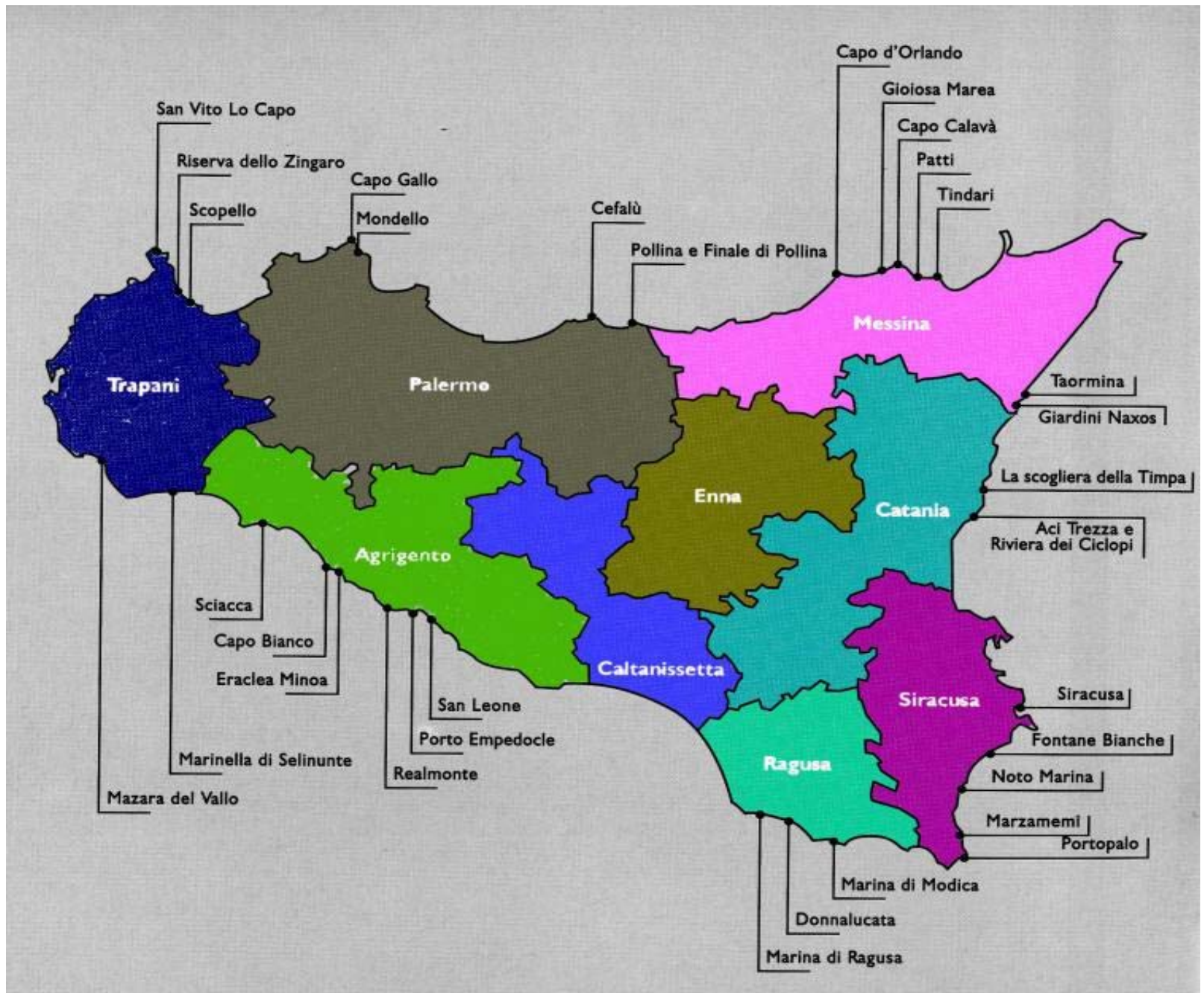


“Influenza Vaccination of Elderly People in Sicily”

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Vaccinazione antinfluenzale: stagione 2004-2005. Coperture vaccinali (per 100 abitanti).

