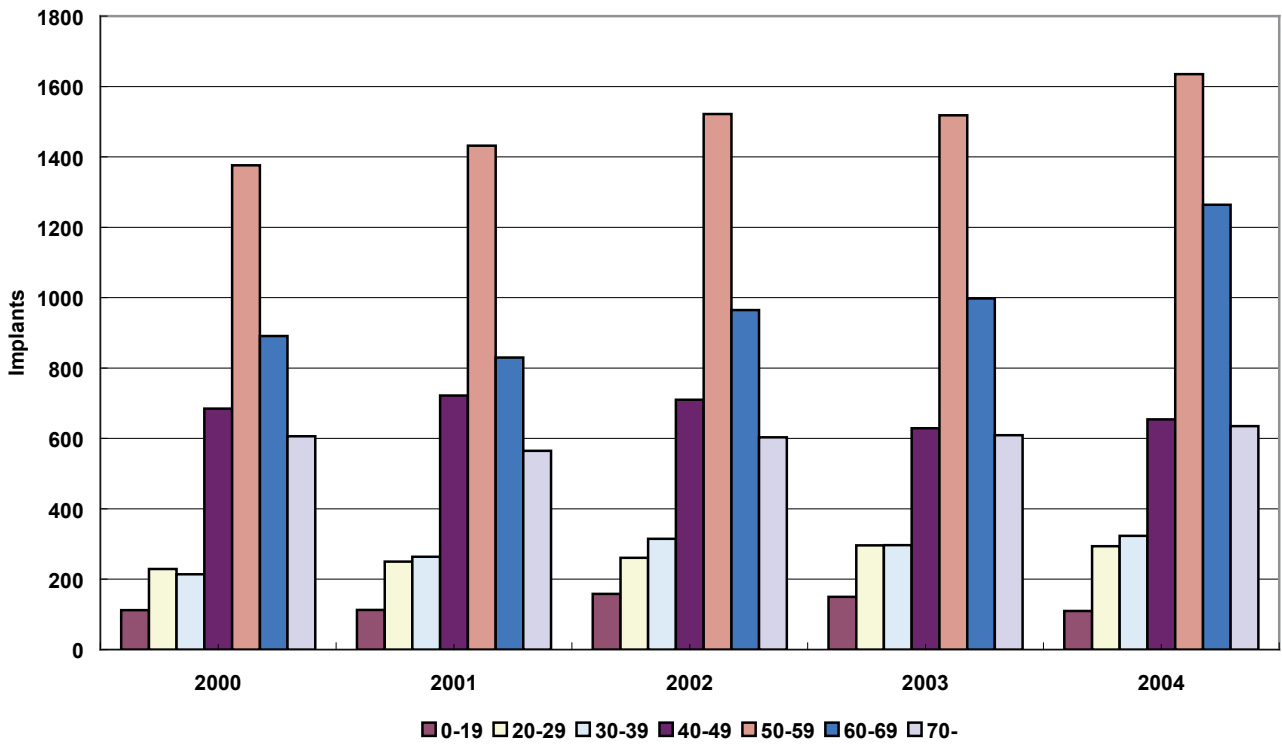


Figure 5a: Implants placed in the maxilla by tooth 2000 - 2004

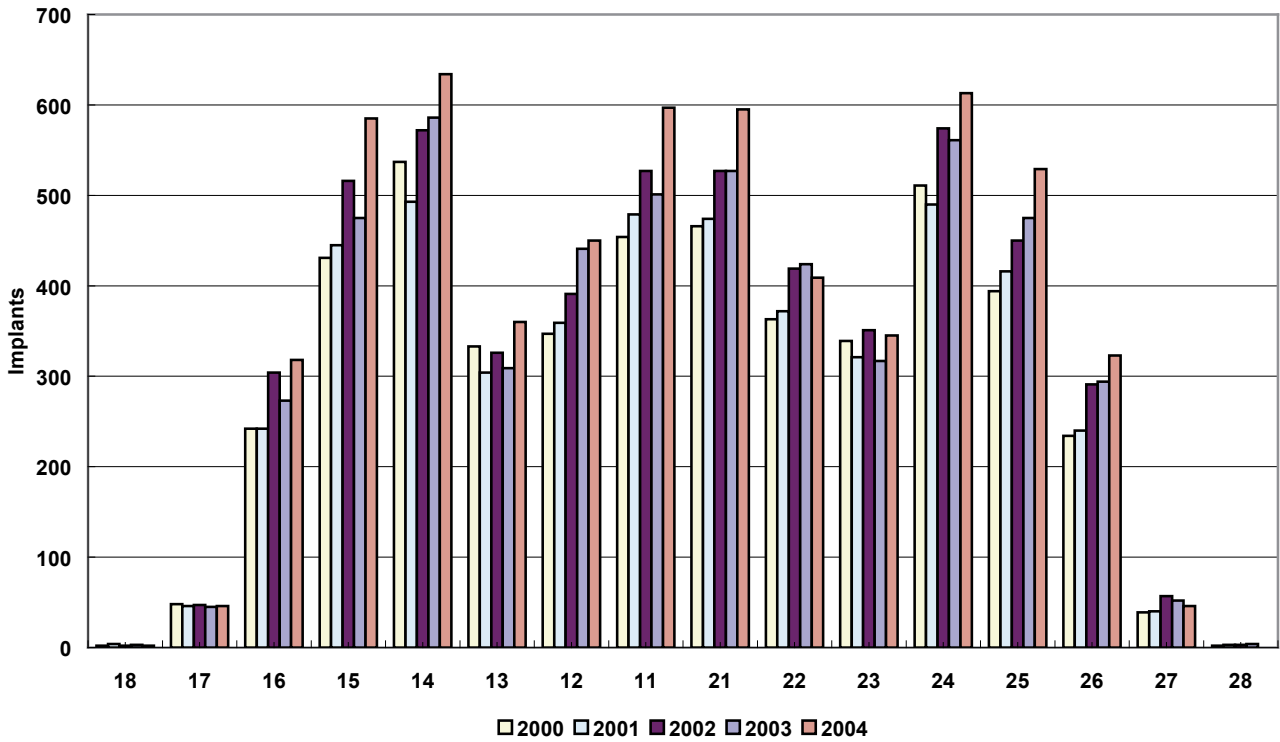
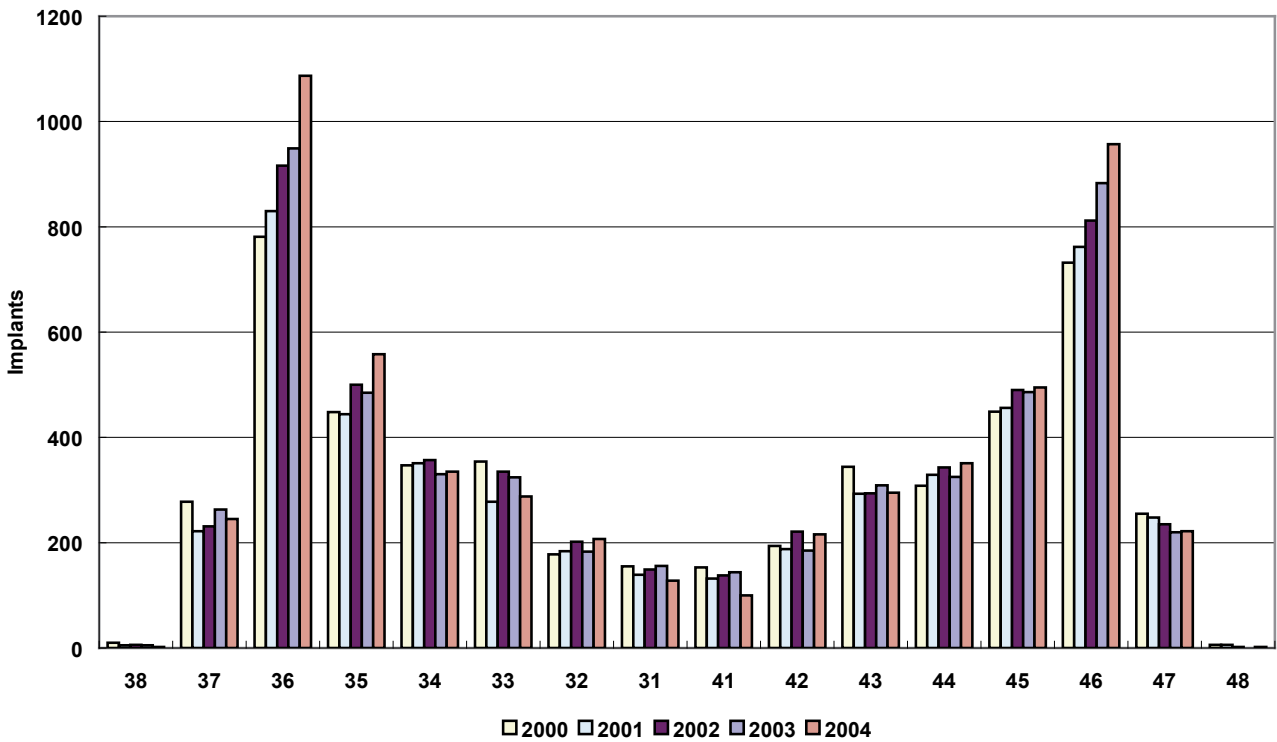
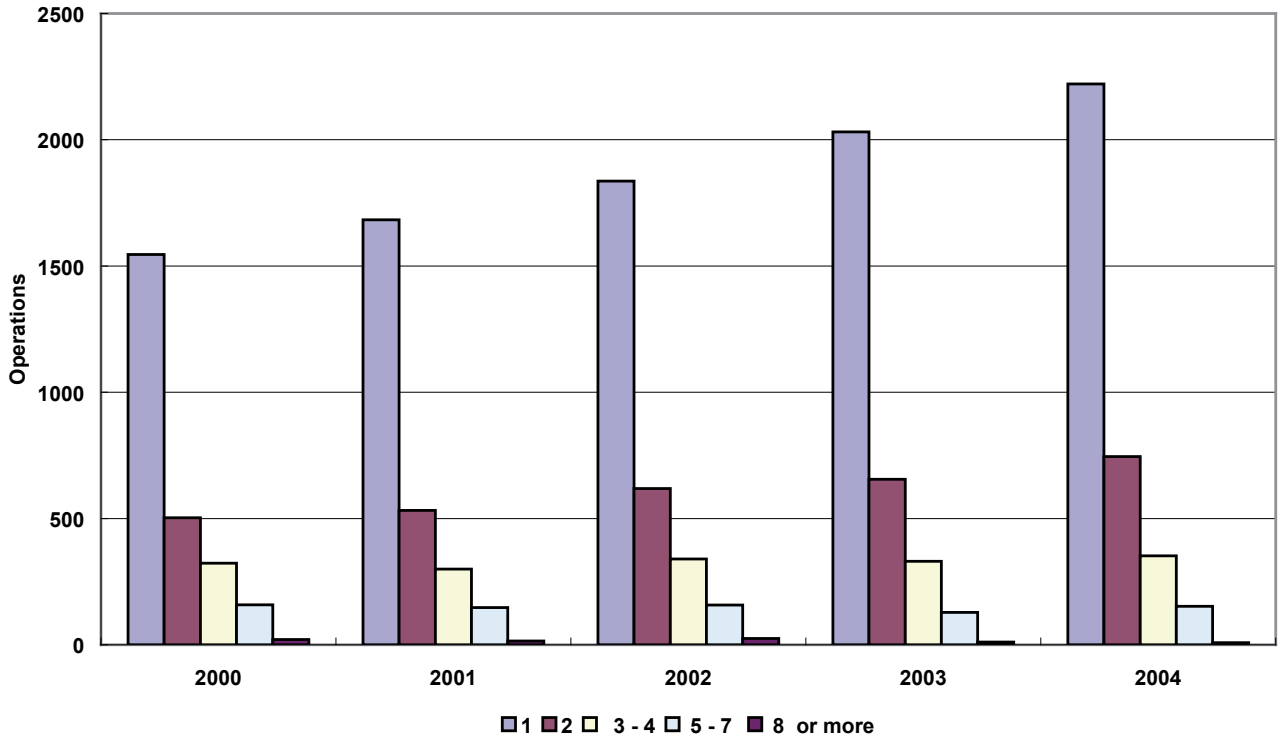


