

BETA-HEMOLYTIC STREPTOCOCCI (%I+R) 2002

**HUCH LabDgn material from Helsinki and Uusimaa Districts
One isolate per patient (the first isolate).**

	S. pyog.	S. agalact.	Group G^{a)}
Penicillin	0	0	0
Erytromycin	5	9	10
Clindamycin	1	5	2
n	4748	2675	2250

a) S. dysgalactiae spp. equisimilis Group G strains

MARTTI VAARA Feb 3, 2003

RESISTANCE IN PNEUMOCOCCUS (% R+I) in 2002

HUCH LabDgn material from Helsinki and Uusimaa Districts

Material	n	Pen-R	Pen-I	Ctriax-R	Ctriax-I	Ery	Cli	Dox	SxT	Levo	Moxi	Teli
All isolates	855	1.6	7.4	0.2	0.8	17	7	6	18	ND	ND	ND
ENT isolates ^{a)}	187	2.7	9.1	0.5	1.1	25	12	6	20	ND	ND	ND
Blood isolates	157	0.6	7.0	0.6	0.0	11	5	ND	ND	2	2	0

^{a)} From the Ear, Nose and Throat Clinic

MARTTI VAARA Feb 3,2003

H. INFLUENZAE & M. CATARRHALIS (%R+I) 2002

**HUCH LabDgn material from Helsinki and Uusimaa Districts
One isolate/patient (the first isolate)**

	H.infl.^{a)}	M. catarrh.^{b)}
Ampicillin	15	90
Amoxyc. + clavul.	1	0
Cefaclor	2	1
Cefuroxime	0	0
Doxycycline	10	1
Ciprofloxacin	0	0
Sulfameth+trimethopr.	15	3
Azithromycin	0	1

a) n=546 b) n=330

MARTTI VAARA Feb 3,2000

STAPH. AUREUS (%I+R) 2002

**Pus and blood isolates. One isolate per patient (the most resistant isolate).
HUCH LabDgn material from Helsinki and Uusimaa Districts**

Material	n	Oxac	Clot	Ery	Cli	Levo	Rif	Fus	Tob	Net	SxT	Van
HUCH (7 hosp.)	1769	3.1	3.1	9	4	5	1	5	3	0	1	0
Health centers	1690	1.7	1.7	6	1	-	-	-	-	-	-	0
All hosp. and HCs	5597	1.8	1.8	7	2	5 ^{a)}	1 ^{b)}	6 ^{c)}	3 ^{d)}	0 ^{e)}	1 ^{f)}	0

a) n=2196; b) n=2195; c) n=2501; d) n= 2503; e) n=2195; f) n=2195

MARTTI VAARA Feb 3,2003

STAPH. EPIDERMIDIS (%I+R) 2002

**Pus and blood isolates. One isolate per patient (the most resistant isolate).
HUCH LabDgn material from Helsinki and Uusimaa Districts**

Material	n	Oxa	Cli	Tob	Net	Ery	Rif	Fus	Levo	SxT	Van
Meilahti hosp.	837	88	69	74	3	78	23	59	76	68	0
Childrens hosp.	189	78	54	62	19	65	32	63	19	62	0
Other sources	1916	71	45	57	2	59	17	51	59	58	0

MARTTI VAARA Feb 3,2003

RESISTANCE IN STAPH. HAEMOLYTICUS (%I+R) 2002

**Pus and blood isolates. One isolate per patient (the most resistant isolate)
HUCH LabDgn material from Meilahti and Töölö Hospitals**

n	Oxa	Cli	Tob	Net	Ery	Rif	Fus	Levo	SxT	Van
151	95	71	59	3	89	9	43	92	67	0

MARTTI VAARA Feb 3,2003

ENTEROCOCCI (% R+I) 2002

**Pus and blood isolates. One isolate per patient (the most resistant isolate)
HUCH LabDgn material from Helsinki and Uusimaa Districts**

	n	Ampi/Pi-Tz	Imi	Vanco	Genta(high)
E. faecalis	1904	0.4	0.6	0.1	32^{a)}
E. faecium	461	73	74	0.4	15^{b)}

a) n= 127

b) n = 78

MARTTI VAARA Feb 3,2003

ENTEROCOCCI, URINE ISOLATES (%R) 2002

**HUCH LabDgn material from Helsinki and Uusimaa Districts
One strain per patient (the most resistant isolate)**

	E. faecalis n = 5436	E. faecium n = 786
Ampicillin	0.3	88
Nitrofurantoin	0.7	3
Norfloxacin	43	89
Sulfameth+trimethoprim	28	45
Vancomycin	0	0