Regione	< 5 anni	5-14 anni	15-24 anni	25-64 anni	>=65 anni	Totale
Piemonte	1,6	1,5	1,5	5,3	55,9	15,4
Valle d'Aosta	0,8	1,1	1,0	5,3	54,4	13,9
Lombardia	2,5	2,3	1,7	4,8	65,3	15,7
P.A. Bolzano	0,9	0,7	0,4	1,9	52,0	9,5
P. A. Trento	1,2	1,4	0,8	3,8	60,0	13,4
Veneto	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
FVG	1,2	1,3	1,1	6,4	72,5	19,7
Liguria	1,7	4,4	2,8	8,3	66,1	22,4
Emilia Romagna	3,9	3,7	2,8	9,0	73,0	22,3
Toscana	6,9	5,2	4,8	7,1	62,2	19,3
Umbria	1,6	1,5	1,2	7,3	61,9	18,5
Marche	2,8	2,4	1,5	7,6	68,0	19,7
Lazio	1,6	1,9	1,7	8,2	71,5	18,3
Abruzzo	3,6	2,7	2,1	6,1	70,0	18,5
Molise	5,9	4,8	2,9	11,2	72,3	22,4
Campania	6,8	4,2	3,0	9,2	71,9	16,9
Puglia	7,5	5,3	3,1	8,5	70,5	17,5
Basilicata	1,2	1,9	3,2	8,6	66,4	17,8
Calabria	1,3	1,2	1,4	5,1	59,9	13,5
Sicilia ●	3,0	2,8	3,1	7,1	69,7	16,7
Sardegna	18,0	13,3	16,6	17,2	59,2	23,7
ITALIA (medie) ●	4,1	3,4	2,9	7,3	66,6	17,7

Dati aggiornati al 7 ottobre 2005

Legenda:

n.p. = la Regione/P.A. non ha fornito indicazioni sul numero dei vaccinati

Fonte: elaborazione del Ministero della Salute, Direzione Generale della Prevenzione Sanitaria, Ufficio V Malattie Infettive, sui dati forniti dalle Regioni e Province Autonome

Vaccinazione antinfluenzale: stagione 2005-06. Coperture vaccinali (per 100 abitanti).

Regione	< 5 anni	5-14 anni	15-24 anni	25-64 anni	≥65 anni	Totale
Piemonte	2,7	2,2	1,8	6,5	58,8	17,2
Valle d'Aosta	3,0	2,1	1,6	8,5	63,1	18,0
Lombardia	3,7	3,0	1,6	5,9	64,0	16,2
P.A. Bolzano	2,6	1,8	1,1	5,1	55,2	12,4
P. A. Trento	2,8	2,4	0,9	5,0	67,6	15,8
Veneto	4,0	3,5	7,5		73,2	19,4
FVG	2,5	2,4	1,8	7,9	72,1	21,0
Liguria	4,4	6,5	3,4	9,7	65,3	24,1
Emilia Romagna	5,1	5,4	4,3	11,9	75,1	24,8
Toscana	11,0	7,2	4,2	10,6	67,6	22,9
Umbria	2,4	1,9	1,9	9,9	65,9	21,2
Marche	4,5	3,9	2,4	8,8	68,0	20,8
Lazio	3,1	3,8	3,1	10,7	73,3	20,7
Abruzzo	8,1	5,7	2,8	7,5	69,9	20,0
Molise	7,1	6,0	4,3	13,3	71,4	24,0
Campania	9,3	6,1	3,3	11,6	72,9	18,9
Puglia	13,7	9,8	5,0	11,4	75,4	21,3
Basilicata	3,0	3,4	1,9	12,2	64,5	19,9
Calabria	4,9	3,0	2,9	6,7	66,3	16,4
Sicilia ●	5,0	4,2	3,0	11,0	67,5	18,9
Sardegna	7,6	5,7	3,4	7,4	56,1	15,1
Italia (medie) ●	5,8	4,7	2,8	8,4	68,3	19,4

