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## OBJECTIVES

MedQual, a French network, follows the susceptibility of bacterial strains isolated from community-acquired infections. Survey was carried out by a growing number of medical analysis laboratories (MAL) over a 7-years period.

## METHODS

All the strains of *S.aureus* isolated in these laboratories were included in the investigation, allowing us to follow the evolution of susceptibility in the urinary infections in *S. aureus* from 2008 to 2014. All patients from private hospitals and emergency departments were excluded.

## RESULTS

Evolution of the resistance (%) to antibiotics for *S. aureus* (2008-2014)

9 546 antibiograms were collected.  
All the strains were isolated from urine.  
In 2008, the average age of the patients was 67 years old (68 in 2014).  
3340 methicillin-resistant *S. aureus* (MRSA) strains were isolated.

	2008		2010		2012		2014		Evolution (2008-2014)	p-value (2008-2014)
	n	% R	n	% R	n	% R	n	% R		
Oxacillin	461	43,38 %	1 006	37,28 %	1 507	33,67 %	2 786	35,39 %	↘	p = 0,001
Kanamycin	432	25,46 %	931	19,44 %	1503	16,23 %	2675	13,53 %	↘	p < 0,001
Tobramycin	454	25,11 %	910	17,36 %	1517	15,36 %	2780	12,52 %	↘	p < 0,001
Gentamicin	458	2,18 %	1007	2,38 %	1440	2,22 %	2771	0,58 %	↘	p = 0,002
Fluoroquinolones	454	55,51 %	1003	47,66 %	1346	44,73 %	2720	42,24 %	↘	p < 0,001
Erythromycin	387	30,23 %	943	19,30 %	1416	20,41 %	2779	24,36 %	↘	p = 0,013
Lincomycin	387	24,29 %	945	11,22 %	1325	12,08 %	2403	10,74 %	↘	p < 0,001
Pristinamycine	386	9,59 %	942	6,26 %	1522	7,49 %	2774	1,77 %	↘	p < 0,001
Trimethoprim-sulfamethoxazole	458	0,66 %	938	1,17 %	1310	1,22 %	2551	1,25 %	→	NS
Fosfomycin	442	12,44 %	978	6,34 %	1413	7,15 %	2692	6,02 %	↘	p < 0,001

**Oxacilline**  
↘ SARM : 43.4% in 2008 to 35.4% in 2014 (p=0.001).  
**Fluoroquinolones**  
↘ % R for *S. aureus* : 55.5% in 2008 to 42.2% in 2014 (p<0.001)  
↘ Methicillin-sensible *S. aureus* (MSSA) : 24.7% vs 13.2%, p<0.001.

**Aminosides**  
↘ % R to Kanamycin : 25.5% in 2008 to 13.6% in 2014 (p<0.001).  
**Erythromycin**  
↘ % R for *S. aureus* : 30.2% vs 24.4% in 2014, p=0.013  
↘ % R for MRSA : 39.5% vs 27.1%, p<0.001  
↔ % R for MSSA : 23.6% vs 22.8%, NS.

**Fosfomycin**  
↘ % R : 12.4% in 2008 to 6.0% in 2014 (p<0.001).  
**Trimethoprim-sulfamethoxazole**  
↔ % R : 0.7% in 2008 to 1.3% in 2014 (NS)

## CONCLUSION

The survey of the evolution of resistance for these strains isolated in the community allows us a significant decrease of resistance to fluoroquinolones for *S.aureus*. As a whole, resistances are really lowly in 2014 than those observed in 2008.