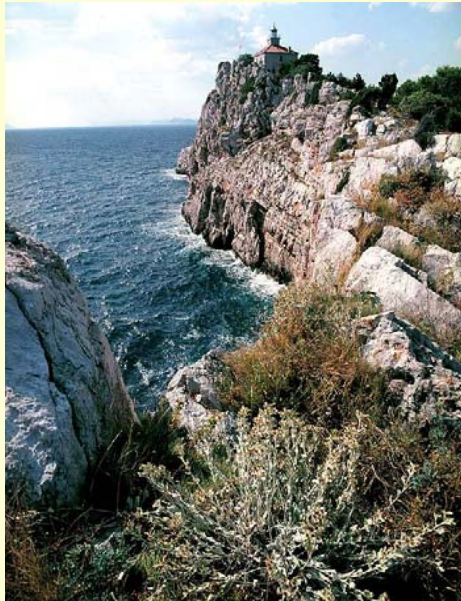


Child health care in Dalmatia

Vjekoslav Krželj, M.D.,Ph.D

**Professor of Pediatrics and Scientific Committee member of
Split - Dalmatia County**

Croatia



**HANS kick of meeting
Ancona -11th October 2007**

- **The Hans (Health Adriatic Network Skills) project aims to create a health and social- health network between Adriatic Regions in order to increase harmonization, integration and cooperation between health and social- health systems in these countries.**
- **The expected results will be improvement of the level of health services**
- **The field of pediatrics is important part of this project.**



Children: 0 – 18 (21) yr make up slightly less than one third of the population



- **The child care must begin in utero**



- **Prevention in the health care of infants, children and adolescents is at core of the field of pediatrics**

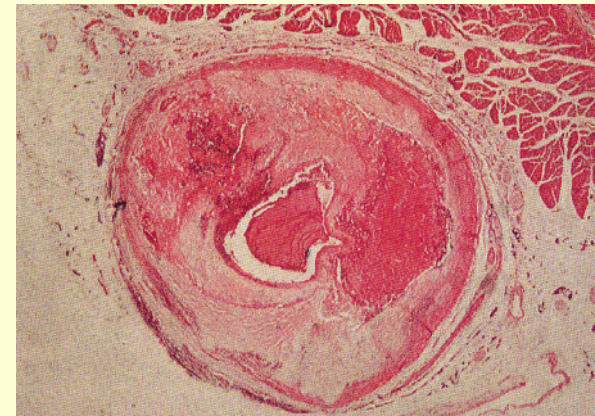
- **Prevention in the childhood decrease costs of adults health care**



Atherosclerotic coronary artery disease is a leading cause of illness and death



- **Atherosclerotic coronary heart disease (CHD) is preventable disease**



- **It can be screened for and treated**
(Smith DS, Steiner RD: Top Clin Nutr 2001;16:17-31)



● **Coronary heart disease needs to be addressed at the pediatric age. A public health strategy provides an important basis for prevention CHD**


(Berenson GS, Srinivasan S. Progress in Pediatric Cardiology 2003; 17:113-22)



Atherogenesis

- **Atherogenesis begins in childhood**
- **Advanced lesions do not occur until adulthood**
- **Pediatricians should work with parents to prevent advanced lesions**

(Olson RE. Pediatric Pathology and Molecular Medicine 2002; 21: 137-52)



Prevention of atherosclerosis in childhood



- Guard against overweight, and smoking
- Universal LDLC screening (sometimes drug therapy is necessary)
- Diet and lifestyle
- Education for pediatricians, parents and children



