

**Antimicrobial resistance in *Streptococcus pneumoniae*,
Streptococcus pyogenes and *Escherichia coli* from the Faroese
population, correlation with antimicrobial use and comparison
with Denmark and Iceland**

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September 2012



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Hví

- Lítil vitan um antibiotika mótstöðuføri í bakterium í tí føroyska samfelagnum
- Umráðandi fyri tað føroyska samfelagið
- Fer at betra um viðgerðina

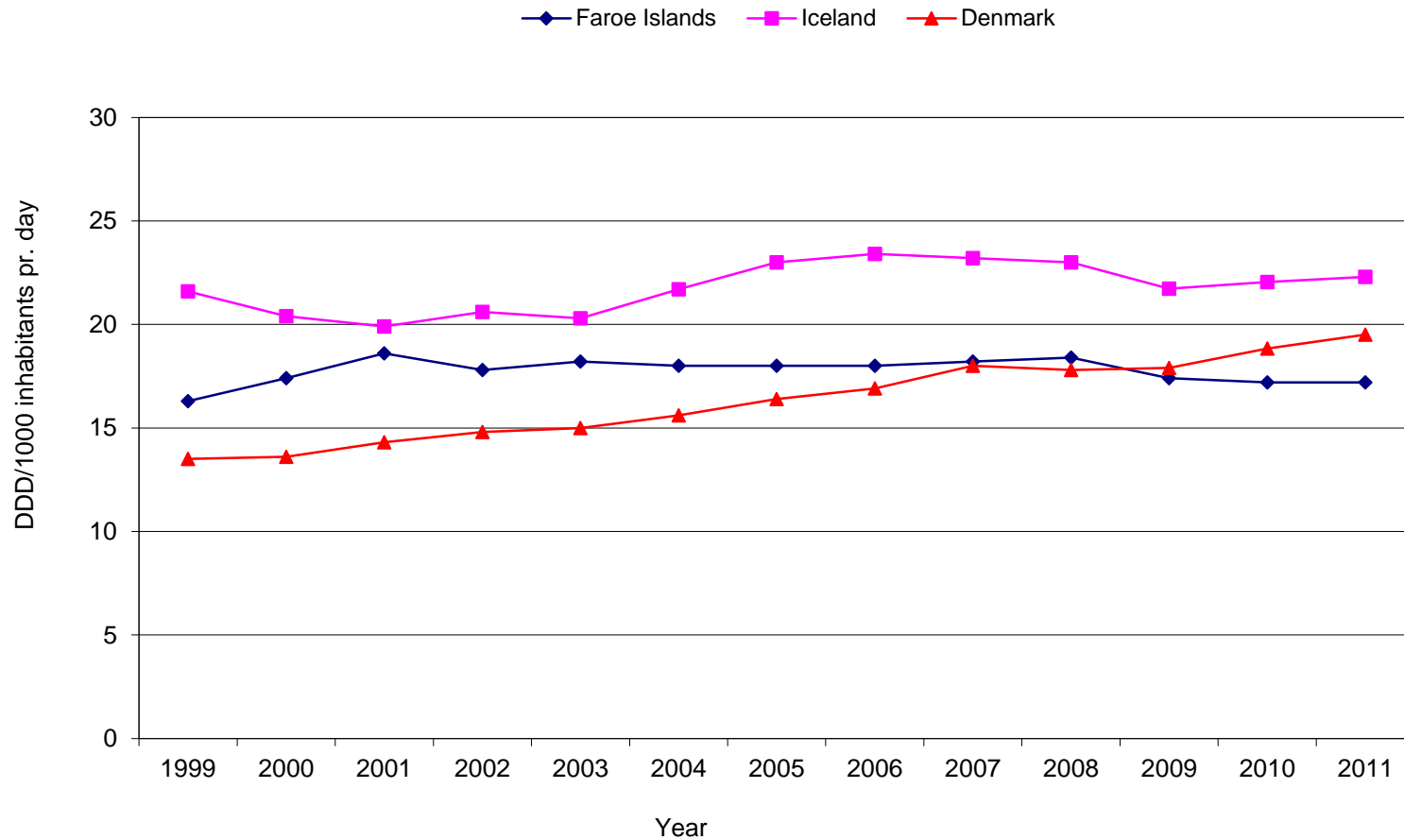


Hvussu

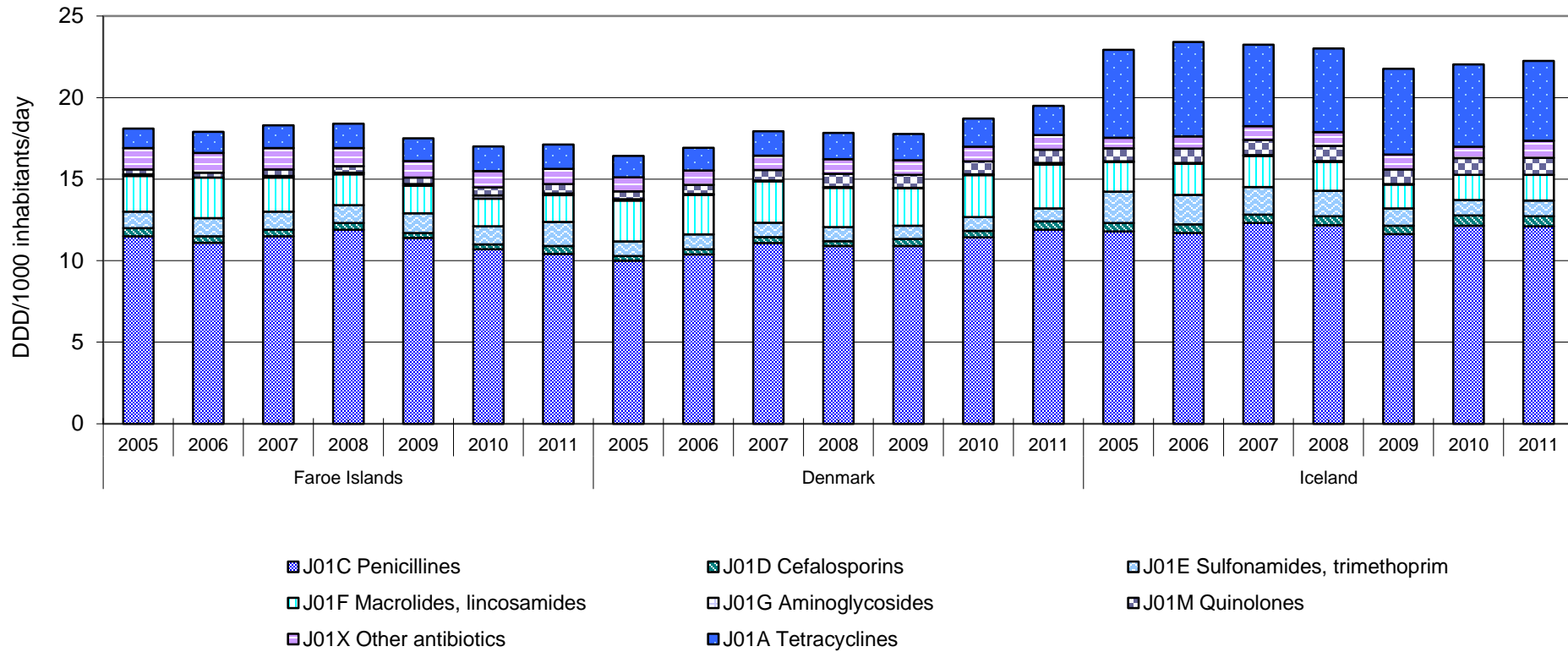
- Antibiotika nýtsla
 - Landsapotekarin, Danmap og Lyfastofan
- Antibiotika mótstöðuføri kanningar
 - *Streptococcus pneumoniae*
 - *Streptococcus pyogenes* (gpA)
 - *Escherichia coli*