Figure 5b: Implants placed in the mandible by tooth 2000 - 2004



**Figure 6a: Implants placed per operation in the maxilla 2000 - 2004**



**Figure 6b: Implants placed per operation in the mandible 2000 - 2004**

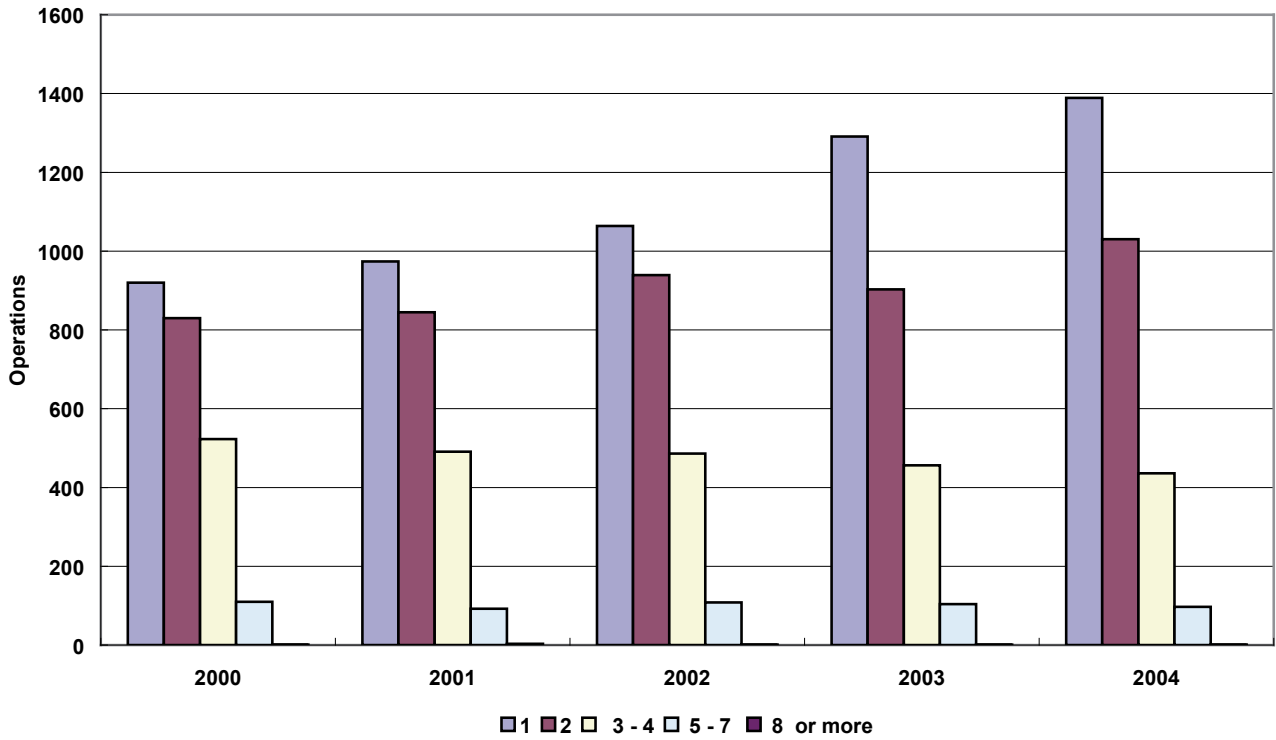