GEOGRAPHIC AREA OF RESEARCH



ŽUPANIJE REPUBLIKE HRVATSKE
COUNTIES OF THE REPUBLIC OF CROATIA



- I. Zagrebačka županija
- II. Krapinsko-zagorska županija
- III. Sisacko-mostavačka županija
- IV. Karlovačka županija
- V. Varaždinska županija
- VI. Koprivničko-križevačka županija
- VII. Bjelovarsko-bilogorska županija
- VIII. Primorsko-goranska županija
- IX. Ličko-severnjačka županija
- X. Virovitičko-podravska županija
- XI. Požeško-slavonska županija
- XII. Brodsko-posavska županija
- XIII. Zadarska županija
- XIV. Osječko-baranjska županija
- XV. Šibensko-kninska županija
- XVI. Vukovarsko-srijemska županija
- XVII. Špišsko-dalmatinska županija
- XVIII. Istarska županija
- XIX. Dubrovačko-neretvanska županija
- XX. Međimurska županija

- i. County of Zagreb
- ii. County of Krapina-Zagorje
- iii. County of Sisak-Moslavina
- iv. County of Karlovac
- v. County of Varaždin
- vi. County of Koprivnica-Križevci
- vii. County of Bjelovar-Bilogora
- viii. County of Primorje-Gorski kotar
- ix. County of Lika-Senj
- x. County of Virovitica-Podravina
- xi. County of Požega-Slavonia
- xii. County of Sl. Brod-Posavina
- xiii. County of Zadar
- xiv. County of Osijek-Baranja
- xv. County of Šibenik-Knin
- xvi. County of Vukovar-Srijem
- xvii. County of Split-Dalmatia
- xviii. County of Istria
- xix. County of Dubrovnik-Neretva
- xx. City of Zagreb



