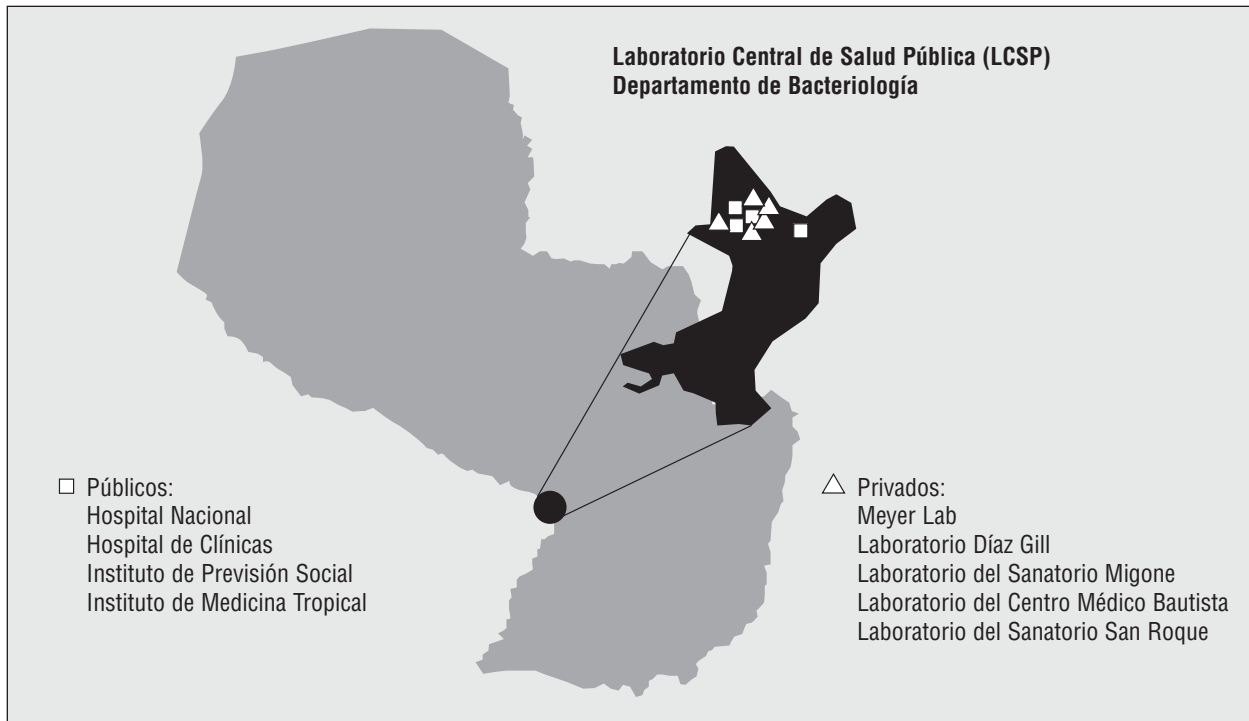


## Paraguay

### SISTEMA DE VIGILANCIA

El Laboratorio Central de Salud Pública del Ministerio de Salud es el coordinador de la red, que está constituida por cuatro laboratorios de instituciones públicas: el Hospital Nacional, el Hospital de Clínicas, el Hospital del Instituto de Previsión Social y el Instituto de Medicina Tropical. También participan 5 instituciones privadas: el Laboratorio Meyer, el Laboratorio Díaz Gil, el Laboratorio Migone, el Centro Médico Bautista y el Laboratorio San Roque.

Figura PAR 1. Red de Laboratorios de Paraguay, 2001



## GARANTÍA DE CALIDAD

### Evaluación del desempeño

Cuadro PAR 1. Evaluación del desempeño de las instituciones participantes, 2001

|   | Concordancia |            |
|---|--------------|------------|
|   | N            | Porcentaje |
| <b>Diagnóstico microbiológico (N=48)</b>                    |              |            |
| Género y especie correctos                                  | 45           | 94         |
| Género correcto   | 3            | 6          |
| Género correcto y especie incorrecta                        | –            | –          |
| Género incorrecto   | –            | –          |
| <b>Tamaño del halo del antibiograma (N=316)</b>             |              |            |
| ≤ 2 mm con el laboratorio organizador                       | 217          | 69         |
| > 2 mm y ≤ 4 mm con el laboratorio organizador              | 78           | 25         |
| > 4 mm con el laboratorio organizador                       | 21           | 6          |
| <b>Interpretación del resultado del antibiograma* (316)</b> |              |            |
| Sensible  | 308          | 97         |
| Resistente  | –            | –          |
| Intermedio  | 5            | 71         |
| <b>Errores (316)</b>  |              |            |
| Menor   | 2            | 0,6        |
| Grave   | 1            | 0,3        |
| Muy grave   | –            | –          |

\*De los 316 ensayos realizados, 309 deberían informarse como S, 7 como I y ninguno como R.

