

# Japan's policy for Antimicrobial Resistance Control

Ministry of Health, Labour and Welfare  
Japan



# by Ministry of Health

---

- Prevention
  - Regional Network for Nosocomial Infections
  - Bonus from fee schedule for nosocomial infection control activities
- Surveillance
  - National Surveillance Systems
    - NESID  
(National Epidemiological Surveillance of Infectious Disease)
    - JANIS  
(Japan Nosocomial Infections Surveillance)
- Response
  - Outbreak management through **regional networks** and local health centers

# National Surveillance systems for AMR

---

- NESID

(National Epidemiological Surveillance of Infectious Disease)

- Reporting system for infections including AMR pathogens designated by law
- **Mandatory**
- VRSA, VRE, MDRA, CRE (sentinel: MRSA, MDRP, PRSP)

- JANIS

(Japan Nosocomial Infections Surveillance)

- Specified for AMR in Hospitals
- **Voluntary base with incentive of preferential medical fee schedule**
- AMR surveillance, SSI, ICU(device surveillance), NICU

# NESID

- **Hospital**
  - Doctors who diagnose any reportable infectious diseases

report



feedback



- **Local Health Center**
  - analysis of clinical and epidemiological information of patients
- **Public Health Institute of Local Government**
  - analysis of pathogen information

report



feedback



- **Local Government**
  - City / Prefecture

report



feedback

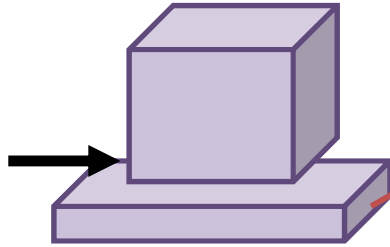
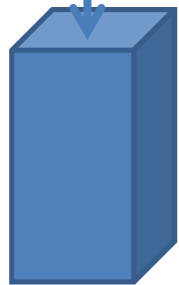


- **National Institute for Infectious Diseases** (NIID)
- **Central Government** (Ministry of Health, Labour and Welfare)