Croatian population by county, 2001 census

Croatia – total 4,437.460



Zadar County 162.045

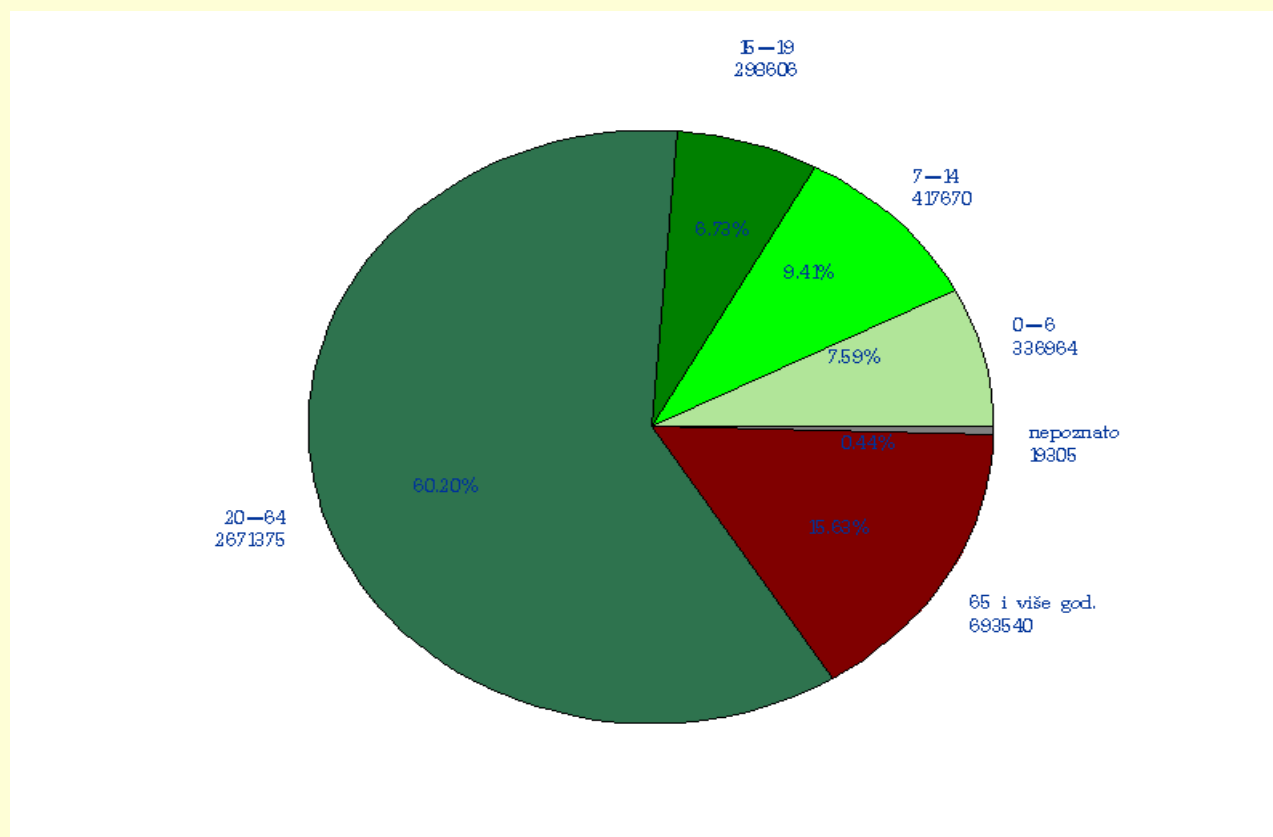
Šibenik-Knin County 112.891

Split-Dalmatia County 463.676

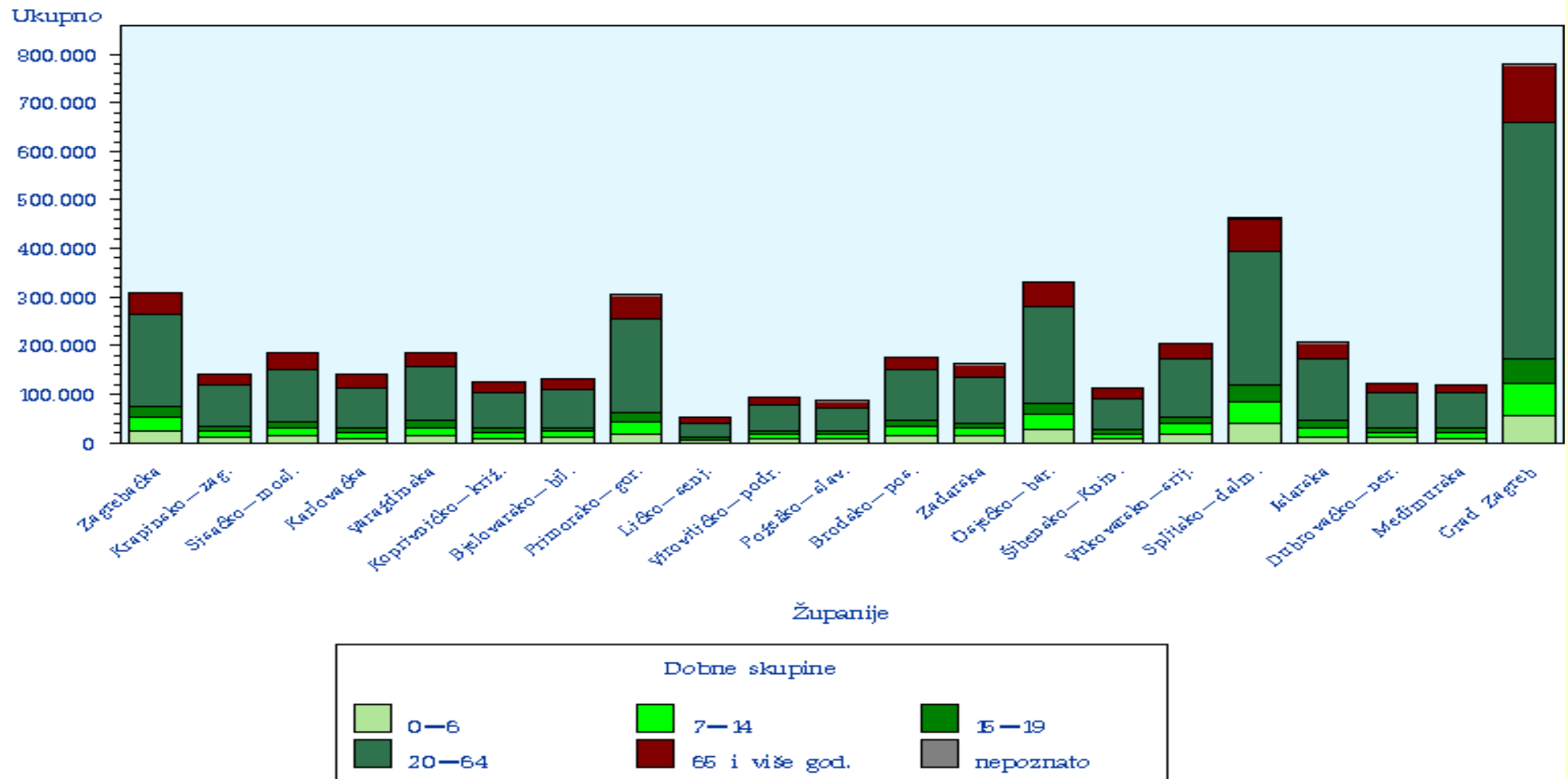


Croatian population by age, 2001 census

 Croatia – total	4 437 460