## Microorganismos de origen comunitario

Cuadro PAR 2. *Salmonella*: porcentaje de resistencia 2000–2001

| Microorganismo         | N/Año    | AMP |   | CTX |   | CIP |   | CHL |   | GEN |   | NAL |    | SXT |   | NIT |    | TCY |     |
|------------------------|----------|-----|---|-----|---|-----|---|-----|---|-----|---|-----|----|-----|---|-----|----|-----|-----|
|                        |          | I   | R | I   | R | I   | R | I   | R | I   | R | I   | R  | I   | R | I   | R  | I   | R   |
| <i>Salmonella</i> spp. | 77/2000  | –   | 3 | –   | – | –   | – | –   | – | –   | 2 | 3   | 4  | –   | – | 3   | 51 | 20  | 8   |
| <i>Salmonella</i> spp. | 126/2001 | 1   | 2 | –   | – | –   | – | 1   | – | 2   | 7 | 1   | 6  | –   | 2 | 6   | 41 | 13  | 10  |
| <i>S. Agona</i>        | 3*/2001  | –   | – | –   | – | –   | – | –   | – | –   | – | –   | –  | –   | – | –   | –  | 1/3 | –   |
| <i>S. Enteritidis</i>  | 53/2001  | –   | 6 | –   | – | –   | – | –   | – | 4   | 9 | 2   | 11 | –   | 4 | 8   | 80 | 6   | 6   |
| <i>S. Infantis</i>     | 5*/2001  | –   | – | –   | – | –   | – | –   | – | –   | – | –   | –  | –   | – | 1/5 | –  | 1/5 | –   |
| <i>S. Typhi</i>        | 1/2001   | –   | – | –   | – | –   | – | –   | – | –   | – | –   | –  | –   | – | –   | –  | –   | –   |
| <i>S. Typhimurium</i>  | 5*/2001  | –   | – | –   | – | –   | – | –   | – | –   | – | –   | –  | –   | – | –   | –  | 1/5 | 1/5 |
| <i>S. Panama</i>       | 4/2001   | –   | – | –   | – | –   | – | –   | – | –   | – | –   | –  | –   | – | –   | –  | –   | –   |
| <i>S. Saintpaul</i>    | 3*/2001  | –   | – | –   | – | –   | – | –   | – | –   | – | –   | –  | –   | – | –   | –  | 2/3 | –   |

\* Número de cepas resistentes sobre el total probadas (n/n);

Cuadro PAR 3. *Shigella*: porcentaje de resistencia, 2000–2001

| Microorganismo           | N/Año    | AMP          |                | CTX |   | CIP |   | CHL |              | GEN          |   | NAL |   | SXT |    | NIT |   | TCY |    |
|--------------------------|----------|--------------|----------------|-----|---|-----|---|-----|--------------|--------------|---|-----|---|-----|----|-----|---|-----|----|
|                          |          | I            | R              | I   | R | I   | R | I   | R            | I            | R | I   | R | I   | R  | I   | R | I   | R  |
| <i>Shigella flexneri</i> | 130/2000 | –            | 70             | –   | 1 | –   | – | 1   | 70           | –            | 2 | –   | 1 | 1   | 75 | –   | 1 | –   | 89 |
| <i>Shigella sonnei</i>   | 87/2000  | –            | 12             | –   | – | –   | – | 2   | <sup>1</sup> | <sup>1</sup> | – | –   | – | 77  | –  | –   | 4 | 64  |    |
| <i>S. flexneri</i>       | 353/2001 | –            | 63             | –   | – | –   | 1 | 5   | 58           | –            | – | –   | – | 78  | –  | 1   | – | 93  |    |
| <i>S. sonnei</i>         | 151/2001 | <sup>2</sup> | 5 <sup>2</sup> | –   | – | –   | 1 | –   | 3            | 1            | – | –   | – | 93  | –  | –   | 1 | 88  |    |