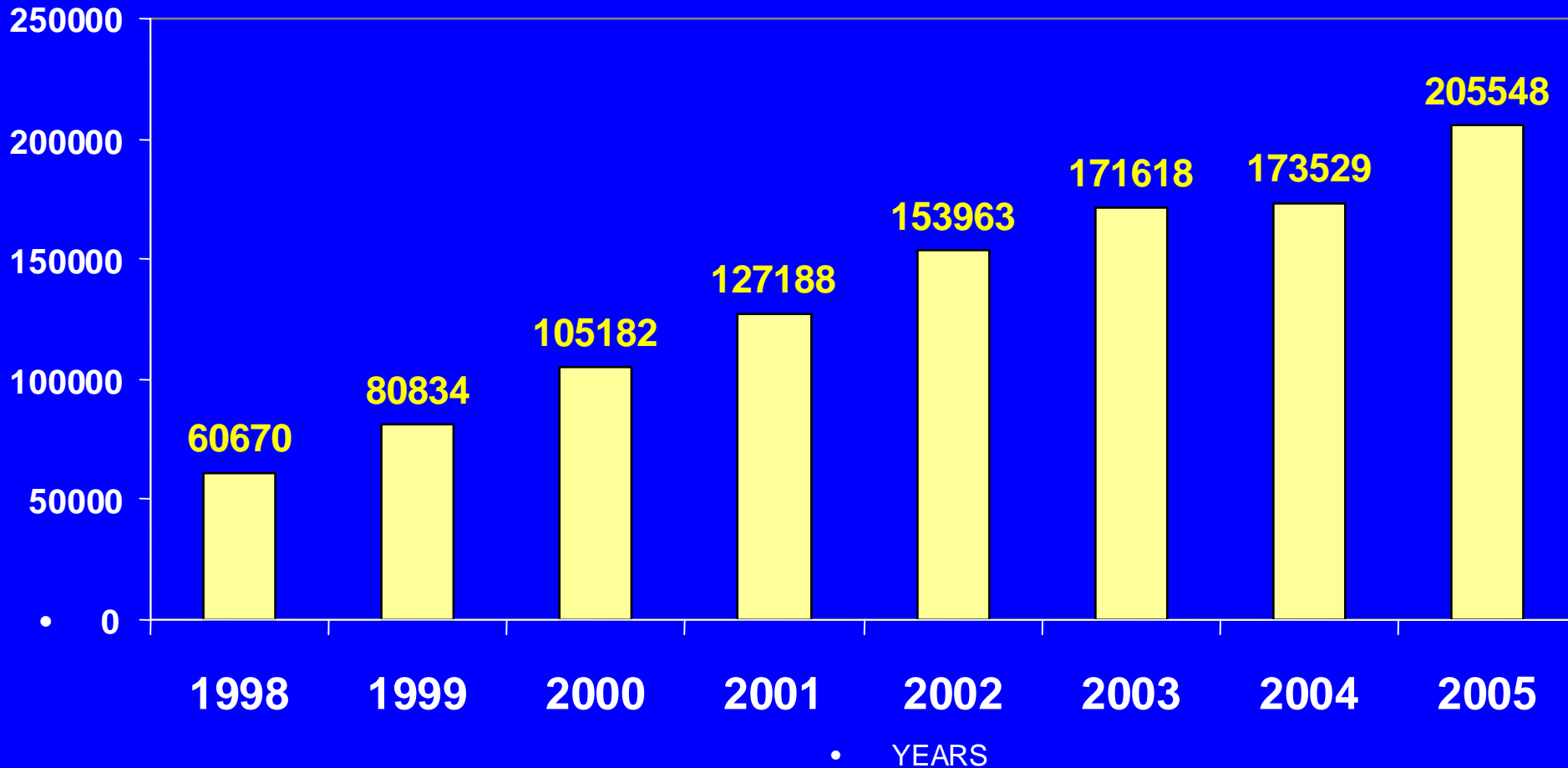
Fonte: elaborazione del Ministero della Salute, Direzione Generale della Prevenzione Sanitaria, Ufficio V Malattie Infettive, sui dati forniti dalle Regioni e Province Autonome