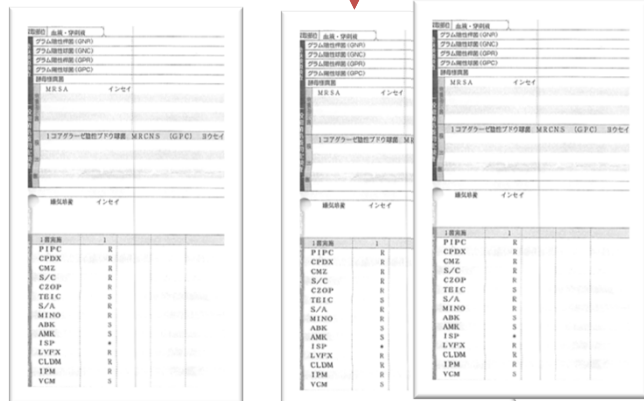
# Reporting flow of JANIS

## Data submission for JANIS Clinical Laboratory Division

Automated system for bacterial identification and drug susceptibility test

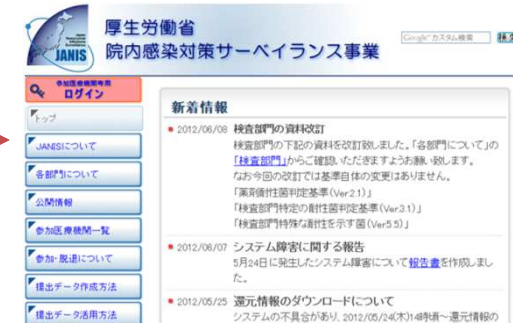


Hospital medical record system



### JANIS data format

Date	20110224
ID	254566877
sp ID	1300
Drug A	245
MICA	4
Drug B	225
Drug C	16

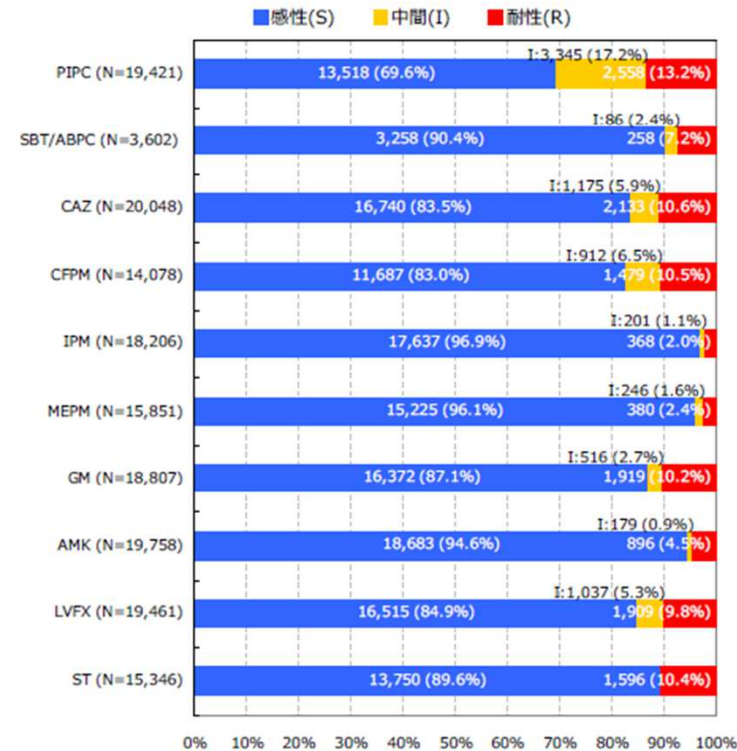


190426041314369		2	0000.002009	0000.002009	
190426015631002		2	0000.002009	0000.002009	
190426015631002		2	0000.002009	0000.002009	\$ 1216111.12 \$ 15371118 S
180941099123816	F200409281401	2	0000.002009	0000.002009	
189991182324063	F199912201401	2	0000.002009	0000.002009	
100001007750000	M000007501401	2	0000.002009	0000.002009	12011128 R 12161128 R 15371118 S

Automated system for converting hospital data into JANIS data format

7. 主要菌の抗菌薬感受性\*

Acinetobacter spp. †



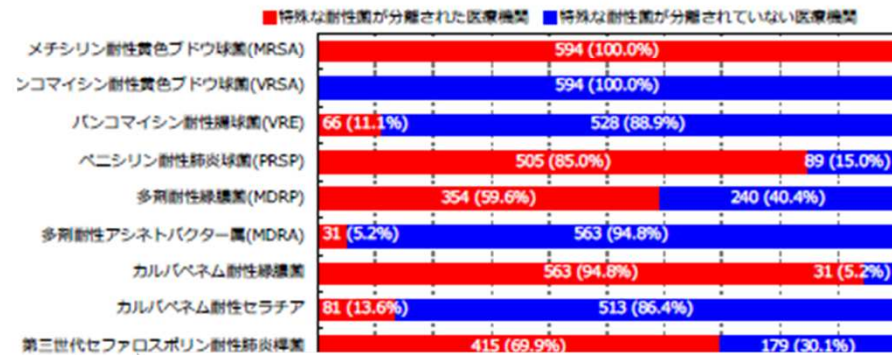
入院検体で、かつ検査法が微量液体希釈法又はEtestと設定されMIC値が報告されている検体を集計  
 抗菌薬感受性結果の重複処理(巻末参照)が行われている

\*米国CLSI 2007 (M100-S17)に準拠し、集計時にS, I, Rの判定ができない報告は集計から削除

†菌名コード: 4400~4403と報告された菌

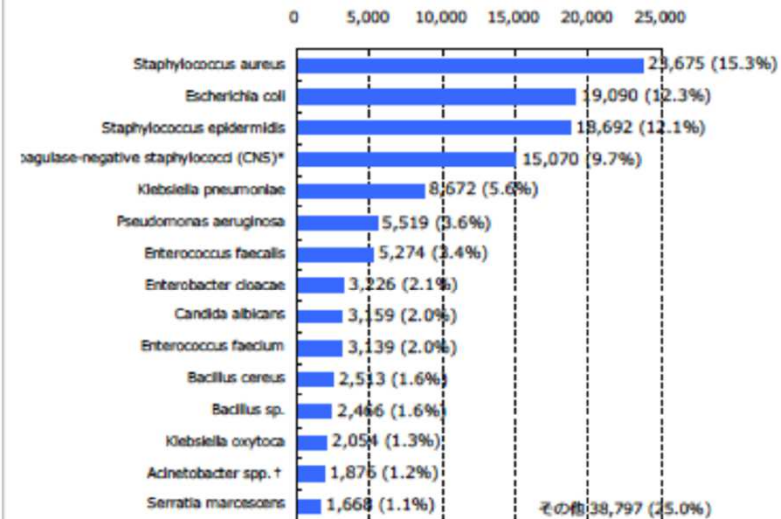
8. 特定の耐性菌が分離された医療機関の割合

2011年 特定の耐性菌が分離された医療機関の割合 (N=594)