Figure 7: Implantation method 2000 - 2004

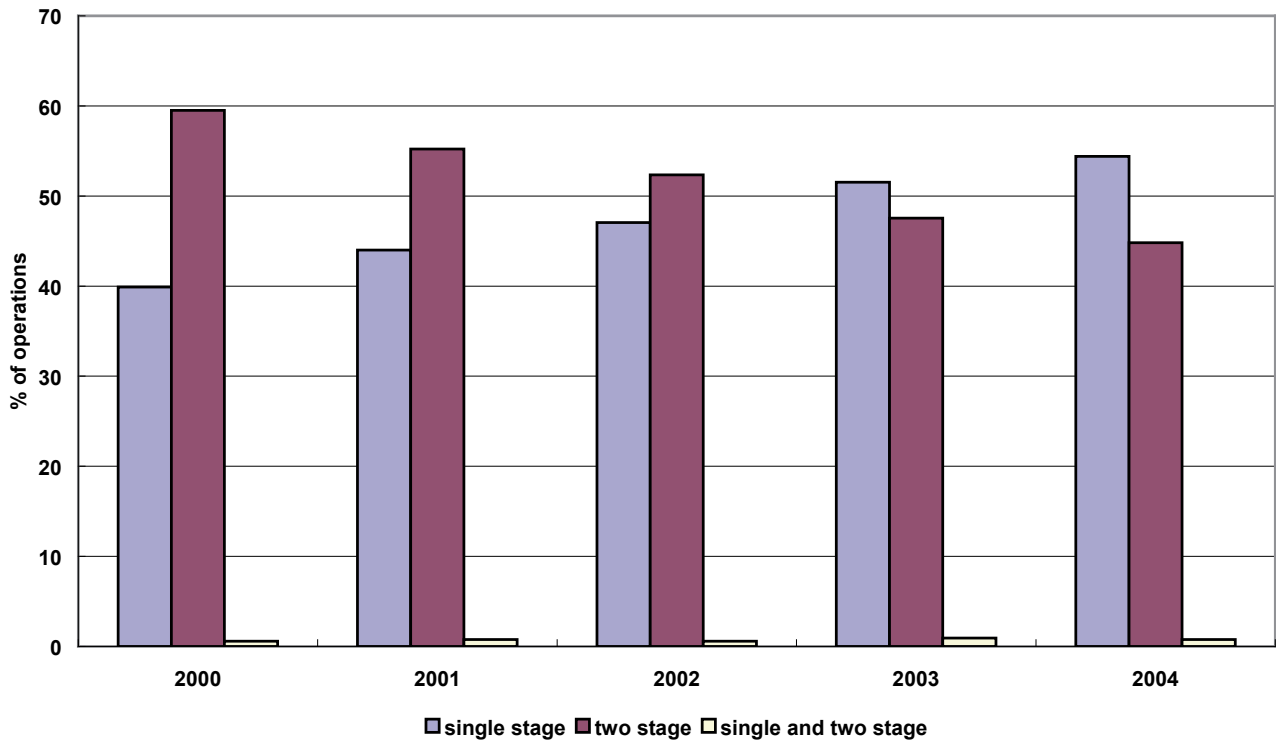


Figure 8: Supportive technique 2000 - 2004

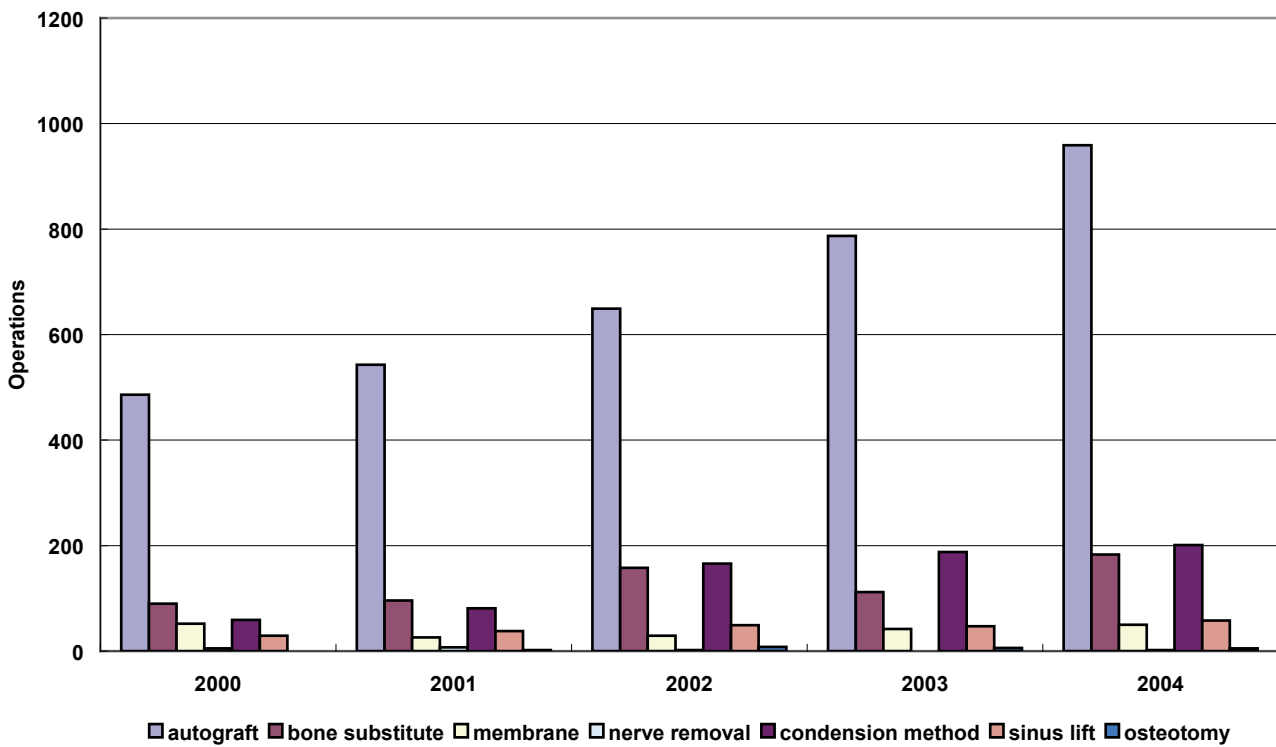
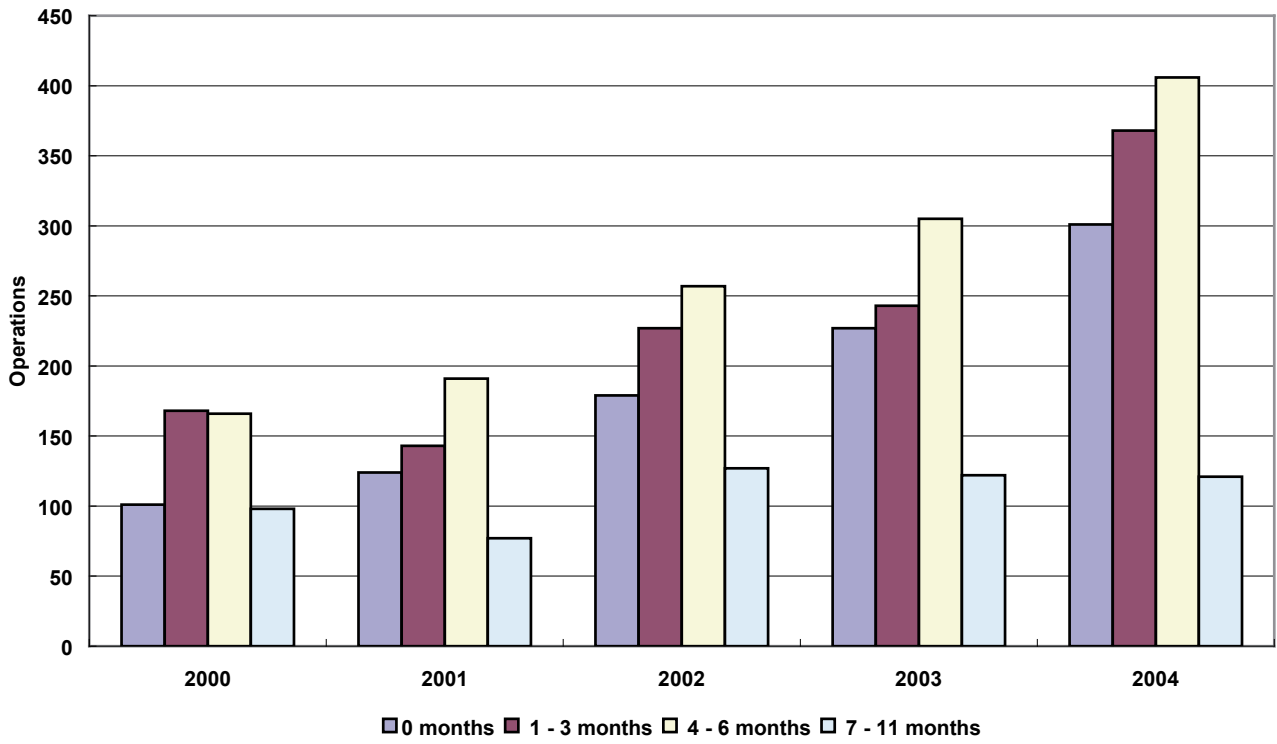
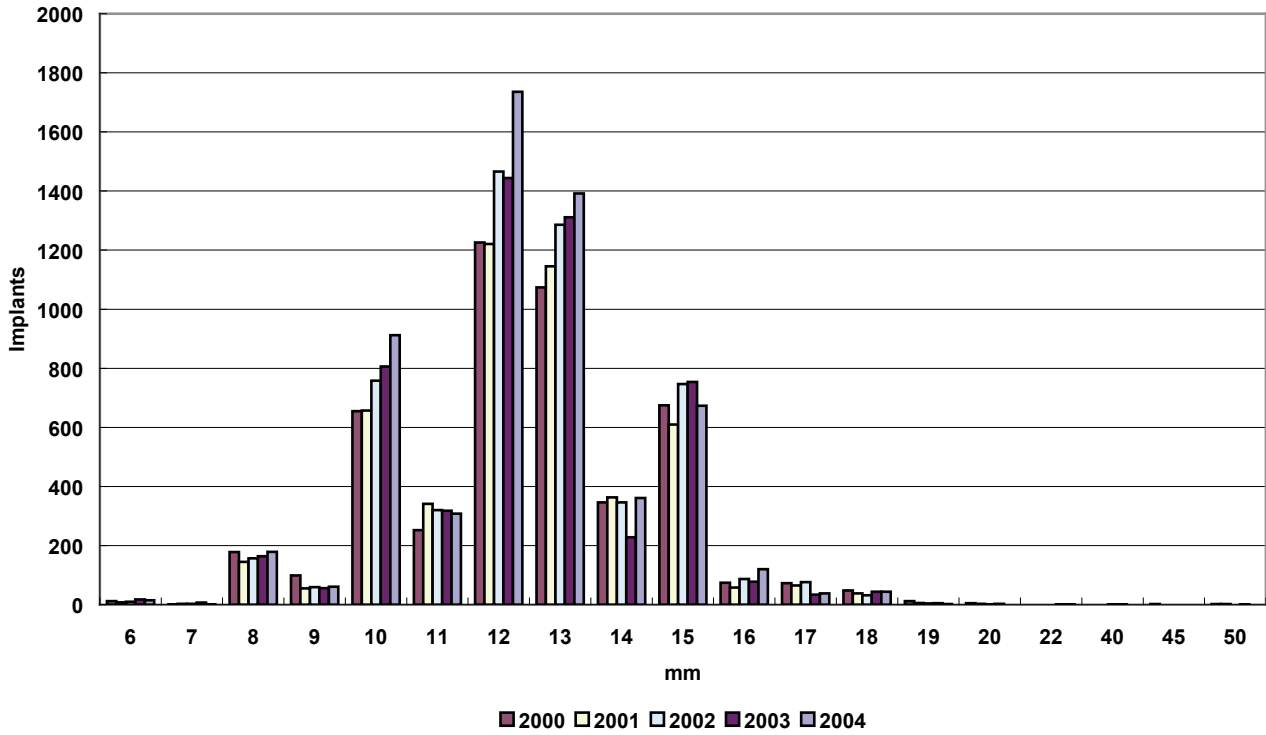