 Children (0 -18 yr)	1 053 240

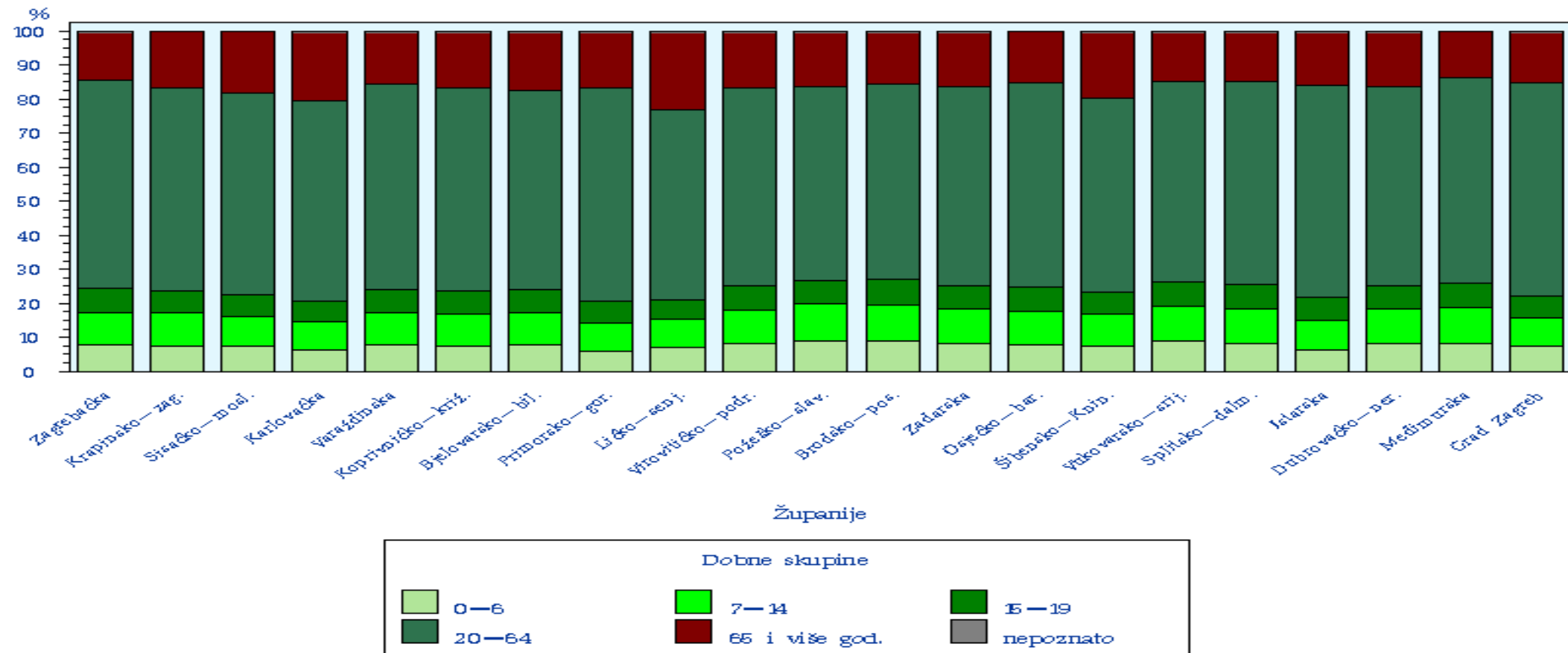


Croatian population by age and county, 2001 census

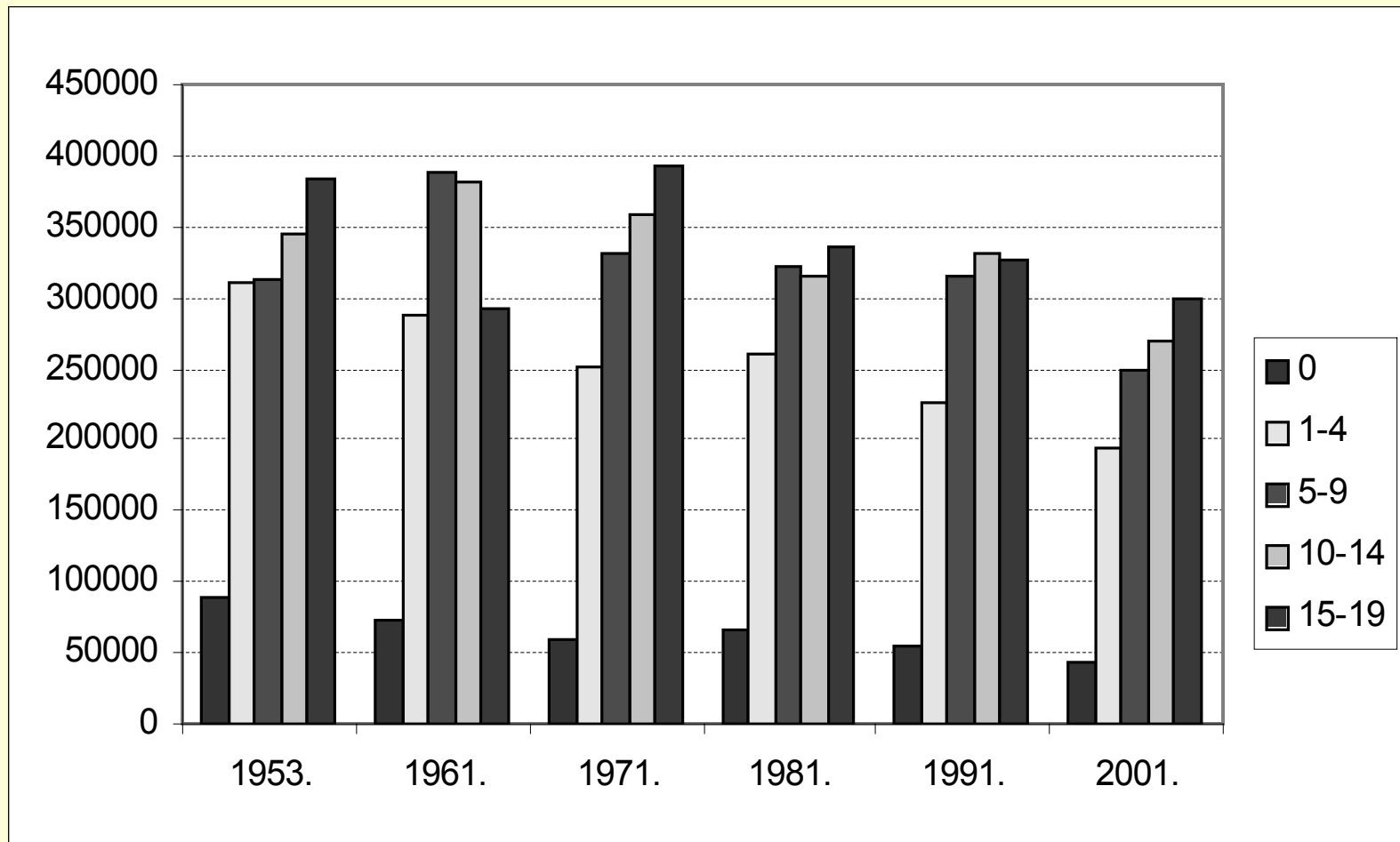


Croatian population by age and county, 2001 census

%



Croatian child population at censuses from 1953. to 2001.





Live born, deaths and natural trend Croatia 2005

live born	no. deaths	natural trend
42.492	51.790	- 9.298

natality	mortality	natural trend rate
9,6	11,7	-2.1




Live born, deaths and natural trend Zadar County – 2005

Live born	no. deaths	natural trend
1791	1714	77




Vital index: 104,5
(*livebirths/100 deaths*)



Live born, deaths and natural trend Šibenik – Knin County – 2005

liveborn	no. deaths	natural trend
954	1495	-541

Vital index: 63,8
(*livebirths/100 deaths*)



Live born, deaths and natural trend Split-Dalmatia County – 2005

Live born	no. deaths	natural trend
4970	4536	434

Vital index: 109,6
(*livebirths/100 deaths*)