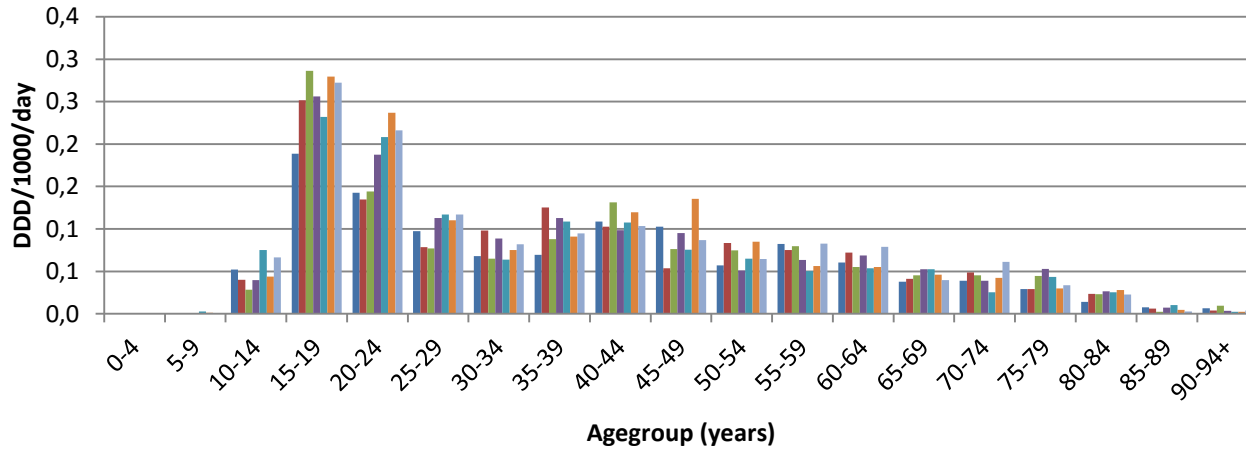
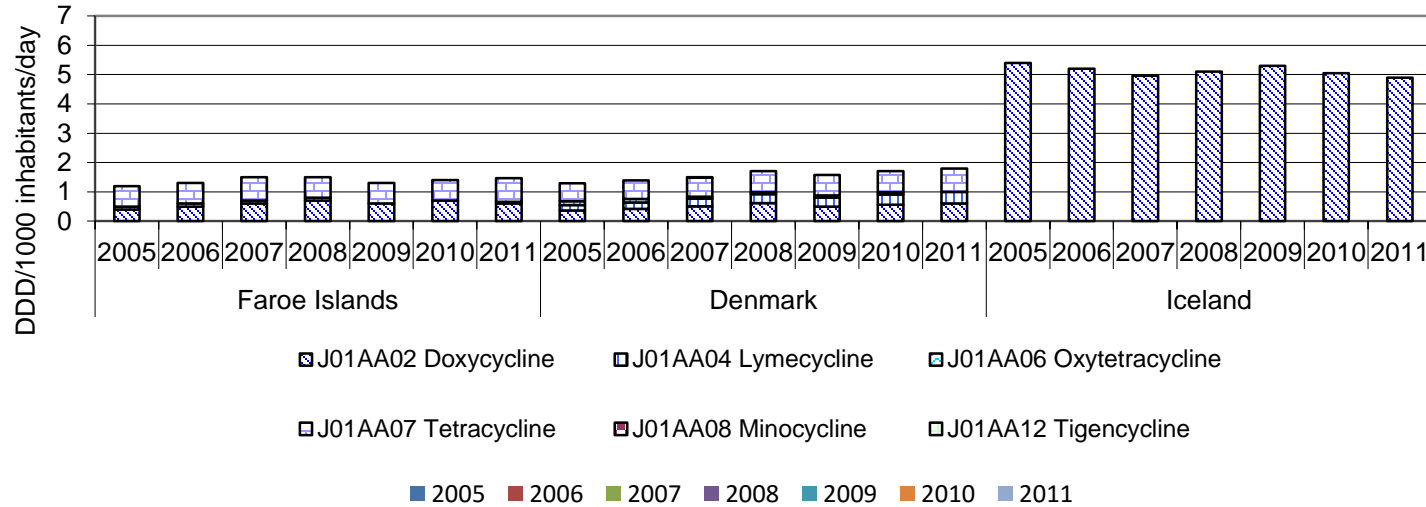
J01 antibiotika nýtsla