TABLE 1. Percentage of adults reporting influenza vaccination,* by vaccination priority status† — Behavioral Risk Factor Surveillance System, United States, 2004–05 influenza season

Vaccination priority status	September 2004– January 2005		
	No. surveyed	%	(95% CI) [§]
Persons aged 18–64 years with high-risk conditions [¶]	4,339	25.5	(±2.6)
Persons aged ≥65 years	6,345	62.7	(±2.1)
Health-care workers with patient contact ^{**}	1,750	35.7	(±4.0)
Total adults in initial priority groups^{††§§}	12,134	42.0	(±1.7)
Healthy persons aged 18–49 years	9,316	6.9	(±1.0)
Healthy persons aged 50–64 years	5,528	16.5	(±1.8)
Total nonpriority group adults aged 18–64 years	14,392	8.8	(±0.9)

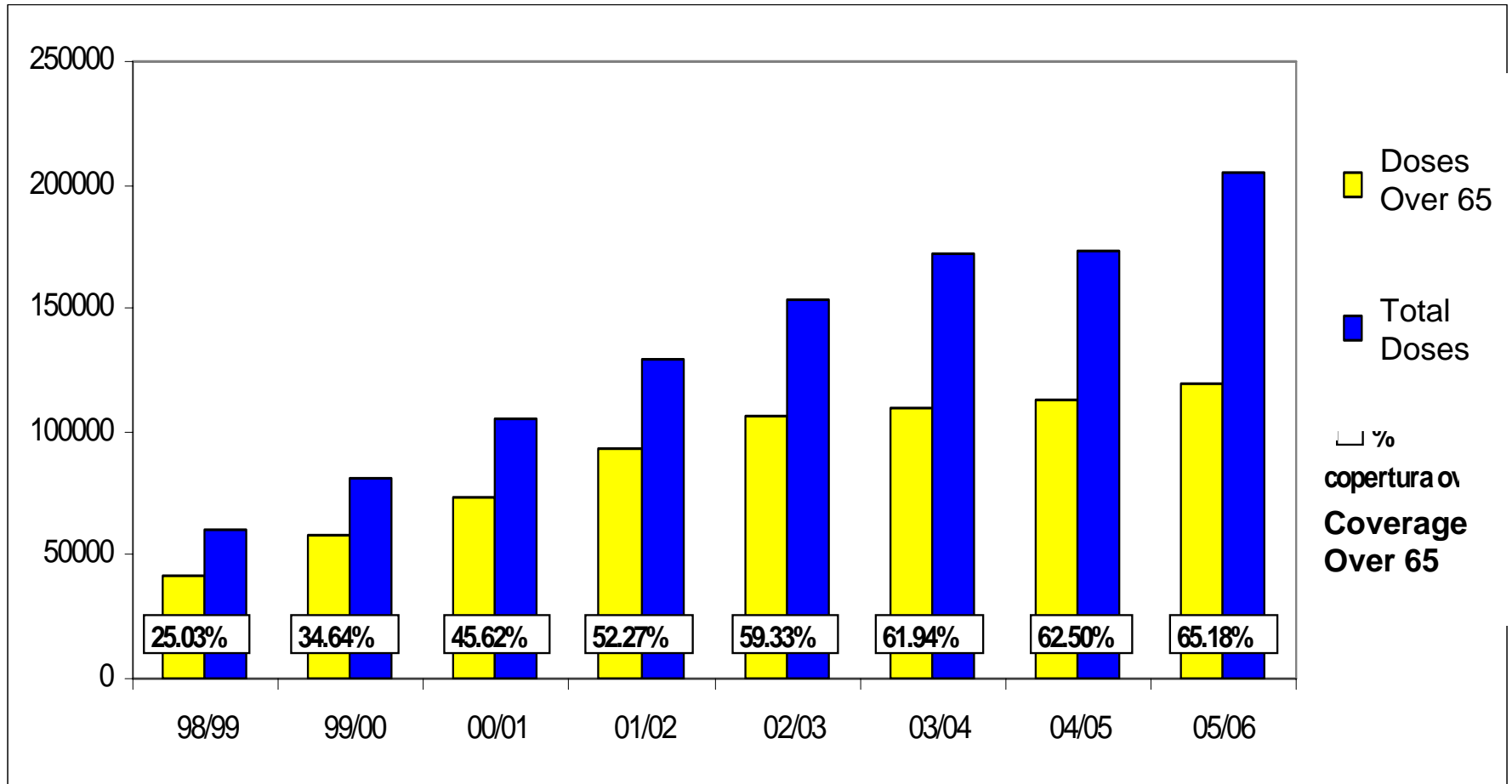
Anti-influenza Campaigns 1998 - 2005

Administered Doses - Province of Catania



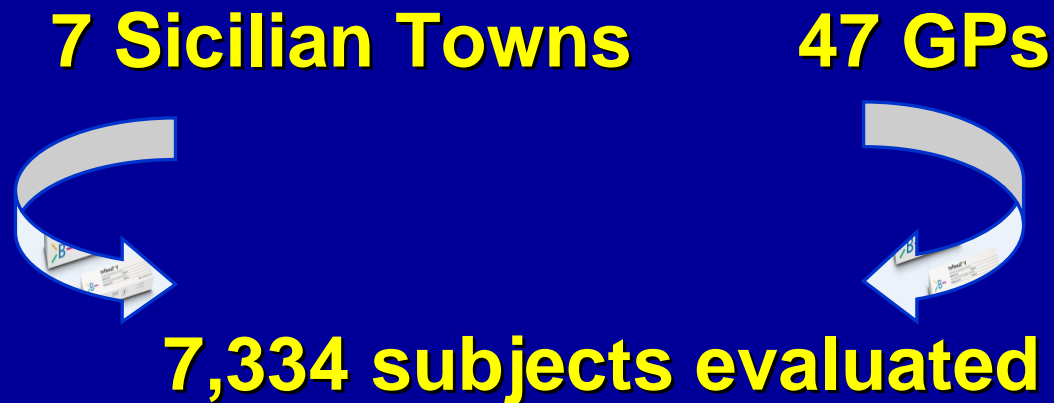
Anti-influenza Campaigns 1998-2005

Total doses administered / Administered doses to the group ≥ 65
Elderly Immunization Rate ≥ 65 years



**THE ANTI-INFLUENZA
IMMUNIZATION IN SICILY
EVOLUTION OF THE STRATEGIES**

- Prevention of acute respiratory tract infections by an adjuvanted virosomal influenza vaccine and its tolerability : outcome of the 1999 - 2000 vaccination program in Sicily.