Infant mortality rate 2005 by county

Croatia – total 5,7

Zadar County 2,2

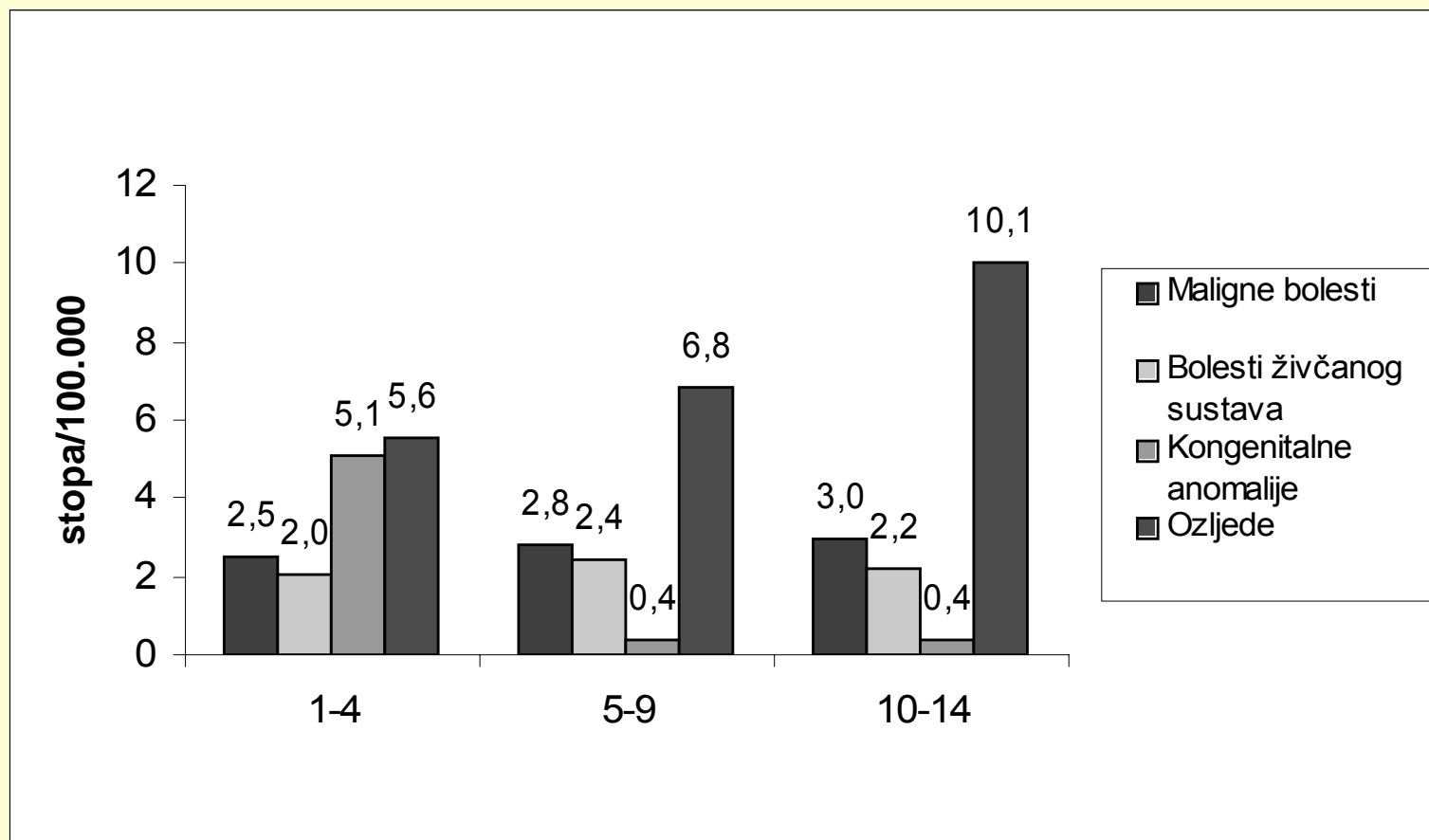
Šibenik-Knin County 6,3


Split-Dalmatia County 6,6

Infant deaths per 1,000 liveborn



The causes of death, children ages 1- 14 years in Croatia in 2003





Children fatalities caused by injuries in Croatia 1995 - 2005

- **2163 children from 0-19 years were killed because of injuries :**

Traffic accidents 993

Suicides 357

Drowning 185



Children injuries caused death in Croatia - 2004

Uzroci smrti	dob (godine)					
	0	1-4	5-9	10-14	15-19	ukupno
prometne nesreće V01-V99	3	10	11	9	69	102
utapljanja W65-W74	0	3	1	3	2	9
ugušenja W75-W84	3	1	1	0	1	6
padovi W00-W19	1	2	0	1	0	4
struja-W85,W86,W87	0	0	0	1	1	2
opekline X00-X09,X10-X19,	0	0	0	0	0	0
otrovanja X40-X49	0	0	0	1	7	8
nesreće oružjem/eksplozivom W32-W40	1	0	0	1	0	2
ostale nesreće	0	1	0	1	1	3
ukupno nesreće	8	17	13	17	81	136
samoubojstva X60-X84	0	0	0	4	16	20
ubojstva X85-Y09	0	0	0	0	1	1
dogadjaj s neodređenom nakanom Y10-Y34	0	0	0	0	0	0
komplikacije medicinske skrbi Y40-Y84	0	0	0	0	0	0
ukupno nasilne smrti	8	17	13	21	98	157