MARTTI VAARA Feb 6, 2003

ENTEROBACTERIACEAE, PUS AND BLOOD (% R+I) 2002

at six hospitals (M,T,L,K,N,Ma) in Helsinki University Central Hospital
Pus and blood isolates. One isolate per patient (the most resistant)

	n	Cfur	Ctax	Pi-Tz	Tob	Levo	Mero
<i>E. coli</i>	821	4	2	1	3	8	0
<i>Kl. pneum.</i>	201	11	5	2	6	7	0
<i>Kl. oxytoca</i>	172	9	1	5	0	2	0
<i>Proteus mirabilis</i>	99	1	0	0	1	2	0
<i>Ent. cloacae</i>	312	41	28	21	1	1	1
<i>Enterobact. spp.</i>	134	41	24	20	2	1	1
<i>Citrob. freundii</i>	43	37	33	9	2	9	0
<i>Serratia marc.</i>	72	94	3	1	6	4	0
<i>Proteus vulgaris</i>	65	94	3	0	3	2	0
<i>Morgan. morganii</i>	63	78	11	0	2	2	0
Total	1982	24	9	6	2	5	0

MARTTI VAARA Feb 3, 2003

E. COLI, URINE ISOLATES (%R) 2002

HUCH LabDgn material from Helsinki and Uusimaa Districts.

One isolate per patient (the most resistant isolate)

Material	Pt. age (y)	n	Nitrof	Mecill	Cephalex	Norflo	SxT	Trim
Health centers	≤40	3688	0	2	4	1	18	19
	41-60	1528	0	2	4	2	16	17
	>60	5170	2	4	7	4	21	23
Meilahti hospital		830	1	4	8	7	20	22
Hels. City hospitals	>75	1084	5	7	14	15	30	33
All materials		16377	2	4	7	5	20	22

MARTTI VAARA Feb 3, 2003

ENTEROBACTERIACEAE, URINE ISOLATES (%R) 2002

HUCH LabDgn material from Helsinki and Uusimaa Districts

One isolate per patient (the most resistant isolate)

	E. coli	Kl. pneum.	Kl. oxyt.	Enterobact.	Pr. mir.
Nitrofurantoiini	2	14	2	19	99
Mesillinaami	4	6	10	12	11
Kefaleksiini	7	7	99	5	2
Norfloksasiini	5	3	1	5	5
Sulfatrimetop.	20	14	10	8	28
Trimetopriimi	22	2	12	13	40
n	16337	2278	610	1026	1056

MARTTI VAARA Feb 3, 2003

ESBL, FREQUENCY (%) 2002 ^{a)}

Isolates from:	E.coli		K. pneumoniae	
	pus and blood	urine	pus and blood	urine
Helsinki Univ Hosp	1.5 (n=1019)	0.7 (n=3967)	4.2 (n=240)	1.5 (n=607)
Helsinki City Hosp & HC	1.2 (n=245)	0.7 (n=10810)	1.6 (n=61)	0.4 (n=1436)
Uusimaa district	0.0 (n=517)	0.1 (n=2385)	0.0 (n=107)	0.6 (n=332)

^{a)} Patients with an ESBL strain/ patients with non-ESBL strains (in %). One strain [the most resistant]/patient). Here, ESBL strains are defined *sensu lato*, i.e. as strains that are I or R to any of the following 3. generation cephalosporins: cefotaxime, ceftazidime, ceftriaxone.