- S. Ciriminna - Journal of Preventive Medicine and Hygiene 2002*



Age : 60 - > 100 anni (70 - 79 = 46.26%; 7 > 100 anni)

Concomitant Illnesses : Cardiovascular : 4399 (52.28%)

Pulmonary: 1802 (24.28%)

Diabetes : 116 (15.04%)

RESULTS - 1

ADVERSE EVENTS IN 580 SUBJECTS

(7.82%)



SYSTEMIC

(17.29%)



LOCAL

(82.71%)

FEVER	0.27%
MALaise	0.28%
CHILLS	0.22%

REDNESS	4.69%
SWELLING	1.93%
PAIN	2.02%

RESULTS -2

6 months after vaccination:

- Rate of hospitalisations for any illness: 5.11%
- Rate of hospitalisations for Respiratory tract infections: 0.98%

RESULTS -3

Comparison of safety in large studies performed with different vaccines under similar conditions and populations

- TOVAP project (immunization with MF59-adjuvanted vaccine): rate of subjects showing at least one symptom: **14.2 %**
- SVEVA study (evaluation of A.E. following influenza vaccination), 9 vaccines used incl. Whole cell.: rate of subjects showing at least one symptom: **38.4-23.5 %**
- **These data confirm that a dose of virosomal adjuvanted influenza vaccine is very safe and tolerated by elderly patients and effective in reducing influenza-related complications.**