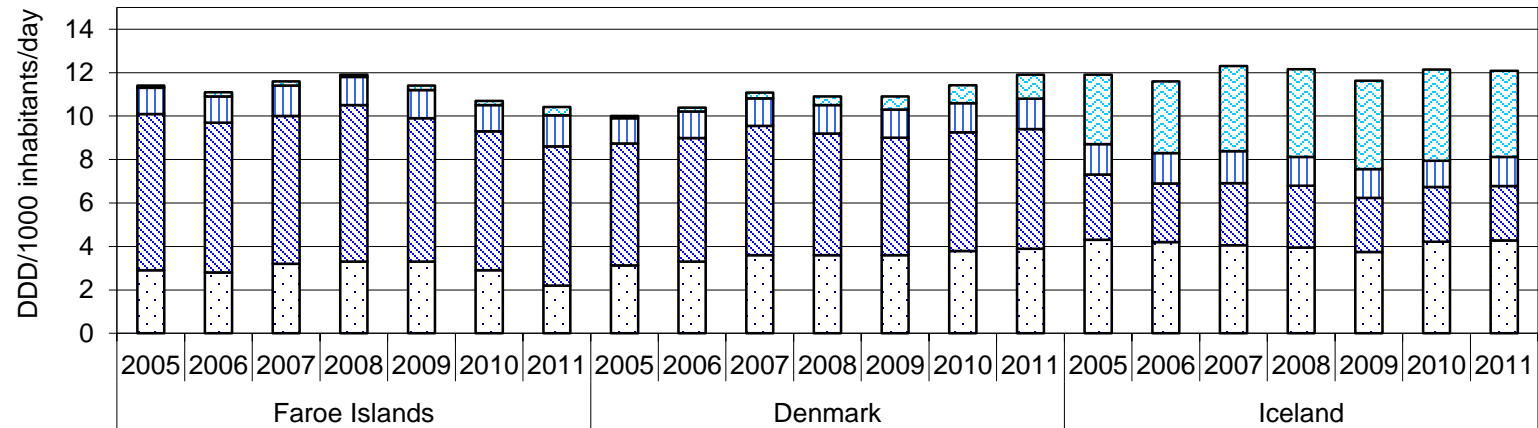
2005 til 2011



Tetracycline



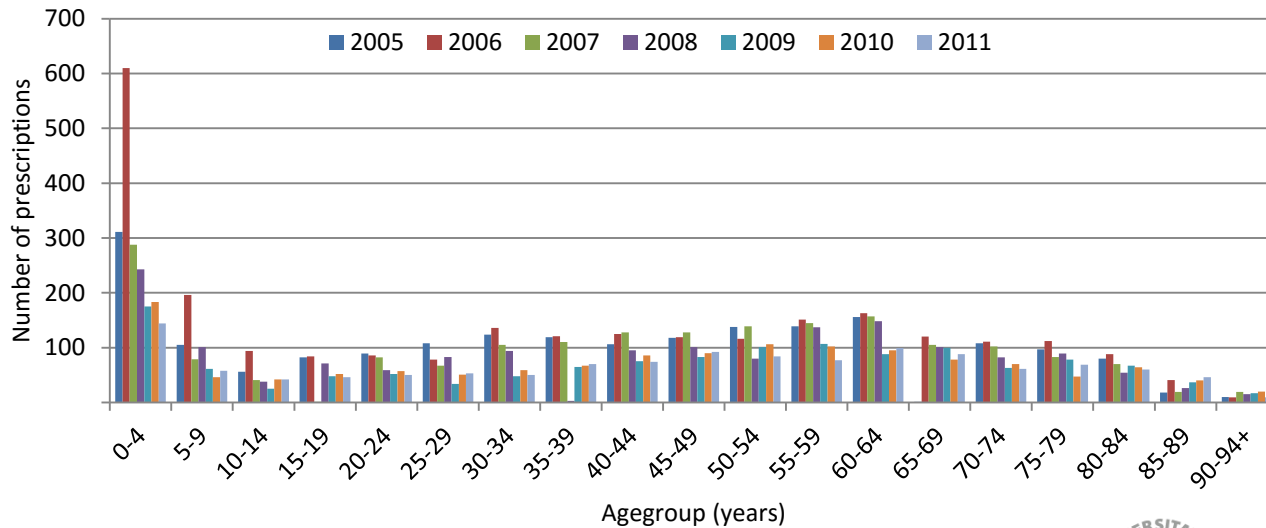
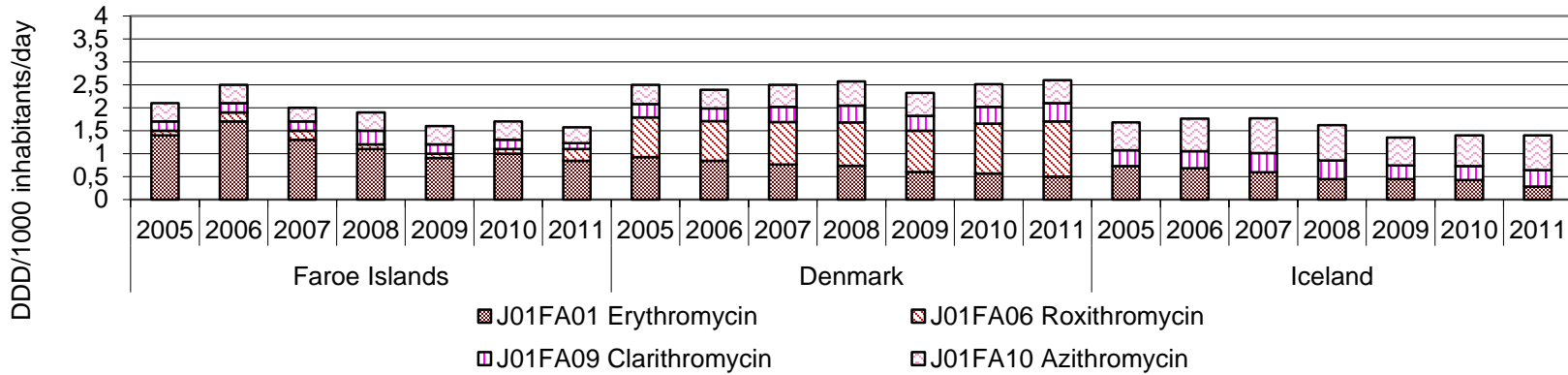
Penicillin



- J01CA Broad-spectrum penicillins
- ▨ J01CE Narrow-spectrum penicillins
- J01CF Penicillinase-resistant penicillins
- ▩ J01CR Comb of penicillin incl. beta-lactamase inhibitors



Macrolides



Royndartøka

- Isolatar av *Streptococcus pneumoniae* frá frískum börnum í ganga á dagstovni í aldrinum 0.5-7 ár
- *Streptococcus pyogenes* (gpA) frá sjúklingum sum vóru positiv í Strep test
- *Escherichia coli* frá landroyndum frá sjúklingum við landrásbruna. Eftir staðfesting av lekucyttum, nitrit ella bæði