Figure 9: Time after tooth extraction in months 2000 - 2004



**Figure 10a: Length of the inserted implant, mm, maxilla 2000 - 2004**



**Figure 10b: Length of the inserted implant, mm, mandible 2000 - 2004**

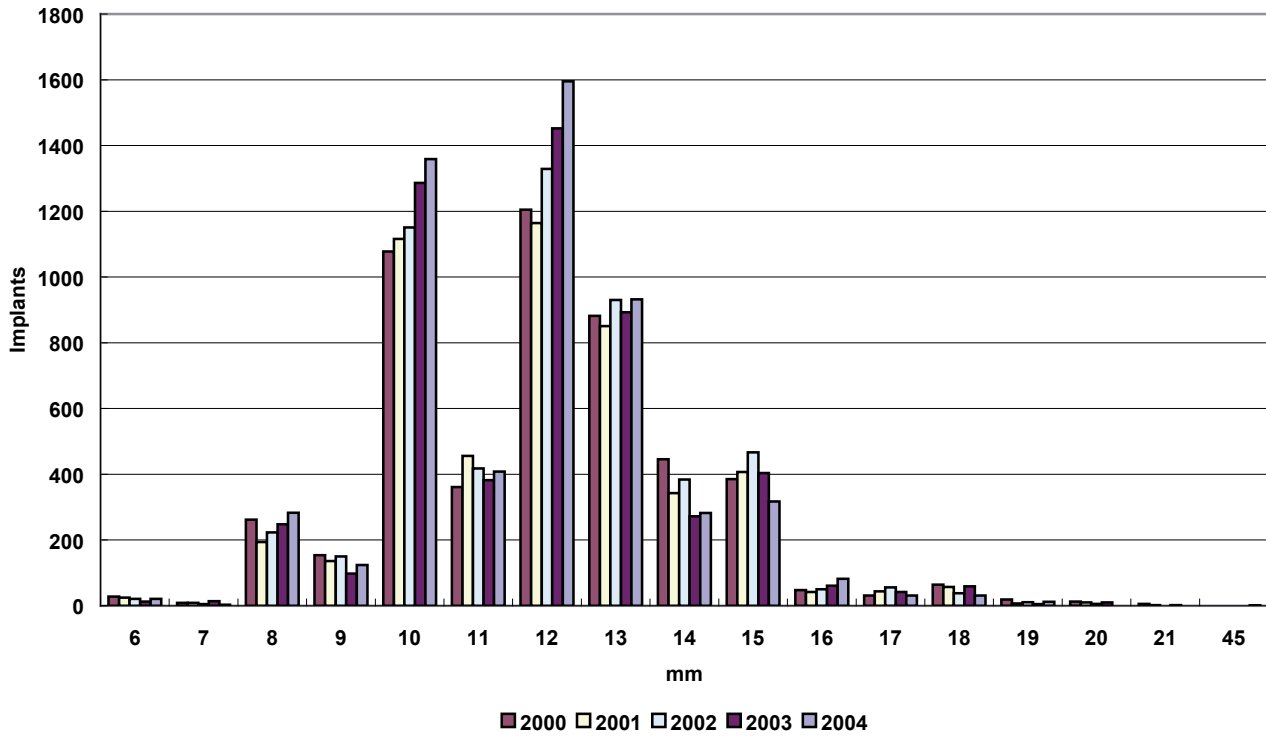


