

Chapter I

The networks of ONERBA

ONERBA was established in 1997 with 11 networks of microbiologists involved in activities of surveillance of bacterial resistance to antimicrobials. In 2003, ONERBA was federating 16 networks listed and briefly described below.

(For more details on each network, please see the French part of the Chapter).

Networks of private practice laboratories

■ AFORCOPI-BIO

Founded in 1986 - ONERBA's scientific board in 1997.

- 19 private practice laboratories in 8 French regions, performing microbiological analysis for ambulatory patients and private hospitals or health institutions (total of 1,420 beds).

Main topic: urinary tract infections and bacterial resistance in the outpatients setting.

Method: prospective studies, susceptibility testing in each centre with external quality control organised by the co-ordinating centre; MICs performed in one centre.

■ AQUITAINE Network

Founded in 1998 - ONERBA's scientific board in 2000.

- 20 private practice laboratories grouped in 10 societies in the Aquitaine region, performing microbiological analysis for ambulatory patients, and 20 private hospitals (2 500 beds), 2 general hospitals, 40 nursing homes and 7 rehabilitation centres.

- Topic varies each year but is focused on bacterial resistance in the outpatients and on the molecular aspects of bacterial resistance.

■ EPIVILLE

Founded in 1990 - ONERBA's scientific board in 1997.

- 19 private practice laboratories in 11 French regions, performing microbiological analysis for a total of 60 laboratories, including 1/3 in contract with private hospitals.

- Main topic: community-acquired infections.

■ MEDQUAL

Founded in 2004 – ONERBA's scientific board in 2008.

- 37 private practice laboratories in the Pays de la Loire region of France (west).

Main topics of interest

Susceptibility to antibiotics of *Escherichia coli* and *Staphylococcus aureus* isolated in clinical samples.

Method

Monthly collection of the results of antibiograms by the MedQual database centre for validation and analysis.

NETWORK for MOLECULAR BIOLOGY in PRIVATE LABORATORIES

Networks of hospital laboratories

■ AZAY-resistance network

Founded in 2001 - ONERBA's scientific board in 2003.

- 15 laboratories of teaching hospitals.

- 10,066 acute-care beds, 3,816 rehabilitation or long-term care beds.

Surveillance of bacteraemia all year long.

Data are sent to EARSS after aggregation with two other participating networks (Ile-de-France microbiologists and REUSSIR).

Quality control performed by NEQUAS-EARSS.

■ Network of the Bacteriology-Virology-Hygiene college of Assistance Publique-Hôpitaux de Paris

Founded in 1993 - ONERBA's scientific board in 1997.

- 39 laboratories of teaching hospitals in Paris area.

- 20,496 beds, including 14,161 acute-care beds, 2,929 rehabilitation beds, and 3,406 long-term care beds.

Surveillance of multidrug-resistance bacteria: record of all MRSA and ESBL-producing bacteria isolated from clinical samples during a 2-month period every year. Susceptibility tests are performed in each centre.

■ COL-BVH: Bacteriology-Virology-Hygiene college of general hospitals

Founded in 1989 - ONERBA's scientific board (SB) in 1997.

- 108 health institutions.

- 19,334 acute-care beds, and 9,088 rehabilitation or long-term care beds.

Surveillance of bacteraemia one month a year since 2001 (15 days a year prior to 2001). Susceptibility tests are performed in each centre and an external quality control is performed during the survey.

■ Network of the military hospitals

Founded in 1995 - ONERBA's scientific board in 1997.

- 9 laboratories of military hospitals
- 2,585 acute-care beds (including 119 intensive-care beds).

Main topic: bacterial resistance in nosocomial infections.

Method: prospective multicenter surveys with susceptibility tests performed in each centre and an external quality control.

■ Network of the Ile-de-France microbiologists

Founded in 1986 - ONERBA's scientific board in 1997.

- 8 health institutions, including 7 general hospitals, and 1 private hospital.
- 3,709 acute-care beds, 970 beds of psychiatry, 489 rehabilitation beds, and 1,269 long-term care beds.