Streptococcus pneumoniae

- Nasopharyngeal prøvar frá 616 børnum í aldrinum 0.5 til 7 ár
- Januar til mars (2009, 2010 og 2011)
- 31 dagstovnar (eru 57 í Føroyum)



Úrslit

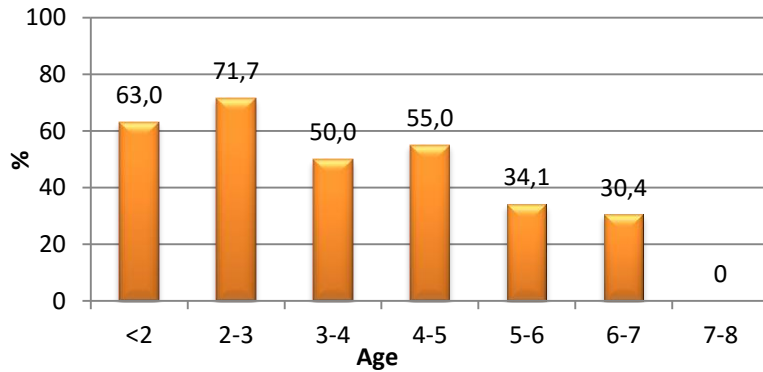
- Frá teimum 616 børnum

	2009	2010	2011
Tal av børnum	265	228	123
Berarar %	50,2	40,4	44,7
Miðal aldur	3,25	4,21	3,75