MARTTI VAARA Feb 3, 2003

PSEUD. AERUGINOSA, MEILAHTI HOSPITAL (% I+R)

2002

using WHONET variations

pus and blood isolates

WHONET variation used	n	Ktaz	Mero	Pi-Tz	Tob	Ami	Sip
All isolates	840	22	30	33	24	3	56
One/patient, first isolate	292	9	17	23	18	3	38
One/patient, most suscept.	292	8	14	20	17	4	34
One/patient, most resist.	292	16	23	30	22	4	42
One/5-day period, first isol.	490	13	22	28	22	3	48
One/2-day period, first isol.	587	18	28	31	23	4	51

MARTTI VAARA Feb 3, 2003

PSEUD. AERUGINOSA (% I+R) 2002

Pus and blood isolates. One isolate per patient (the most resistant isolate)

HUCH LabDgn material from selected hospitals in Helsinki and Uusimaa District.

Material	n	Ctaz	Mero	Pi-Tz	Tob	Ami	Cip
Meilahti hospital	292	16	23	30	22	3	48
Töölö hospital	233	11	18	23	21	3	49
Helsinki City hospitals	211	12	14	24	21	2	42
Maria hospital	63	5	6	16	10	2	25
Children´s clinic	38	10	8	11	0	3	18
Uusimaa hospitals	322	7	9	14	9	1	25
ENT clinic	189	1	1	2	2	1	3
Health centers	376	2	4	4	4	1	15

MARTTI VAARA Feb 6, 2003

ACINETOBACTER SPP (% I+R) 2002

Pus and blood isolates. One isolate per patient (the most resistant isolate)

HUCH LabDgn material from selected hospitals

Materiaali	n	Ktaz	Mero	Pi-Tz	Tob	Sip	SuTri
Meilahti	96	8	3	11	6	8	15
Töölö	130	25	15	26	21	23	27

MARTTI VAARA Feb 6, 2003

STENOTROPHOMONAS MALTOPHILIA (% I+R) 2002

Pus and blood isolates. One isolate per patient (the most resistant isolate)

HUCH LabDgn material from selected hospitals

	n	SxT	Levo	Cipro	Tic-clav	Pip-taz	Ceftaz	Mero	Tobra
Meilahti	121	12	24	39	45	99	100	99	99
Töölö	67	4	19	37	29	100	100	99	90
LNS	13	0	10	45	29	90	100	100	90
All units	415	8	22	34	37	94	100	99	92

MARTTI VAARA Feb 6,2003

BACTEROIDES FRAGILIS GROUP (%R+I) 2002

**HUCH LabDgn material from Helsinki and Uusimaa Districts.
One isolate per patient (the first isolate). n = 993**

Metronidazole	0.1
Piperacillin + tazobactam	0.4
Imipenem	0.0
Clindamycin	44
Doxicycline	11
Penicillin G	100

MARTTI VAARA Feb 6, 2003

NEISSERIA GONORRHOEAE (%) 2002

**HUCH LabDgn material from Helsinki and Uusimaa Districts
One isolate per patient (the first isolate). n = 75**

Ciprofloxacin-R	31
Ciprofloxacin-I	7
Cephtriaxone	0
Azithromycin	0

MARTTI VAARA Feb 6, 2003

NEISSERIA MENINGITIDIS (%) 2002

**HUCH LabDgn material from Helsinki and Uusimaa Districts
One isolate per patient (the first isolate). n = 15**

Penicillin G -R 0

Penicillin G -I 0

Ciprofloxacin-R 0

Ciprofloxacin-I 0

Meropenem 0

MARTTI VAARA Feb 6, 2003

CAMPYLOBACTER, (% RESISTANCE) 2002

**HUCH LabDgn material from Helsinki and Uusimaa Districts
One isolate per patient (the first isolate).**

	C. jejuni	C. coli
Ciprofloxacin-R	43	57
Ciprofloxacin-I	3	4
Erythromycin-R	0.4	11
Erythromycin-I	0.4	0
n	492	83

MARTTI VAARA Feb 6, 2003

SALMONELLA (% RESISTANCE) 2002

**HUCH LabDgn material from Helsinki and Uusimaa Districts
One isolate per patient (the first isolate)**

Ciprofloxacin-R	0		
Ciprofloxacin-I	0		
Sulfametox/Trimethoprim	8		
Ampicillin	10	Amp-R + Dox-R + TxS-R	3%
Doxycyline I+R	87	Amp-R + Dox-R	7%

MARTTI VAARA Feb 6, 2003