Figure 11: Reason for the operation 2000 - 2004

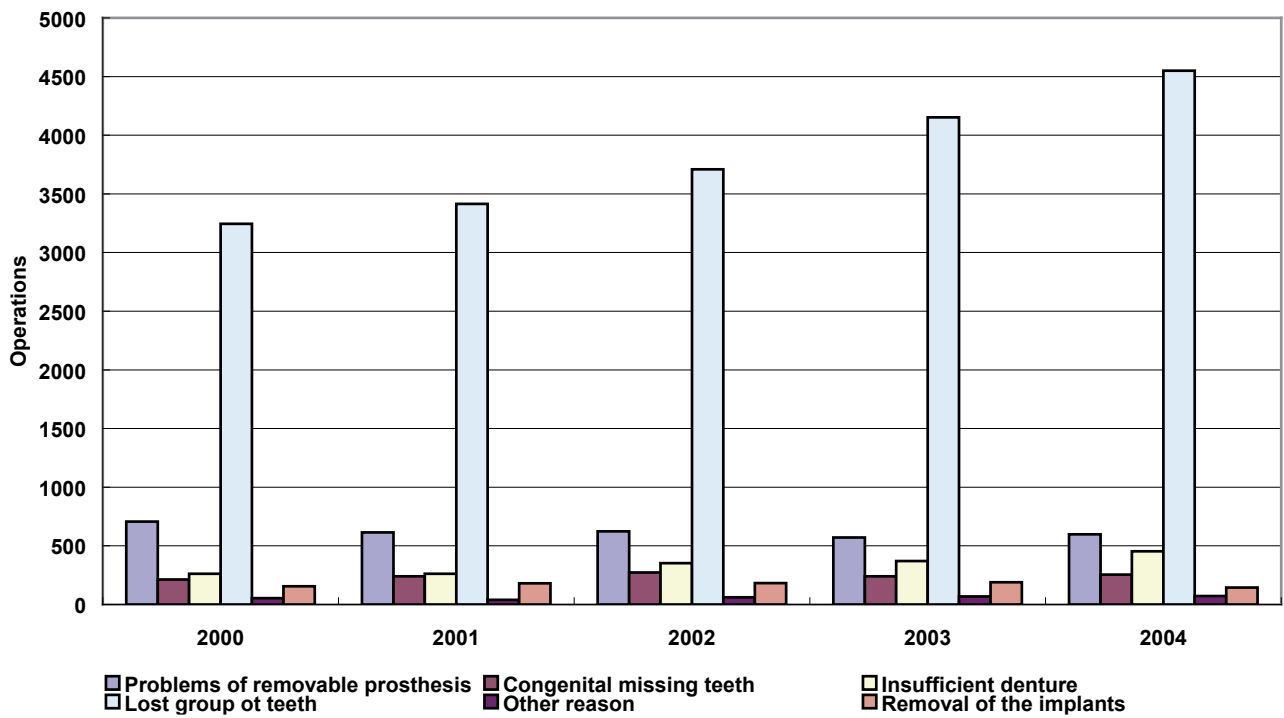


Figure 12: Primary complications, per cent of primary operations 2000 - 2004

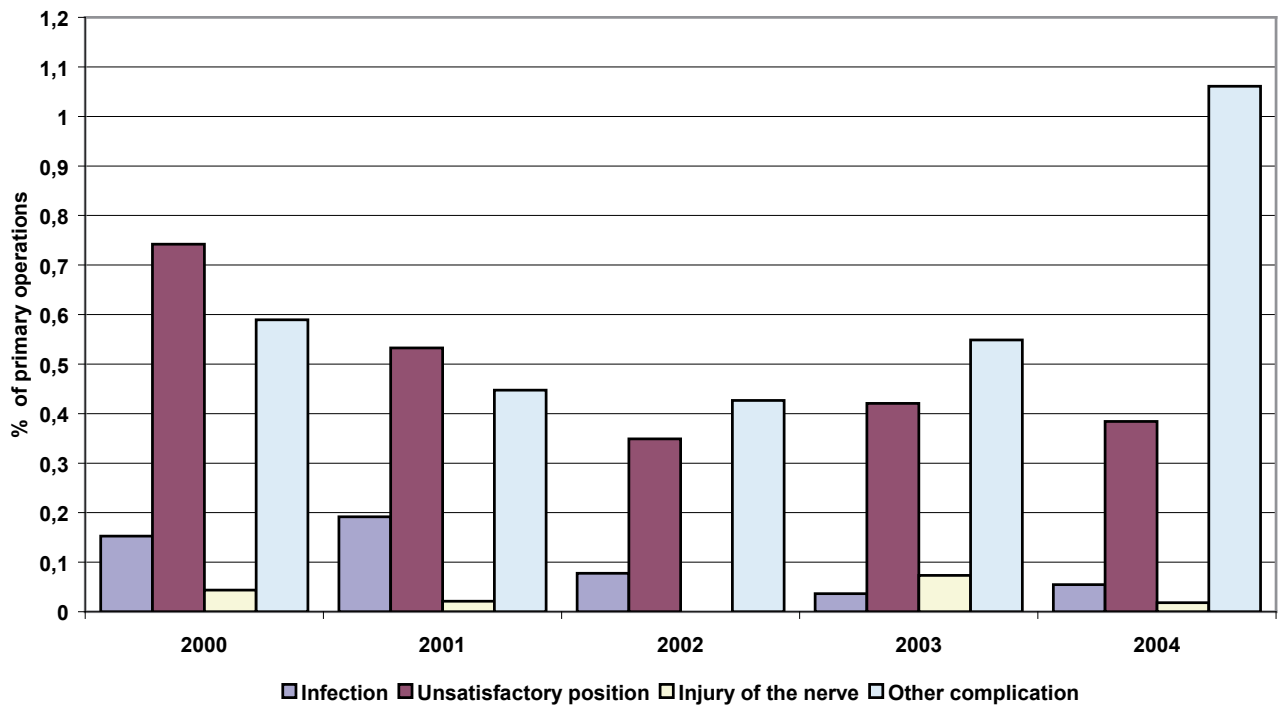
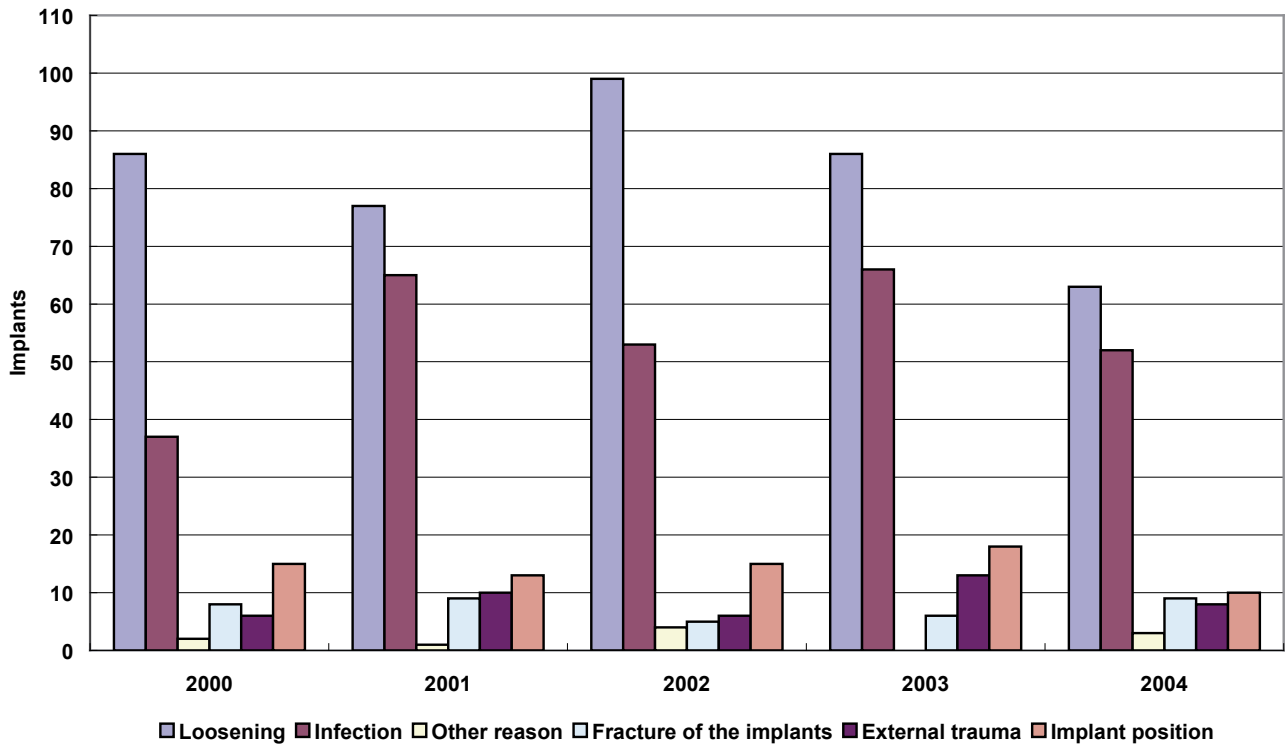
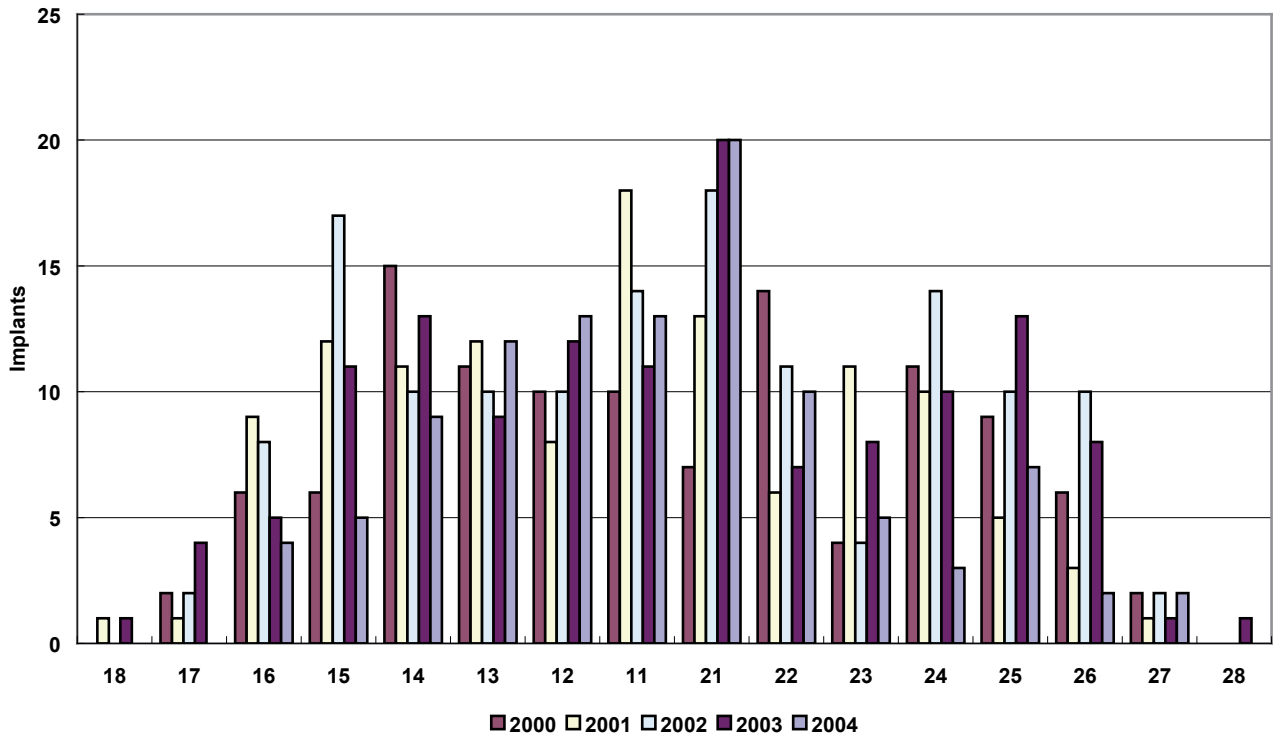