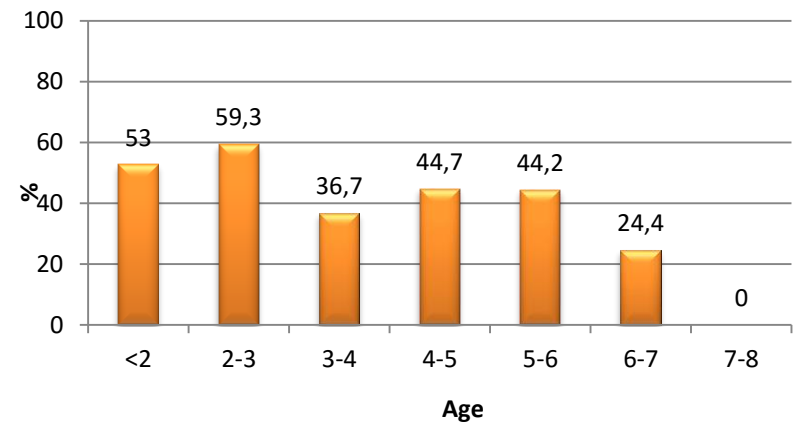


Kolonisering v. aldur

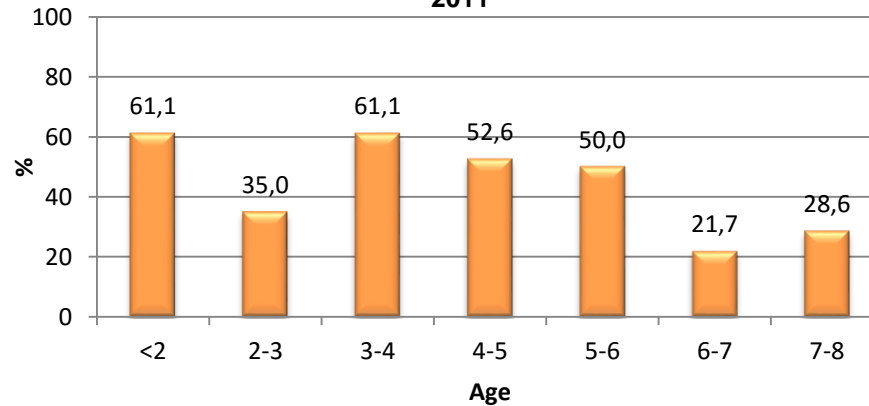
2009



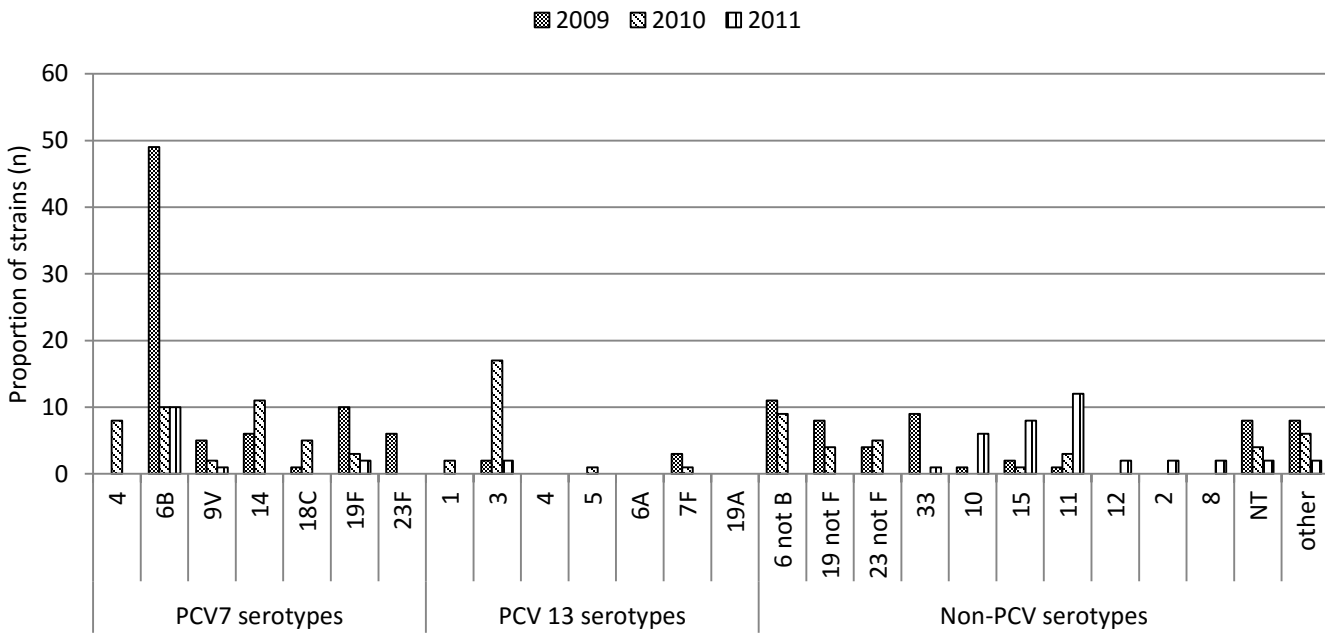
2010



2011



Serotypes



Mótstöðuføri 2009, 2010 og 2011

	<i>S. Penumoniae</i>									Antimicrobial use DID mean for 2009-2011
	2009 (n=133)			2010 (n=92)			2011 (n=55)			
	S (%)	I (%)	R (%)	S (%)	I (%)	R (%)	S (%)	I (%)	R (%)	
Penicillins										10.8
Oxacillin	94	0	6	91,3	0	8,7	98,4	0	1,6	
Macrolides										1.7
Erythromycin	98,5	0	1,5	97,8	0	2,2	99,2	0	0,8	
Chloramphenicol										
Chloramphenicol	100	0	0	100	0	0	100	0	0	
Lincosamides										0.07
Clindamycin	98,5	0	1,5	98,9	0	1,1	100	0	0	
Tetracyclines										1.5
Tetracycline	97,7	0	2,3	98,9	0	1,1	96,7	3,3	0	
Sulfonamides and trimethoprim										1.2
Sulfonamides and trimethoprim	96,2	1,5	2,3	96,7	2,2	1,1	98,4	0	1,6	