9. 検査材料別分離菌数割合

血液検体分離菌 (N=154,890)



\*菌名コード: 1311, 1313~1325と報告された菌 (1312: Staphylococcus epidermidisは対象外)

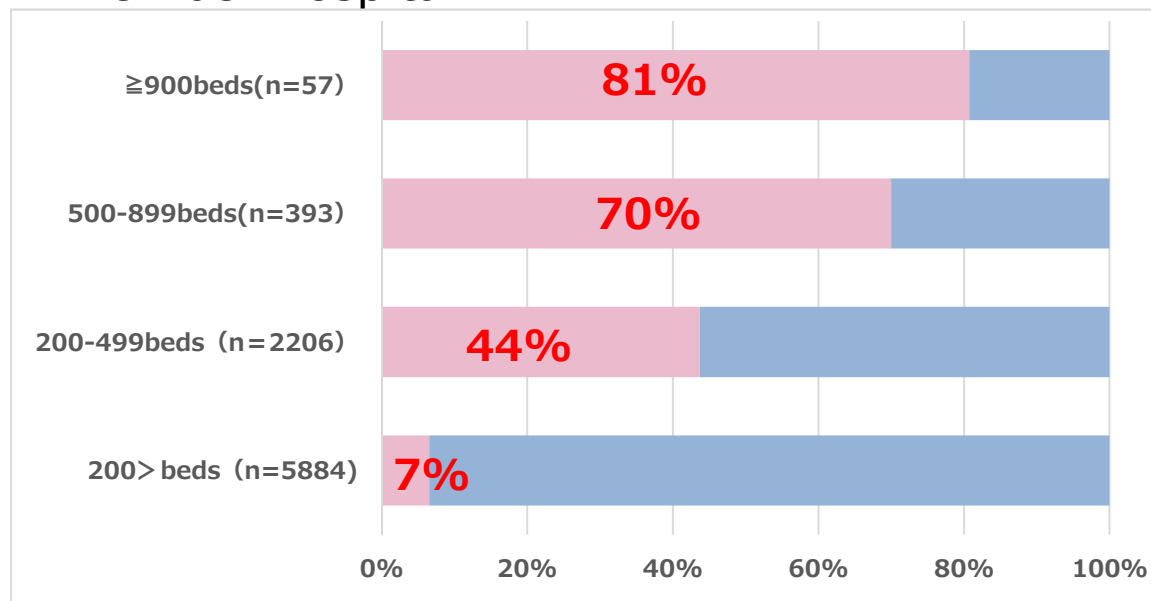
†菌名コード: 4400~4403と報告された菌

# Participating Hospitals

As of January 2015

Division	No. of Participating Hospitals
Clinical Laboratory (CL)	1482
Antimicrobial Resistant Bacterial Infections (ARBI)	841
Surgical Site Infections (SSI)	714
Intensive Care Unit (ICU)	187
Neonatal Intensive Care Unit (NICU)	109