Figure 13: Reason for removal of the implant 2000 - 2004



**Figure 14a: Implants removed from the maxilla by tooth 2000 - 2004**



**Figure 14b: Implants removed from the mandible by tooth 2000 - 2004**

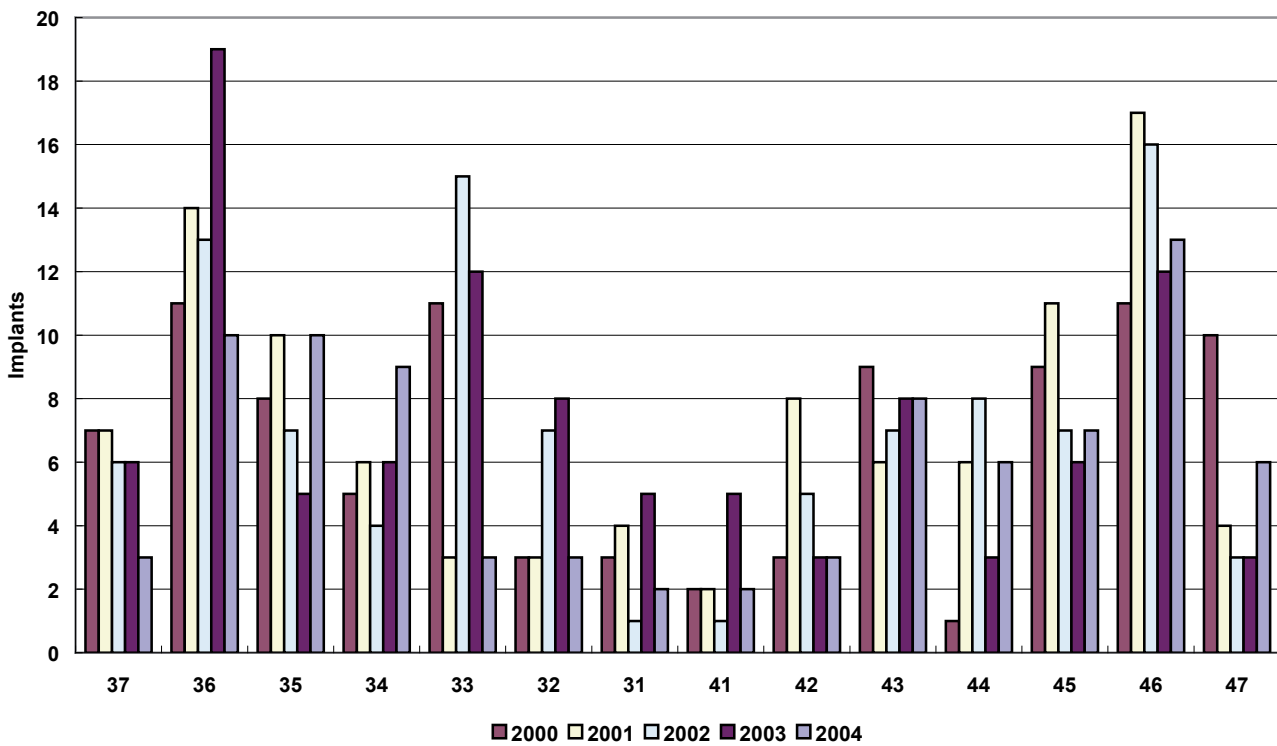


Figure 15a: Length of the removed implant, mm, maxilla 2000 - 2004

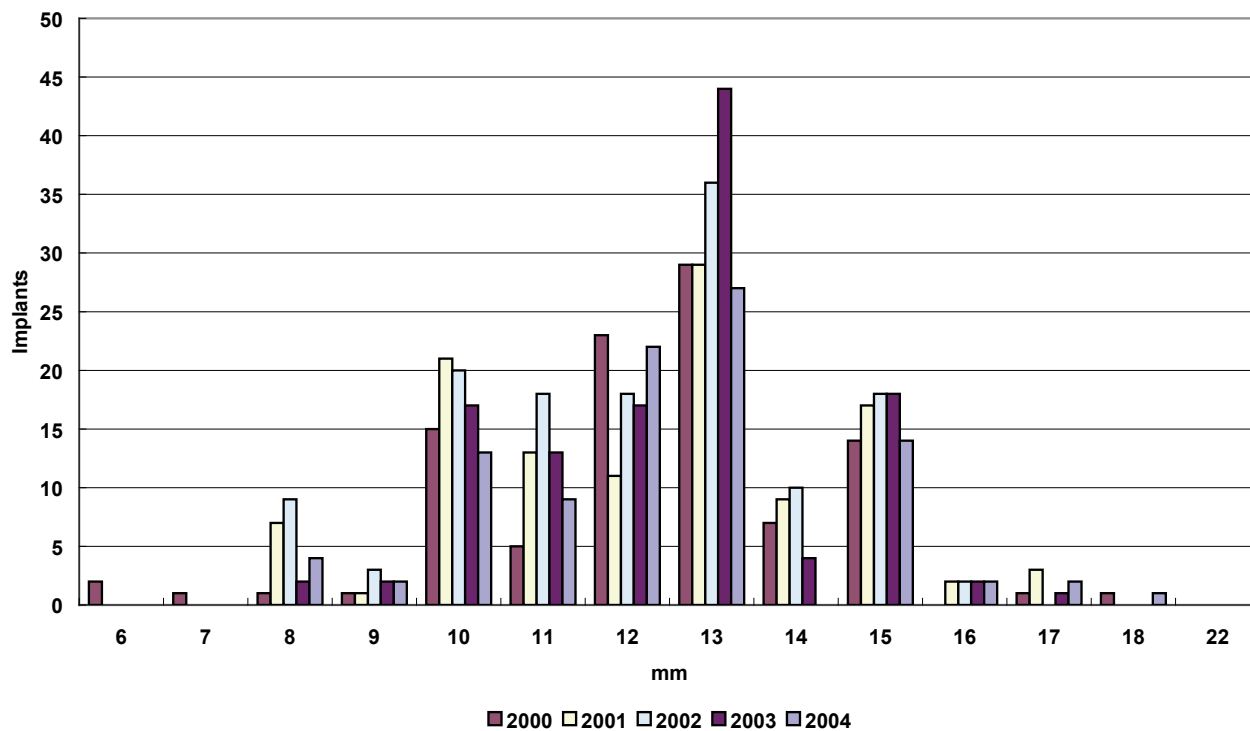
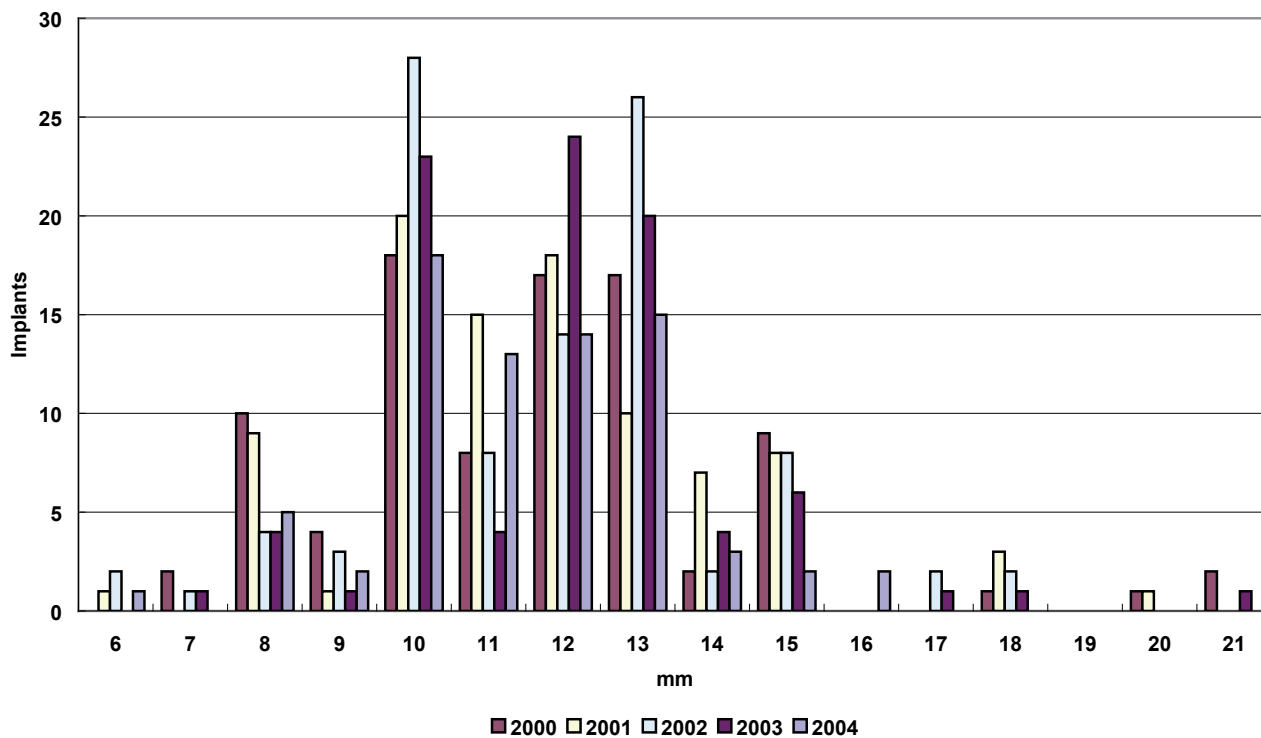
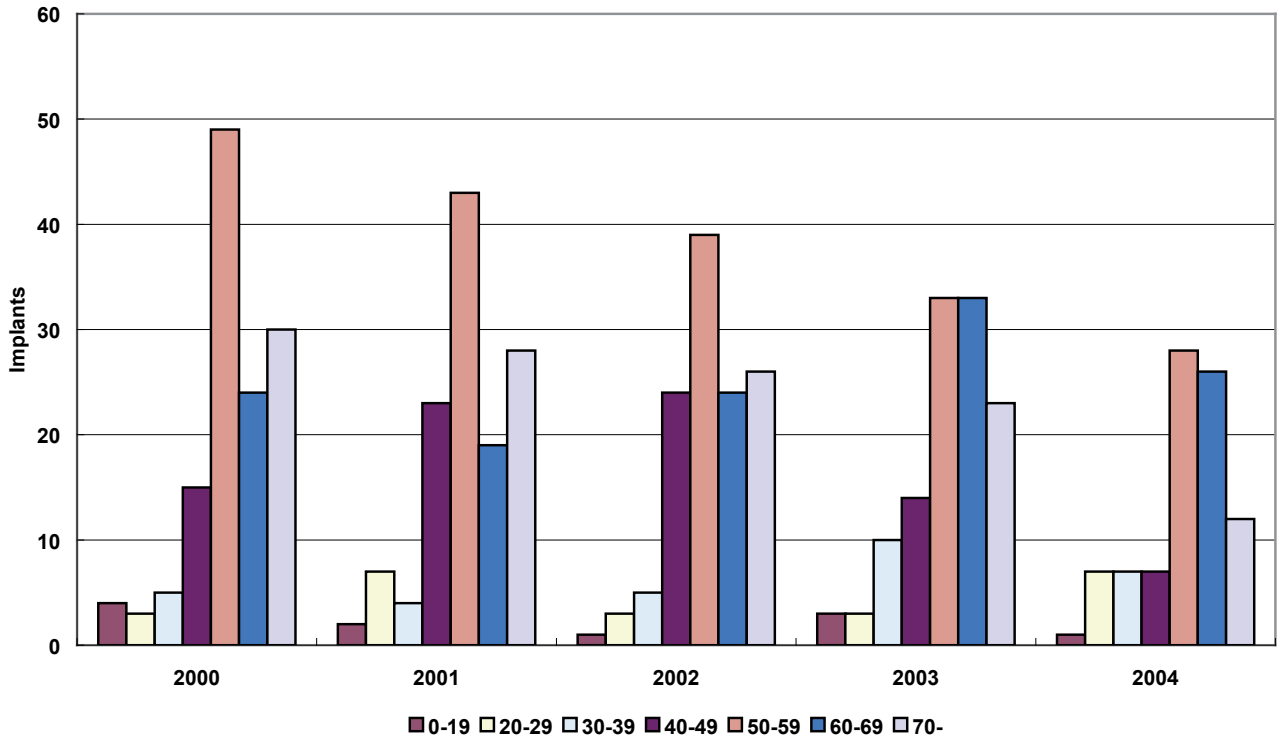