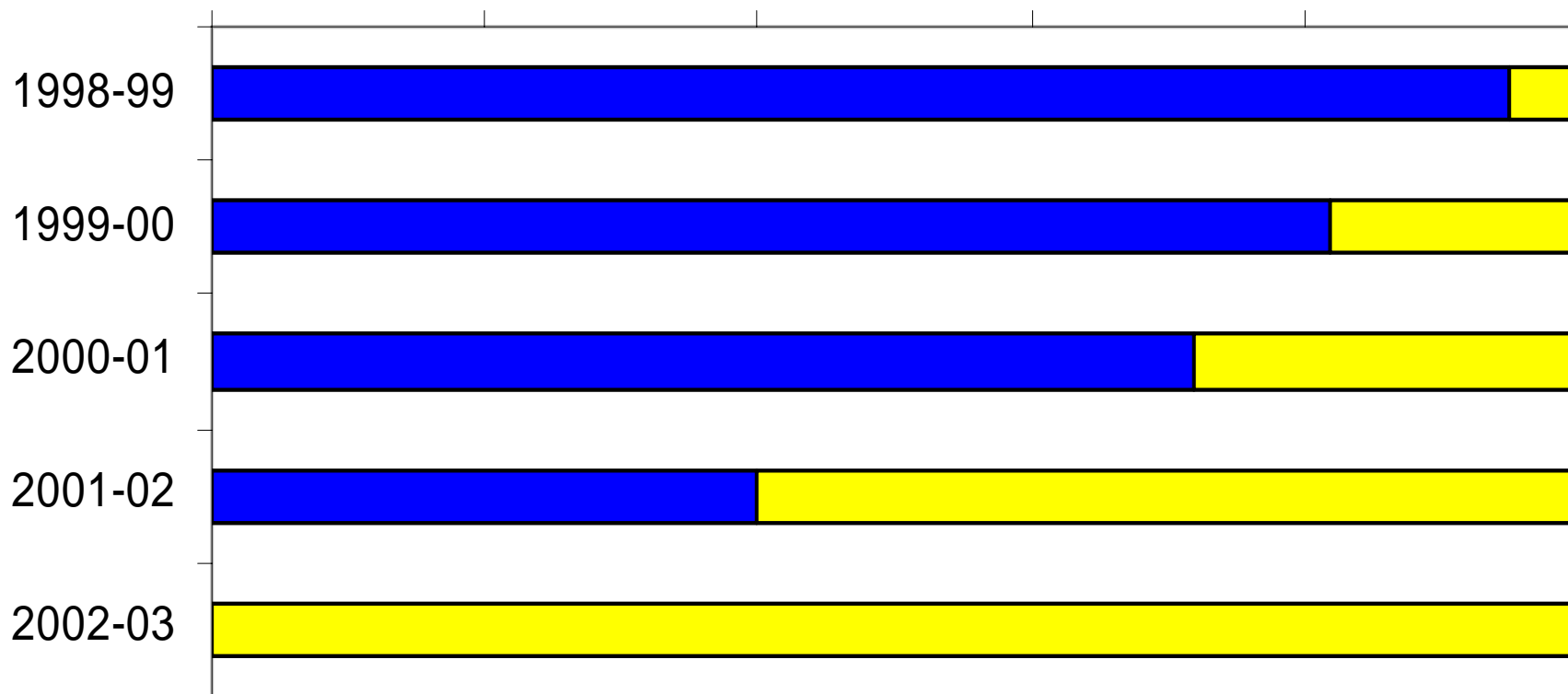
Province of Palermo – LHU 6

THE PROGRESS FROM “CONVENTIONAL” TO ADJUVANTED VACCINES

- 1998-1999** First trial of “MF 59” in a District
(The Regional Project “TOVAP”)
- 1999-2000** Introduction of the “Virosomal vaccine” in a second District
- 2000-2001** Same strategy of the previous season
- 2001-2002** Offer of “MF 59 vaccine” and “Split” in Province Districts
Offer of “Virosomal vaccine” in the Districts of Palermo city
- 2002-2003** Offer of “MF 59 vaccine” for elderly > 64 years
Offer of “Virosomal vaccine” for all age groups

Anti-influenza campaigns seasons 1998 – 2002
TYPE OF VACCINES USED
Province of Palermo