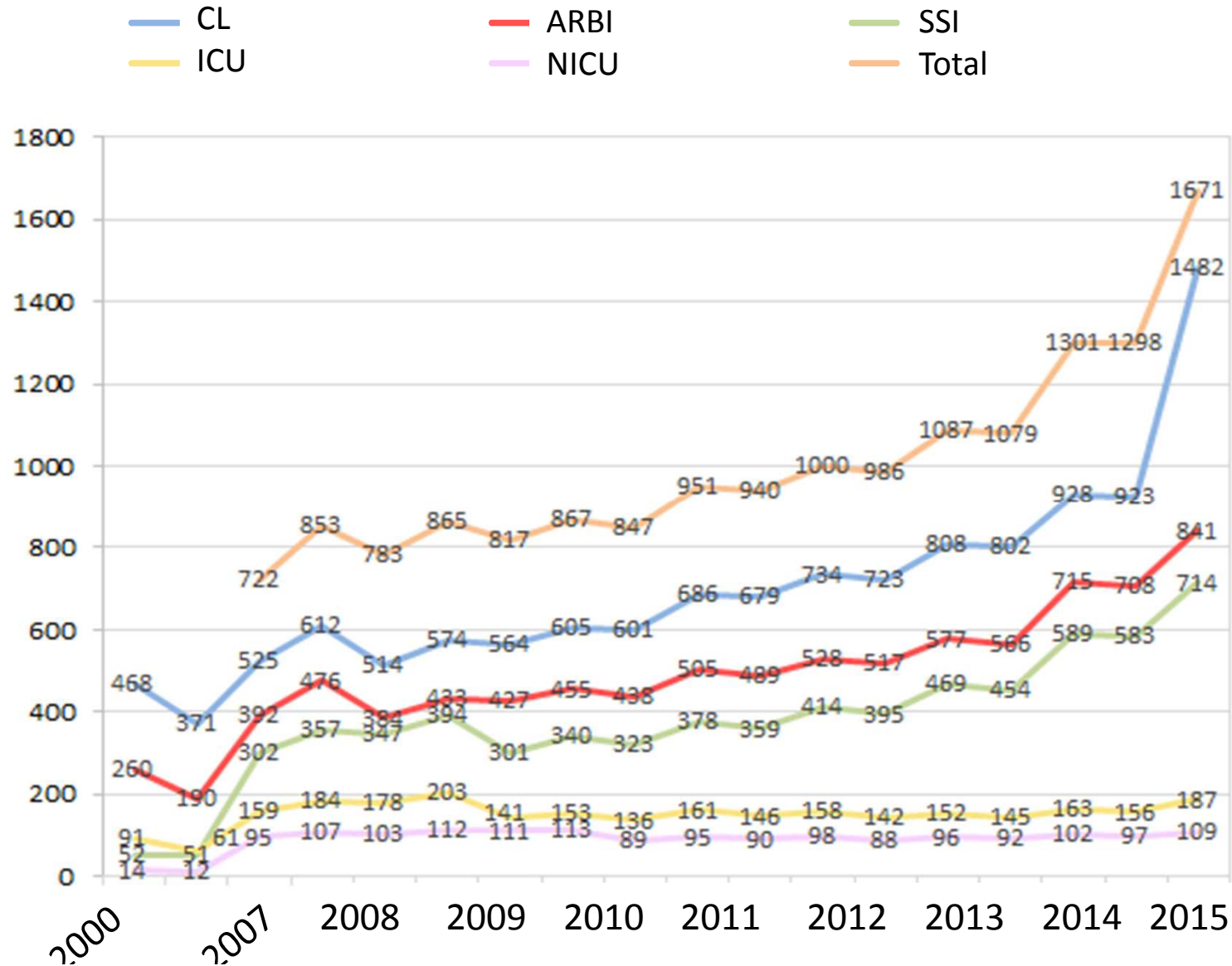
Representativity; Proportion of JANIS member hospital



- Voluntary based with incentive of fee schedule
- Annual recruit of new participant
- Target was limited to hospitals with more than 200 beds until 2013
- From 2014, started recruiting hospitals with less than 200 beds

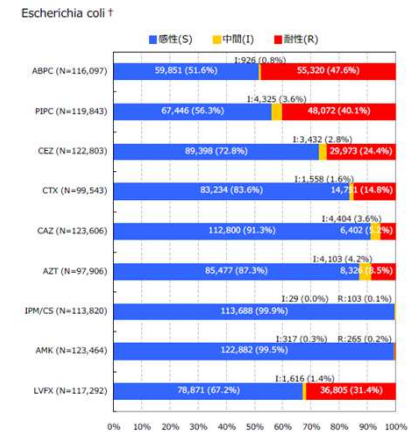


# Number of participating hospitals from 2000 to 2014



# Resistance rate of major AMR pathogens Regarding hospital acquired infection in Japan (2013)

- ◆ MRSA/*S. aureus* 50%
- ◆ VRE/*Enterococcus* spp. 0.3%
- ◆ MDRP/*Pseudomonas aeruginosa* 2%  
Carbapenem resistant *P. aeruginosa*/*P. aeruginosa* 17%
- ◆ MDRA/*Acinetobacter* spp. 0.4%
- ◆ Enterobacteriaceae
  - Fluoroquinolones resistant *E. coli*/*E. coli* 35%
  - 3<sup>rd</sup> generation cepharosporine resistant *E. coli*/*E. coli* 18%
  - 3<sup>rd</sup> Cep. Resistant *K. pneumoniae*/*K. pneumoniae* 5%