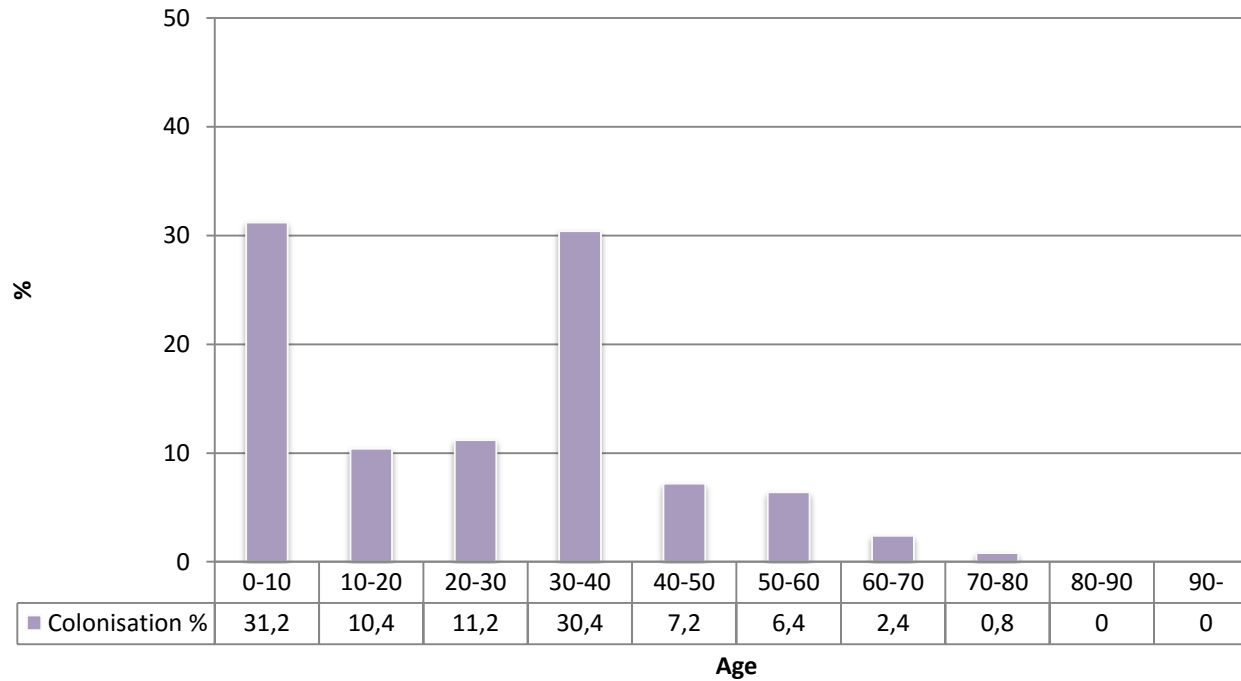


Royndar tþoka av gpA

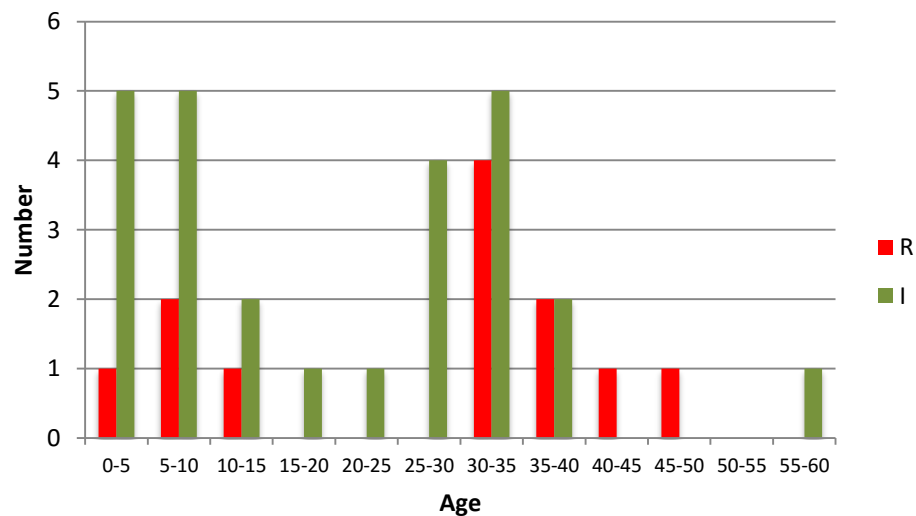
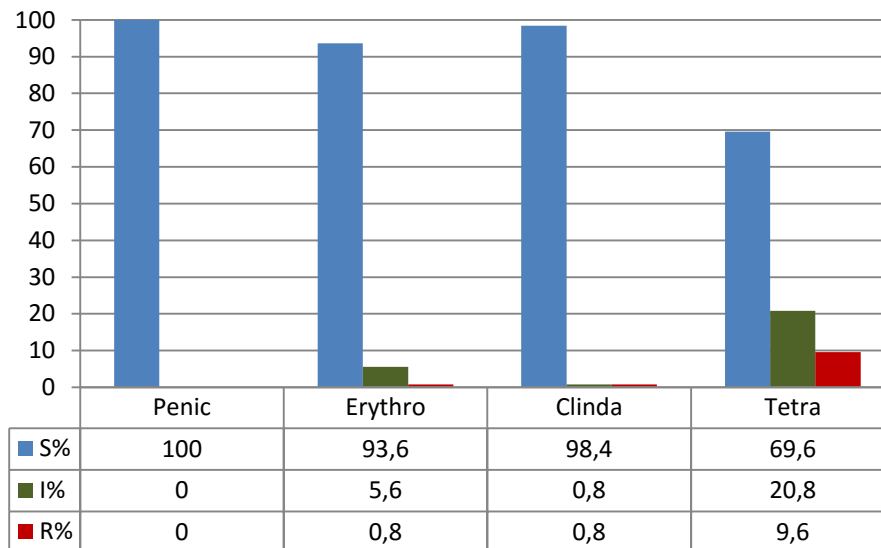
- Kommunulæknaar hava sent 125 prþovar fyri Strep A
 - Allir positivir frá Strep test
- Januar til mars (2009 og 2010)
- 12 kommunulæknaar