<sup>1</sup>N= 39; <sup>2</sup>N= 14

Cuadro PAR 4. *Escherichia coli*: porcentaje de resistencia, 2000–2001

| N/Año     | AMP |    | NIT |   | CIP            |                | SXT |    | CEP             |                 | SAM            |                | CTX            |                 |
|-----------|-----|----|-----|---|----------------|----------------|-----|----|-----------------|-----------------|----------------|----------------|----------------|-----------------|
|           | I   | R  | I   | R | I              | R              | I   | R  | I               | R               | I              | R              | I              | R               |
| 138/2000  | 3   | 62 | 1   | 8 | 2              | 10             | 1   | 41 | 30              | 34              | 10             | 16             | –              | 18              |
| 1472/2001 | 3   | 61 | 1   | 3 | 1 <sup>1</sup> | 9 <sup>1</sup> | 1   | 42 | 23 <sup>2</sup> | 23 <sup>2</sup> | 6 <sup>3</sup> | 8 <sup>3</sup> | – <sup>4</sup> | 19 <sup>4</sup> |

<sup>1</sup>N= 1216; <sup>2</sup>N= 758; <sup>3</sup>N= 420; <sup>4</sup>N= 1065

Cuadro PAR 5. *Haemophilus influenzae* invasivo: porcentaje de resistencia, 2000–2001

| N/Año   | AMP |    | CIP |   | CHL |    | SXT |    | SAM |   | CXM |   | CTX |   |
|---------|-----|----|-----|---|-----|----|-----|----|-----|---|-----|---|-----|---|
|         | I   | R  | I   | R | I   | R  | I   | R  | I   | R | I   | R | I   | R |
| 41/2000 | 2   | 12 |     |   | 2   | 15 | 3   | 15 |     |   | –   | – | –   | – |
| 79/2001 | 3   | 17 |     |   | 5   | 9  | –   | 19 |     |   | 1   | – | –   | – |

Cuadro PAR 6. *Streptococcus pneumoniae* invasivo: porcentaje de resistencia, 2000–2001

| N/Año    | OXA* | PEN             |                | ERI |   | SXT |    | CHL |   | VAN |   | CTX |    |
|----------|------|-----------------|----------------|-----|---|-----|----|-----|---|-----|---|-----|----|
|          | +R   | I               | R              | I   | R | I   | R  | I   | R | I   | R | I   | R  |
| 162/2000 | 20   | 18 <sup>1</sup> | 5 <sup>1</sup> | 1   | 5 | 6   | 38 | –   | 4 | –   | – |     |    |
| 126/2001 | 23   | 10              | 10             | 2   | 6 | 14  | 42 | –   | 6 | –   | – | –   | 13 |

<sup>1</sup>N= 99 \* Disco 1 µg; +Halo ≤ 19 mm

## Microorganismos de origen hospitalario

Cuadro PAR 7. *Staphylococcus aureus* y *Acinetobacter* spp.: porcentaje de resistencia, 2000–2001

| Microorganismo               | N/Año    | PEN |    | CLI            |                 | CIP |    | VAN |   | RIF |    | SXT |    | OXA |    | ERI |    | GEN |    |
|------------------------------|----------|-----|----|----------------|-----------------|-----|----|-----|---|-----|----|-----|----|-----|----|-----|----|-----|----|
|                              |          | I   | R  | I              | R               | I   | R  | I   | R | I   | R  | I   | R  | I   | R  | I   | R  | I   | R  |
| <i>Staphylococcus aureus</i> | 99/2000  | –   | 98 | 1              | 13              | 4   | 13 | –   | – | 3   | 19 | –   | 12 | –   | 16 | 4   | 15 | –   | 17 |
| <i>Staphylococcus aureus</i> | 537/2001 | –   | 94 | 3 <sup>1</sup> | 18 <sup>1</sup> | 5   | 21 | –   | – | 3   | 26 | 1   | 25 | 2   | 29 | 6   | 28 | 1   | 34 |

<sup>1</sup>N= 304

| Microorganismo            | N/Año    | AMK |    | SAM             |                | CIP |    | CAZ |    | IPM |   | SXT |    | MEM            |                 | GEN |    |
|---------------------------|----------|-----|----|-----------------|----------------|-----|----|-----|----|-----|---|-----|----|----------------|-----------------|-----|----|
|                           |          | I   | R  | I               | R              | I   | R  | I   | R  | I   | R | I   | R  | I              | R               | I   | R  |
| <i>Acinetobacter</i> spp. | 40/2000  | 5   | 53 | 50 <sup>1</sup> | 7 <sup>1</sup> | –   | 63 | –   | 61 | –   | – | 3   | 69 |                |                 | –   | 74 |
| <i>Acinetobacter</i> spp. | 173/2001 | 4   | 50 | 13 <sup>2</sup> | 8 <sup>2</sup> | 1   | 56 | 11  | 45 | 1   | 5 | 5   | 52 | 5 <sup>3</sup> | 13 <sup>3</sup> | –   | 51 |