0% 20% 40% 60% 80% 100%



■ Conventional ■ Adjuvanted

Consumption of vaccines (doses)

	2002	2006
Conventional	258,000	119,000
MF59-Adjuvanted	190,000	305,000
Virosomal-Adjuvanted	278,000	590,000

Source: Berna Biotech Italia 2007

Mutual Consent

Involvement at all levels of the different people sharing the programs

- **Departments of Prevention**
- **General Practicioners**
- **Pediatricians**
- **Universities**

Anti-influenza Campaign seasons 2002 – 2006
Participating GPs – Province of Catania

DISTRICTS	GPs 2002	GPs 2003	GPs 2004	GPs 2005	GPs 2006
ACIREALE	63	69	79	84	88
ADRANO	15	22	33	35	39
BRONTE	27	30	31	32	33
CALTAGIRONE	56	58	63	66	67
CATANIA 1,2,3	128	148	192	217	229
GIARRE	58	58	60	58	56
GRAVINA	55	59	63	76	89
PALAGONIA	34	32	37	42	43
PATERNO'	39	40	45	48	50
TOTAL	475	516	603	658	694

Anti-influenza Campaign 2006 – 2007
Number and % of Participating GPs – Province of Catania

DISTRICTS	GPs (n)	participating GPs (n)	%
ACIREALE	110	88	80
ADRANO	49	39	79.59
BRONTE	33	33	100
CALTAGIRONE	68	67	98.53
CATANIA 1,2,3	315	229	72.69
GIARRE	62	56	90.32
GRAVINA	128	89	69.53
PALAGONIA	45	43	95.56
PATERNO'	58	50	86.21
TOTAL	868	694	79.95

Anti-influenza Campaign 2005-2006

Immunization rates subjects ≥ 65 years – Province of Catania

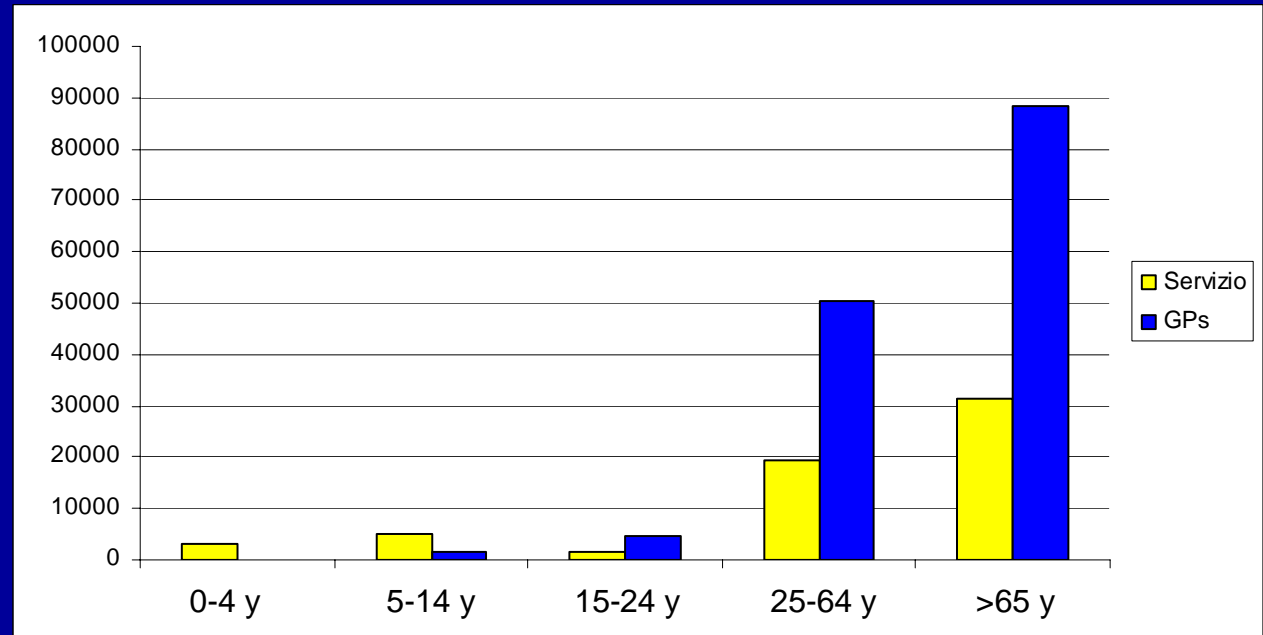
DISTRICTS	POPULATION ≥ 65 YEARS	ADMINISTERED DOSES	IMMUNIZATION RATE %
ACIREALE	19,885	12,419	62.54
ADRANO	10,890	6,459	59.31
BRONTE	7,155	5,632	78.71
CALTAGIRONE	20,282	12,393	61.10
CATANIA 1,2,3	66,995	44,846	67.00
GIARRE	15,300	10,467	68.41
GRAVINA	22,791	14,178	62.20
PALAGONIA	9,573	6,541	68.32
PATERNO'	11,290	7,076	62.67
TOTAL	184,131	120,011	65.18