Figure 15b: Length of the removed implant, mm, mandible 2000 - 2004



**Figure 16a: Implants removed by age group, female, 2000 - 2004**



**Figure 16b: Implants removed by age group, male, 2000 - 2004**

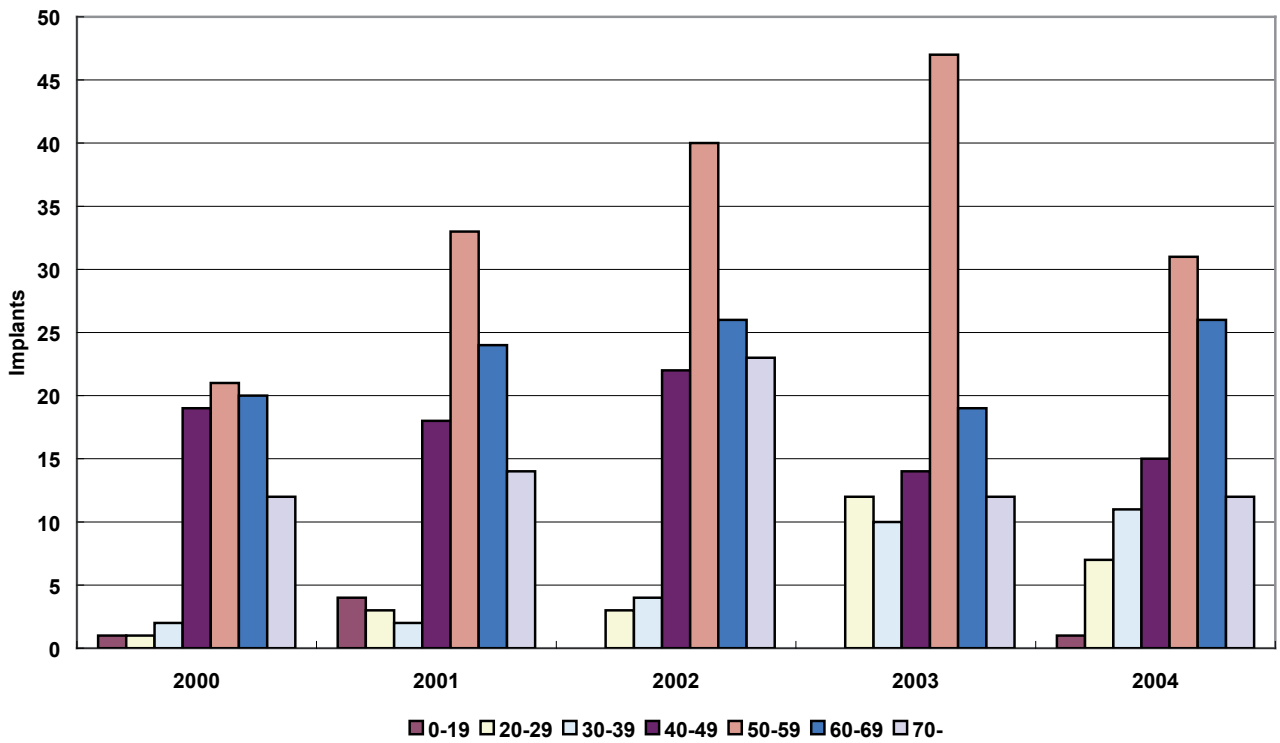
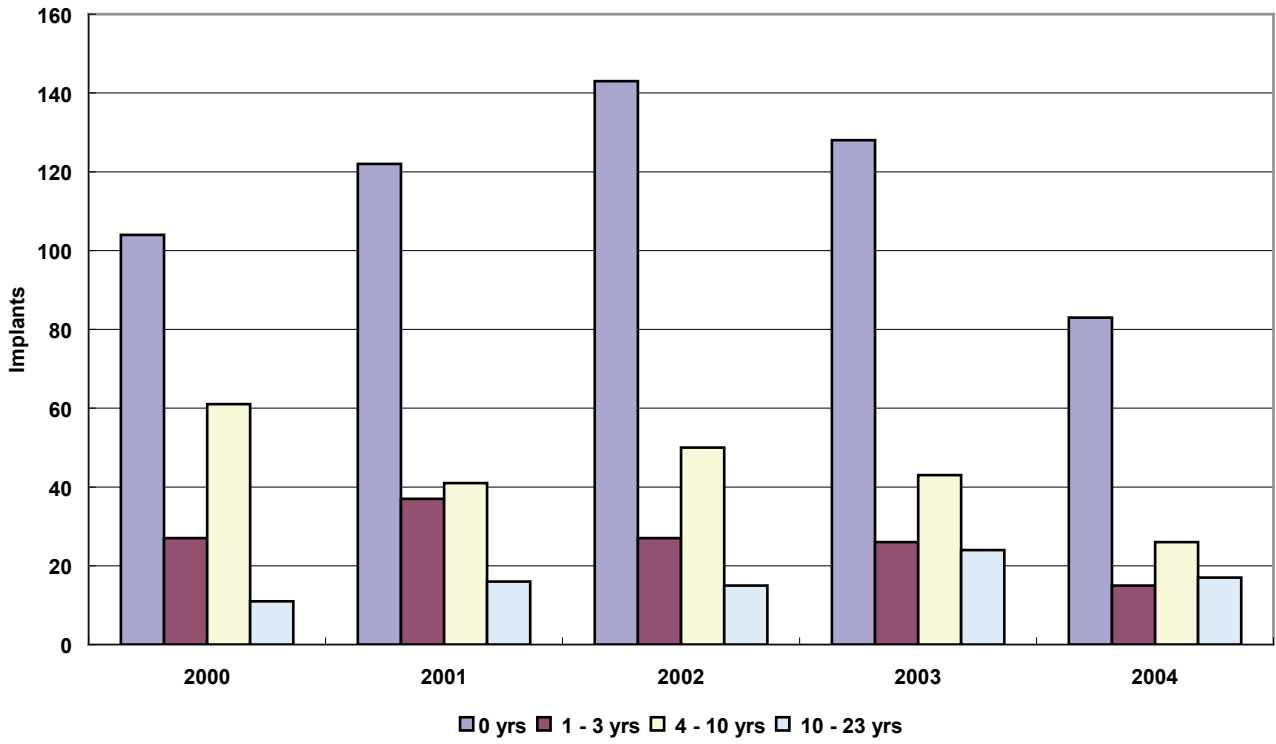


Figure 17: Service life of removed implant 2000 - 2004





**Table 1. Dental implants placed/health care district**

Health care district	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Total
Varsinais-Suomi	237	405	490	493	576	646	690	746	851	943	932	7009
Satakunta	97	109	147	198	206	242	277	218	263	287	250	2294
Kanta-Häme	35	52	92	98	104	110	118	140	221	157	177	1304
Pirkanmaa	101	216	262	416	530	702	740	894	914	835	790	6400
Päijät-Häme	74	135	191	221	290	282	244	144	214	235	208	2238
Kymenlaakso	40	38	94	130	165	243	247	242	220	277	212	1908
Etelä-Karjala	33	46	57	98	63	92	87	122	109	92	68	867
Etelä-Savo	29	78	114	110	107	154	136	104	160	165	156	1313
Itä-Savo	25	21	55	47	47	50	68	83	68	40	65	569
Pohjois-Karjala	119	166	76	62	71	184	139	264	270	247	341	1939
Pohjois-Savo	261	384	563	423	435	414	392	444	478	465	496	4755
Keski-Suomi	115	262	314	329	402	381	438	390	414	528	478	4051
Etelä-Pohjanmaa	63	42	93	101	124	183	159	176	129	155	209	1434
Vaasa	193	222	230	369	268	298	344	272	321	341	406	3264
Keski-Pohjanmaa	32	135	111	109	142	207	175	207	159	198	222	1697
Pohjois-Pohjanmaa	123	242	288	459	476	575	585	665	684	615	722	5434
Kainuu	70	73	98	86	91	79	98	58	129	146	109	1037
Länsi-Pohja	34	51	48	104	145	107	120	91	107	132	182	1121
Lappi	58	73	130	108	226	183	199	235	245	255	189	1901
Åland	16	42	55	65	63	131	163	128	152	144	177	1136
HUS	908	1440	1658	2098	2973	3555	4225	3893	4342	4150	4846	34088
<b>Total</b>	<b>2663</b>	<b>4232</b>	<b>5166</b>	<b>6124</b>	<b>7504</b>	<b>8818</b>	<b>9644</b>	<b>9516</b>	<b>10450</b>	<b>10407</b>	<b>11235</b>	<b>85759</b>

**Table 2a: Implants placed in maxilla**

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Total
Straumann	512	848	885	896	1325	1490	1801	1731	1977	2006	2503	15974
Astra Implant	150	254	372	528	640	818	887	967	1060	1116	1147	7939
Brånemark	225	379	450	741	790	702	583	287	198	79	74	4508
3i Implant System	0	18	26	5	66	241	362	404	486	337	301	2246
Frialit II	33	50	62	138	217	219	319	341	297	176	95	1947
Osteofix	0	0	36	129	123	210	152	246	304	250	298	1748
Brånemark Ti Unite	0	0	0	0	0	0	7	151	428	451	432	1469
Impla-Med	95	153	183	141	100	63	65	58	67	133	103	1161
IMZ	220	196	131	97	117	97	26	43	8	12	0	947
Hi Tec	0	44	133	166	242	183	74	24	14	25	32	937
Osfix	0	0	4	6	35	223	153	192	144	46	6	809
Replace Select	0	0	0	0	0	0	99	32	85	169	349	734
Xive	0	0	0	0	0	0	0	0	34	223	299	556
Replace	0	0	0	0	0	30	33	15	32	52	39	201
BiOsfix	0	0	0	0	0	0	37	64	58	21	19	199
Camlog	0	0	0	0	0	0	20	12	20	29	13	94
Frialoc	0	0	0	0	0	0	12	16	8	0	0	36
Impla	0	0	0	0	0	0	0	0	0	24	8	32
Frialit CELLplus	0	0	0	0	0	0	0	0	0	0	25	25
Imtec	0	16	0	0	0	0	0	0	0	0	5	21
Restore Lifecore	0	0	16	2	0	0	0	0	0	0	0	18
Friatec	0	0	0	0	0	0	0	15	0	0	0	15
Brånemark Zygoma	0	0	0	0	0	1	4	2	1	3	0	11
Tilox	7	1	0	0	0	0	0	0	0	0	0	8
Cal Form	0	0	0	0	0	0	0	7	0	0	0	7
Allfit SSO	0	0	0	0	0	0	0	0	0	1	0	1
<b>Total</b>	<b>1242</b>	<b>1959</b>	<b>2298</b>	<b>2849</b>	<b>3655</b>	<b>4277</b>	<b>4634</b>	<b>4607</b>	<b>5221</b>	<b>5153</b>	<b>5748</b>	<b>41643</b>