<sup>1</sup>N= 18; <sup>2</sup>N= 38; <sup>3</sup>N= 40

**Cuadro PAR 8. *Pseudomonas aeruginosa* y *Enterobacter cloacae*: porcentaje de resistencia, 2000–2001**

| Microorganismo       | N        | GEN |    | PIP |    | CIP |    | CFP             |                 | CAZ |    | IPM            |                | AMK |    | MEM            |                 |
|----------------------|----------|-----|----|-----|----|-----|----|-----------------|-----------------|-----|----|----------------|----------------|-----|----|----------------|-----------------|
|                      |          | I   | R  | I   | R  | I   | R  | I               | R               | I   | R  | I              | R              | I   | R  |                |                 |
| <i>P. aeruginosa</i> | 63/2000  | –   | 29 | –   | 25 | 3   | 24 | 5               | 12              | –   | 9  | – <sup>1</sup> | 9 <sup>1</sup> | –   | 18 |                |                 |
| <i>P. aeruginosa</i> | 264/2001 | 1   | 27 | –   | 28 | 1   | 24 | 10 <sup>2</sup> | 23 <sup>2</sup> | 6   | 13 | 1              | 11             | 3   | 20 | 2 <sup>3</sup> | 29 <sup>3</sup> |

<sup>1</sup>N= 29; <sup>2</sup>N= 115; <sup>3</sup>N=96

| Microorganismo              | N       | GEN |    | AMK |    | CIP |    | CAZ |    | IPM |   | CTX |    | SXT |    | FEP |  |
|-----------------------------|---------|-----|----|-----|----|-----|----|-----|----|-----|---|-----|----|-----|----|-----|--|
|                             |         | I   | R  | I   | R  | I   | R  | I   | R  | I   | R | I   | R  | I   | R  |     |  |
| <i>Enterobacter cloacae</i> | 21/2000 | –   | 52 | 14  | 19 | –   | 20 | 5   | 38 | –   | 5 | 11  | 50 | –   | 44 |     |  |
| <i>Enterobacter cloacae</i> | 93/2001 | 2   | 30 | 3   | 8  | 5   | 23 | 6   | 31 | –   | 1 | 9   | 48 | 2   | 31 |     |  |

Fig PAR 1. *Salmonella* spp.: aislados 2001

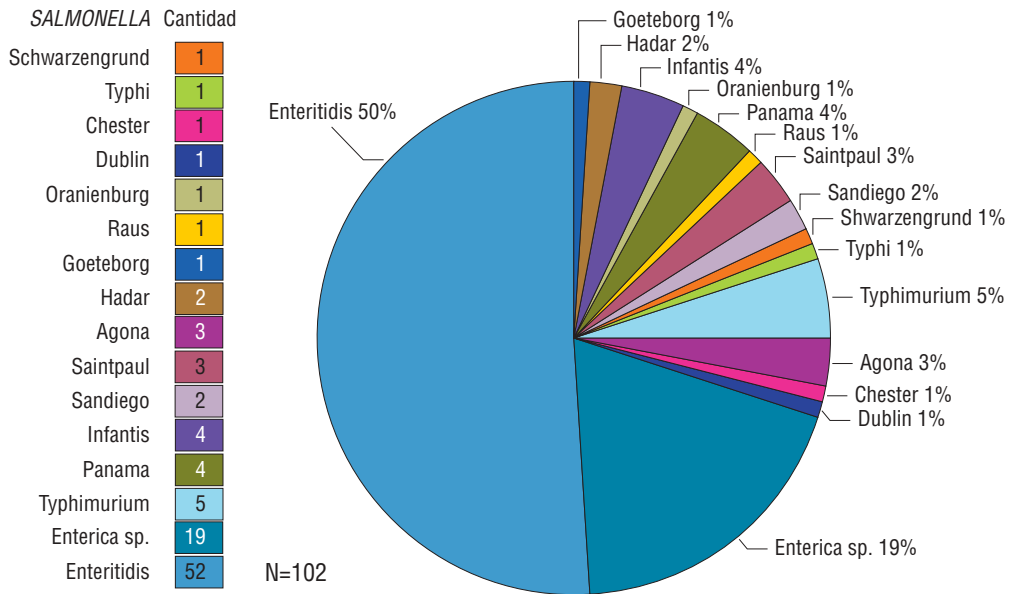


Fig PAR 2. *Shigella* spp.: aislados, 2001