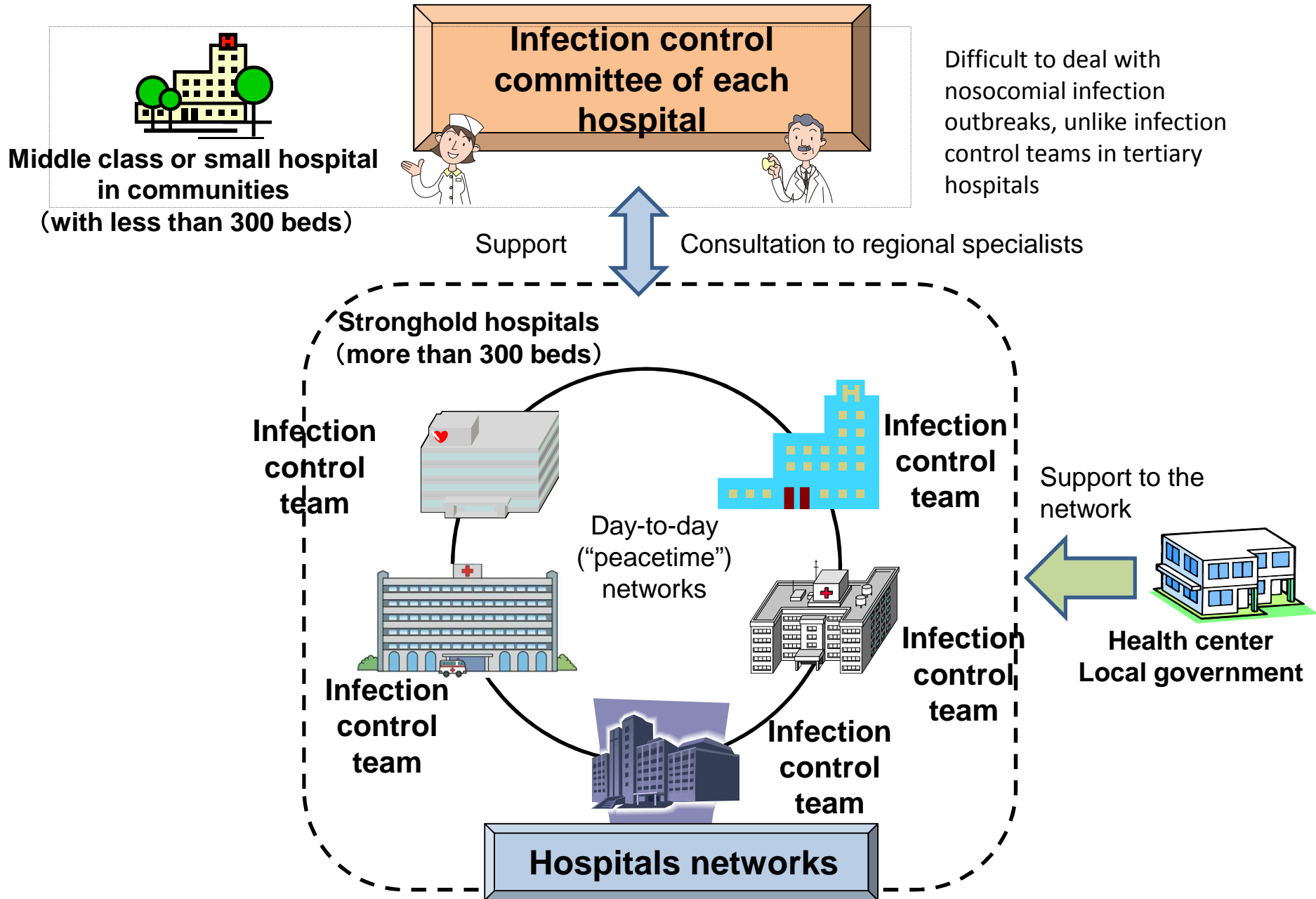


# Regional Network for Nosocomial Infections

---

- ◆ Hospitals shall establish day-to-day (“peacetime”) mutual network.
- ◆ University hospitals, National Hospital Organization, Hospitals accredited by professional societies, and other tertiary hospitals in communities are supposed to be “strongholds” for the regional networks.
- ◆ Hospitals can receive special bonus from medical fee schedule for the regional network activity.

# Overview of regional networks



Thank you