Distribution of doses (LHU vs GPs by patient age group)

Anti-influenza
Campaign

2005 – 2006

Province of
Catania



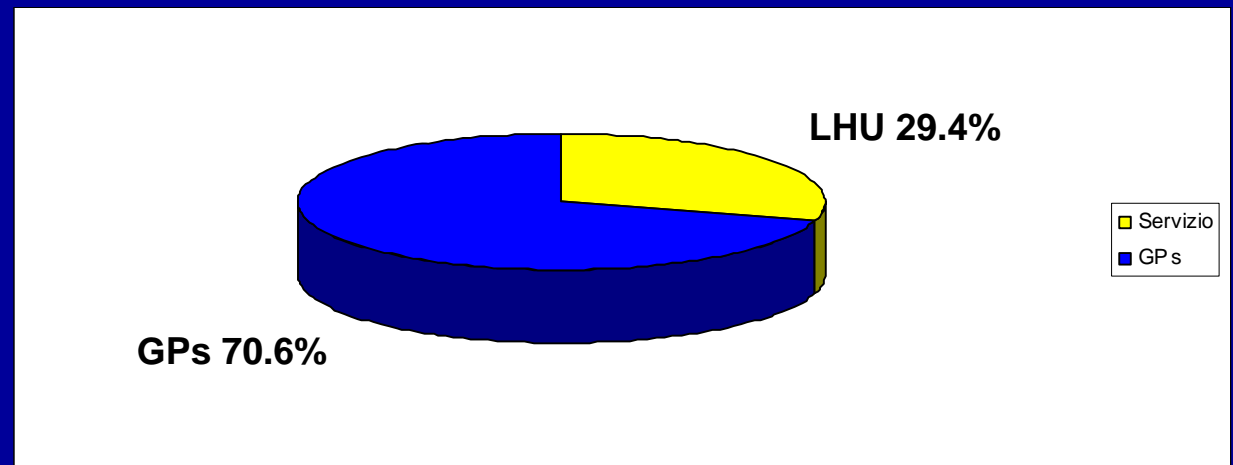
Doses
administered
by GPs

145,022

Doses
administered
In LHU

60,526

Distribution of released doses (who)



Considerations - 1

The significant improvement of immunization rates in the over 65 should be followed by increasing the immunization rates in the other “at risk” groups for:

- underlying/chronic conditions
- health care workers
- public service personnel

Considerations - 2

The coverage in pediatric age is scarce and variable from year to year

Do we need new strategies?

TABLE 2. Percentage of children aged 6 months–17 years reported to have received influenza vaccination,* by vaccination priority status — Behavioral Risk Factor Surveillance System, United States, 2004–05 influenza season

Vaccination priority status	September 2004– January 2005		
	No. surveyed	% (95% CI) [†]	
Children aged 6–23 months	531	48.4	(±8.8)
Children aged 2–17 years with high-risk conditions [§]	685	34.8	(±7.1)
Total children in priority groups	1,216	42.2	(±5.9)
Nonpriority group children and others aged 2–17 years [¶]	5,349	12.3	(±1.8)