Kolonisering 2009 & 2010



Mótstöðuføri 2009 & 2010

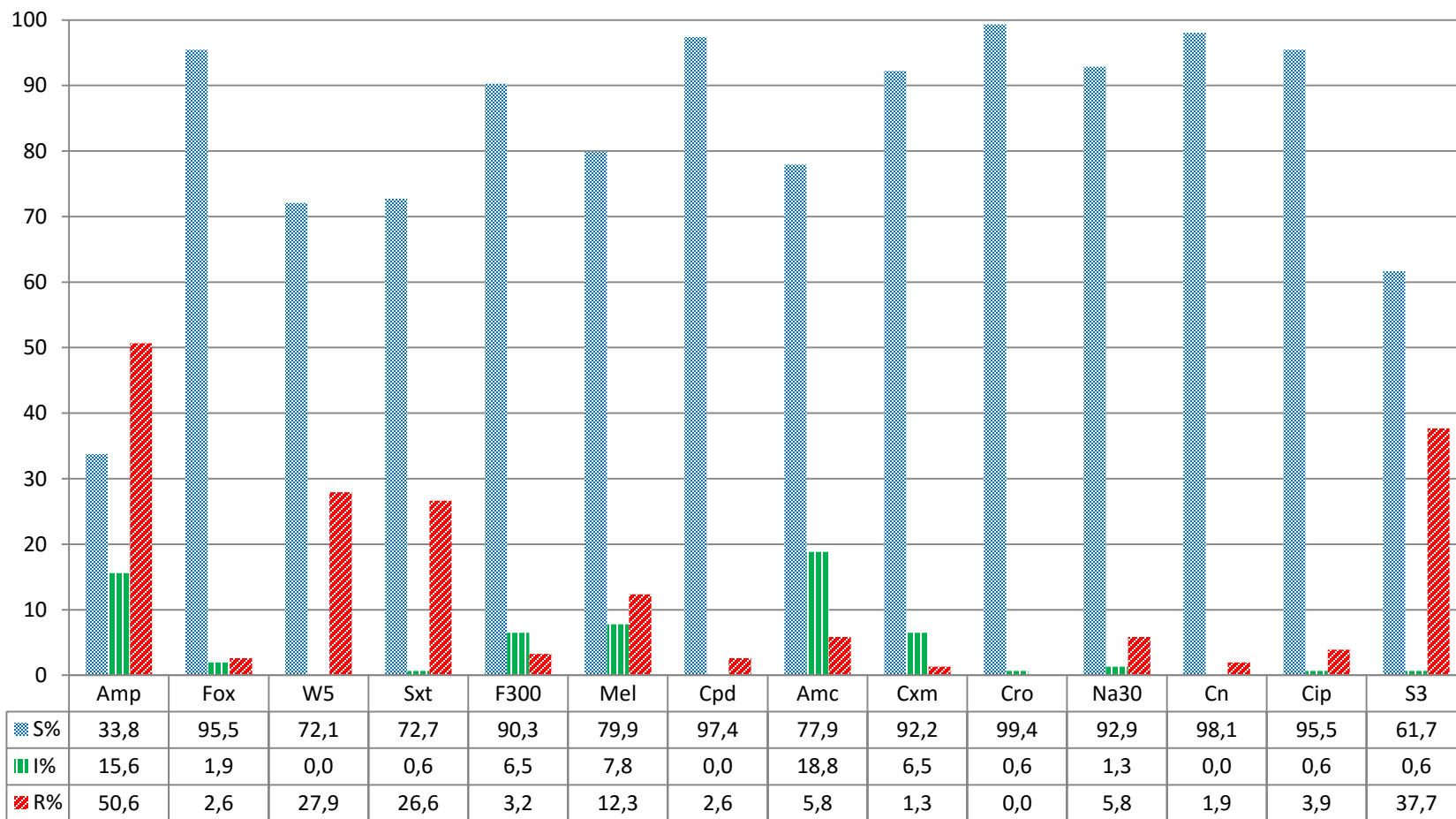


E.coli

- 96 urin royndir frá kommunulæknum
- 64 frá Landssjúkrahúsinum
- 72 % prøvar positiv fyri *e. coli*
 - 90 isolatar av *e. coli*



Mótstöðuføri



Artiklar

- Antimicrobial use in the Faroe Islands, Iceland and Denmark
- Antimicrobial resistance in *Streptococcus pneumoniae* isolated from children attending day care centres in the Faroe Islands. Associations with antimicrobial use and molecular epidemiology of resistant strains



Artiklar

- Antimicrobial resistance in *Streptococcus pyogenes* isolated from patients with tonsillitis and healthy primary school children in the Faroe Islands. Association with antimicrobial use and clonality of resistant strains
- Antimicrobial resistance of *Escherichia coli* isolated from patients with urinary tract infections in the Faroe Islands. Prevalence of extended spectrum and AmpC lactamases and association with antimicrobial use



- **Vegleiðari:**

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- **PhD nevnd:**

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Leif Bæk, MD

Takk til :

- Elna Krosstein & Sunneva Petersen
- Kommunulæknar
- Øll börnini og foreldur
- Mikrobiologisk kanningarstova á HFS og Bryndis á Dunga
- Mikrobiologisk kanningarstova á LS og Hjördis Reinert og Shahin Gaini
- Landsapotekarin, Ann W Jensen og Richard Schwartzon

- **Fígging:**



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