**Table 2b: Implants placed in mandible**

<b>Year</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>Total</b>
Straumann	626	1055	1162	1190	1625	1923	1966	1868	2149	2478	2789	18831
Astra Implant	289	370	525	446	571	683	859	896	980	937	1000	7556
Brånemark	300	424	461	855	806	660	711	476	368	114	50	5225
Osteofix	0	8	68	149	192	246	280	269	317	304	272	2105
3i Implant System	1	9	10	0	54	156	293	341	310	267	239	1680
Osfix	0	12	136	93	49	339	289	213	143	42	18	1334
Brånemark Ti Unite	0	0	0	0	0	0	8	226	335	322	320	1211
IMZ	150	195	171	132	158	77	47	34	10	9	10	993
Frialit II	5	12	31	95	139	135	116	134	136	105	52	960
Hi Tec	0	67	130	152	154	110	78	28	28	49	45	841
Impla-Med	44	90	116	101	60	63	74	69	85	65	73	840
Replace Select	0	0	0	0	0	0	81	43	57	128	239	548
Xive	0	0	0	0	0	0	0	0	9	178	198	385
Frialoc	0	0	0	0	0	0	28	104	114	33	5	284
Replace	0	0	0	0	0	16	27	24	39	57	24	187
BiOsfix	0	0	0	0	0	0	19	40	48	20	13	140
Camlog	0	0	0	0	0	0	24	3	12	15	20	74
Impla	0	0	0	0	0	0	0	0	0	26	16	42
Imtec	0	14	0	0	0	0	0	0	0	3	3	20
Restore Lifecore	0	0	18	1	0	1	0	0	0	0	0	20
Frialit CELLplus	0	0	0	0	0	0	0	0	0	0	17	17
Tiiox	2	2	0	0	0	0	0	0	0	0	0	4
Allfit SSO	0	0	0	0	0	0	0	0	1	0	3	4
Cresco	0	0	2	0	0	0	0	0	0	0	0	2
Friatec	0	0	0	0	0	0	0	2	0	0	0	2
Brånemark Zygoma	0	0	0	0	0	0	0	0	0	1	0	1
<b>Total</b>	<b>1417</b>	<b>2258</b>	<b>2830</b>	<b>3214</b>	<b>3808</b>	<b>4409</b>	<b>4900</b>	<b>4770</b>	<b>5141</b>	<b>5153</b>	<b>5406</b>	<b>43306</b>

**Table 2c: Implants placed, total**

<b>Year</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>Total</b>
Straumann	1138	1903	2047	2086	2950	3413	3767	3599	4126	4484	5292	34805
Astra Implant	439	624	897	974	1211	1501	1746	1863	2040	2053	2147	15495
Brånemark	525	803	911	1596	1596	1362	1294	763	566	193	124	9733
3i Implant System	1	27	36	5	120	397	655	745	796	604	540	3926
Osteofix	0	8	104	278	315	456	432	515	621	554	570	3853
Frialit II	38	62	93	233	356	354	435	475	433	281	147	2907
Brånemark Ti Unite	0	0	0	0	0	0	15	377	763	773	752	2680
Osfix	0	12	140	99	84	562	442	405	287	88	24	2143
Impla-Med	139	243	299	242	160	126	139	127	152	198	176	2001
IMZ	370	391	302	229	275	174	73	77	18	21	10	1940
Hi Tec	0	111	263	318	396	293	152	52	42	74	77	1778
Replace Select	0	0	0	0	0	0	180	75	142	297	588	1282
Xive	0	0	0	0	0	0	0	0	43	401	497	941
Replace	0	0	0	0	0	46	60	39	71	109	63	388
BiOsfix	0	0	0	0	0	0	56	104	106	41	32	339
Frialoc	0	0	0	0	0	0	40	120	122	33	5	320
Camlog	0	0	0	0	0	0	44	15	32	44	33	168
Impla	0	0	0	0	0	0	0	0	0	50	24	74
Frialit CELLplus	0	0	0	0	0	0	0	0	0	0	42	42
Imtec	0	30	0	0	0	0	0	0	0	3	8	41
Restore Lifecore	0	0	34	3	0	1	0	0	0	0	0	38
Friatec	0	0	0	0	0	0	0	17	0	0	0	17
Tilox	9	3	0	0	0	0	0	0	0	0	0	12
Brånemark Zygoma	0	0	0	0	0	1	4	2	1	4	0	12
Cal Form	0	0	0	0	0	0	0	7	0	0	0	7
Allfit SSO	0	0	0	0	0	0	0	0	1	1	3	5
Cresco	0	0	2	0	0	0	0	0	0	0	0	2
<b>Total</b>	<b>2659</b>	<b>4217</b>	<b>5128</b>	<b>6063</b>	<b>7463</b>	<b>8686</b>	<b>9534</b>	<b>9377</b>	<b>10362</b>	<b>10306</b>	<b>11154</b>	<b>84949</b>

**Table 3: Removed implants**

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Total
Straumann	16	10	26	32	29	33	58	56	59	75	62	456
Brånemark	16	30	30	58	55	79	61	41	22	27	14	433
Astra Implant	4	9	5	12	15	20	16	25	35	45	37	223
IMZ	5	4	9	10	9	10	19	20	8	12	7	113
Frialit II	1	0	4	3	7	17	10	21	17	12	17	109
3i Implant System	0	1	0	1	0	0	10	9	30	11	8	70
Impla-Med	2	7	4	0	6	10	6	7	11	9	4	66
Hi Tec	0	0	5	6	4	1	14	11	17	4	2	64
Osfix	0	0	0	2	1	7	9	14	15	9	6	63
Osteofix	0	0	0	7	1	3	1	7	5	7	5	36
Brånemark Ti Unite	0	0	0	0	0	0	0	2	8	9	11	30
Xive	0	0	0	0	0	0	0	0	0	5	7	12
Replace Select	0	0	0	0	0	0	0	3	0	2	7	12
Frialoc	0	0	0	0	0	0	0	0	10	0	0	10
BiOsfix	0	0	0	0	0	0	0	6	2	2	0	10
Replace	0	0	0	0	0	1	2	1	0	3	1	8
Biolox	1	0	0	0	0	0	0	0	1	1	0	3
Camlog	0	0	0	0	0	0	0	0	0	0	3	3
Core-vent	0	0	0	0	2	0	0	0	0	0	0	2
Cal Form	0	0	0	0	0	0	0	1	0	0	0	1
<b>Total</b>	<b>45</b>	<b>61</b>	<b>83</b>	<b>131</b>	<b>129</b>	<b>181</b>	<b>206</b>	<b>224</b>	<b>240</b>	<b>233</b>	<b>191</b>	<b>1724</b>

**Table 4: Supportive techniques in 2000 - 2004**

Year	2000		2001		2002		2003		2004	
	n	%	n	%	n	%	n	%	n	%
Autograft	486	10,6	543	11,1	649	12,1	787	13,8	959	15,6
Xenograft	90	1,9	96	2,0	158	2,9	112	2,0	183	3,0
Membrane	52	1,1	26	0,5	29	0,5	42	0,7	50	0,8
Condensation	59	1,2	81	1,7	166	3,1	188	3,3	201	3,3
Sinus lift	29	0,6	38	0,8	49	0,9	47	0,8	58	0,9
Osteotomia	0	0,0	2,0	0,0	8	0,1	6	0,1	5	0,1



## INSTRUCTIONS TO FILL IN THE FORM

The form shall be mailed within ten days after the operation. The code number can be filled in if provided by the National Agency for Medicines.

One form is used for each patient and operation. All implants inserted in one operation are reported on the same form, within ten days after operation.

Give the name of the dental office/hospital in which the operation has been performed.

Please, note! Fill in always the inquiries marked with A. Sections B and C are used in connection with installation and removal of the implant, respectively. Copies of the form can be made if necessary.

Fill in always:

- A1. Give always the complete social security number but not the name of the patient.  
Home commune=commune of residence.
- A2. Date of the operation is given as day/month/year (for example 010194).
- A3. Operation area. Mark the length of the each fixture in to the space corresponding to the tooth in question.

Fixture installation:

- B4. Give the trade name of the implant used. Indicate whether a one-stage or two stage procedure has been applied. In a two-stage method, the fixture is covered by the oral mucosa for the healing period.
- B5. Give the main (only one) reason for the implant treatment.
- B6. Prosthodontic treatment planned is given here.
- B7. If prophylactic antibiotics has been used give the trade name of medicine here.
- B8. Primary complications, i.e. complications occurring within ten days after the operation, are reported here. Removal of a fixture due to a complication more than ten days postoperatively are reported in section C of a separate form.
- B9. Other information. Give any disease considered relevant to the implant operation.  
Indicate if the patient has been given irradiation therapy.
- B10. Information of the method used. Bone grafts and bone substitute materials (trade names) are reported here.
- C11. Give the trade name of removed or replaced fixture and the date when it was inserted.  
Note! Section A shall be filled in completely also in connection of the implant removal.  
Note! If the fixture is placed in an other location in connection of the implant removal this is considered as a new implantation and shall be reported in a seperate form (section A and B).
- C12. Give the main reason causing removal of the fixture.
- C13. Remarks. Use the space to give additional information not to mentioned above.  
If the implant installation is made less than 12 months after the extraction of the tooth to be replaced specify the time in months.