Accounting for a total of 27 % of hospital-beds of the Ile-de-France region.

Surveillance of bacteraemia all year long since 2001.

Data are sent to EARSS after aggregation with two other participating networks (AZAY-resistance and REUSSIR).

Quality control performed by NEQUAS-EARSS.

■ REUSSIR network

Founded in 1995 - ONERBA's scientific board (SB) in 1997.

Network of the system SIR users (I2A society).

- 44 laboratories in 1999.
- 13 laboratories from 2000 to 2002.
- 27 laboratories in 2003-2005, including in 2005 2 university hospitals, 20 general hospitals, 4 military hospitals, and 1 private hospitals.
- 14,692 acute-care beds, and 1,865 rehabilitation or long-term care beds.

Use of the SIR system for epidemiology (I2A society).

All clinical strains from all origins (except those from active surveillance cultures and environmental strains), all year long. Duplicates are eliminated by the coordinating centre.

Surveillance of bacteraemia all year long.

Data are sent to EARSS after aggregation with two other participating networks (AZAY-resistance and Ile-de-France networks).

Quality control performed by NEQUAS-EARSS.

Networks of the Coordination Centres for prevention of nosocomial infection (C-CLIN)

■ Champagne-Ardenne network (East)

Founded in 1996 - ONERBA's scientific board in 2000.

- 21 health institutions.
- 4,574 acute-care beds, 2,145 rehabilitation or long-term care beds.

■ Franche-Comté network (RF-CLIN, East)

Founded in 1993 - ONERBA's scientific board in 1997.

- 26 health institutions.
- 3,581 acute-care beds, 3,512 rehabilitation or long-term care beds.

■ Microbiological network of the C-CLIN Paris-Nord (Paris and North)

Founded in 1994 - ONERBA's scientific board in 1997.

- 93 health institutions.
- 5 teaching hospitals, 59 general hospitals, 19 private hospitals with public activities, 2 military hospitals, 2 cancer hospitals, 11 private hospitals.
- 30,769 acute-care beds (including 1,509 intensive-care beds), 5,966 rehabilitation beds, 8,907 long-term care beds.

All these 3 networks run 2 types of surveillance:

- Surveillance of multidrug resistant bacteria each year during a 3-month period (2-month period for some networks prior to 2003)

- Surveillance of bacteraemia during a 3-month period every year or every other year according to the network.

■ Microbiological network of the C-CLIN Sud-Ouest (South-West)

Founded in 1993 - ONERBA's scientific board in 1997.

- 83 laboratories for 78 health institutions.

Objective for 2005 :

- Surveillance of multidrug resistant bacteria each year during a 3-month period (2-month period for some networks prior to 2003).

■ Hygiene network of the Centre of France

Founded in 1997 - ONERBA's scientific board in 2002.

- 32 health institutions, including 1 teaching hospital, 1 regional hospital, 1 general hospital, 14 private hospitals for a total of 6,546 acute-care beds, and 4,009 long-term care beds.

Main topic: bacterial resistance in hospital- and community-acquired infections, and more specifically bacteraemia.

Method: a 3-month survey every year since 2000 where all MRSA strains and all ESBL-producing strains are sent to a reference laboratory for susceptibility testing and molecular analysis. The co-ordinating centre organises an external quality control.

Network of veterinary laboratories

■ RESAPATH

Founded in 2002, formerly as RESABO in 1982 (for cattle surveillance) and RESAPATH in 1999 (for poultry and swine surveillance). ONERBA's scientific board in 1997 for RESABO, and 2002 for RESAPATH.

- 51 laboratories of private or public practice performing analysis of samples from food-producing animals (cattle, poultry and swine).

Surveillance of a representative sample (over 10 000 strains per year, all bacteria from cattle, poultry, and swine included).

National Reference Centres

- *Pneumococci*.
- *Haemophilus influenzae*.
- Resistance of mycobacteria to antimicrobials.
- Mechanisms of resistance to antimicrobials.