Child health care

- Primary health care
- Secondary health care
- Tertiary health care



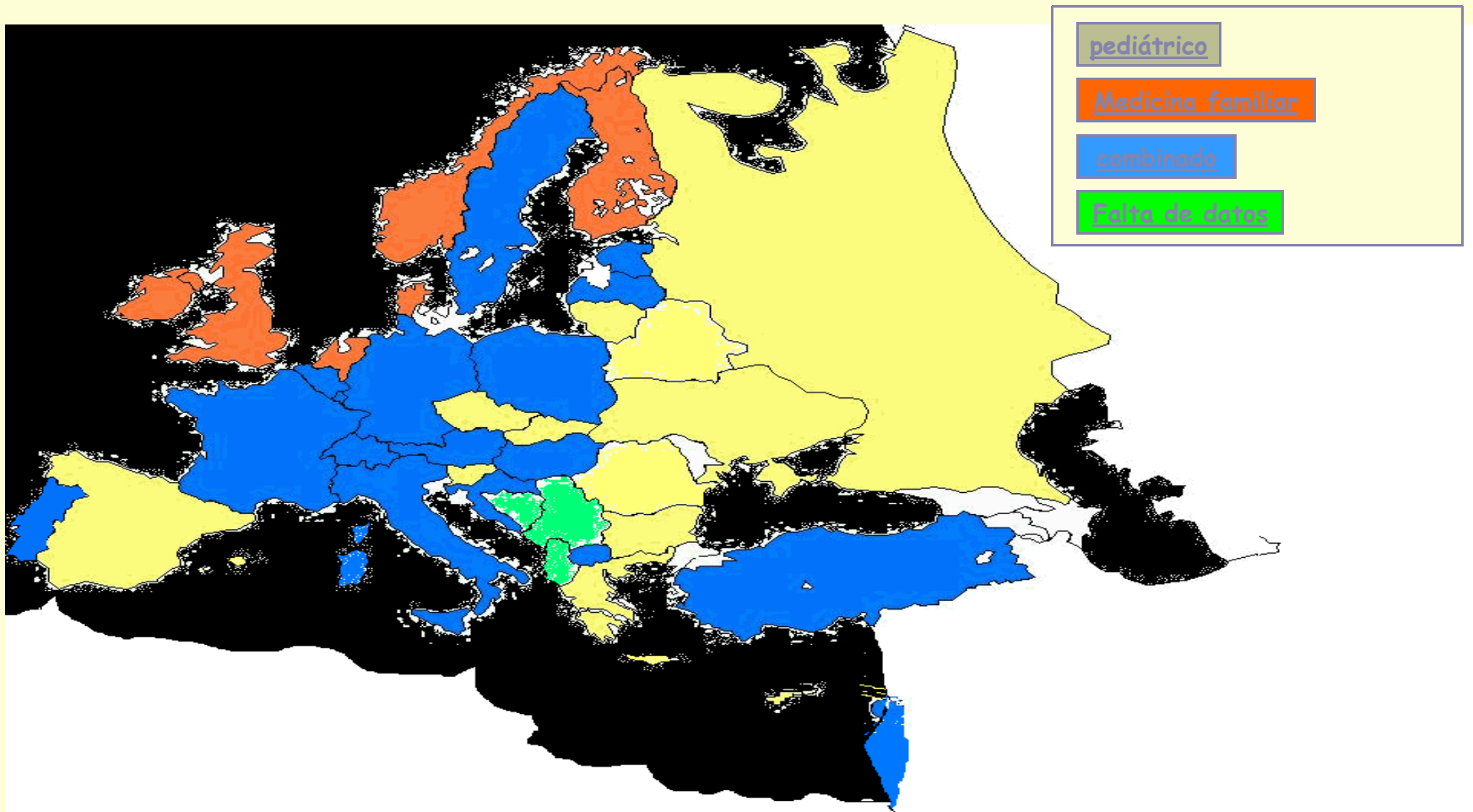



Primary health care

- 0 - 7 years : pediatrician
 - 7 – 18 years: general practice
school medicine (prevention
programs)
- 

Patterns for Paediatric Care (Europe 2002)

mapa






The vaccination program is obligatory

Coverage with vaccination is 98%.

**Chronology of introducing vaccines into the
Childhood Vaccination Programme in Croatia**
Godina uvođenja cjepiva u Program

Vaccine	Year of introduction
BCG	1948
Diphtheria	1948
Tetanus	1955
Pertussis	1959
Poliomyelitis	1961
Measles	1968
Rubella	1975
Mumps	1976
Hepatitis B	1999
H. influenzae type B	2002



HRVATSKA –Croatia 2007.

KALENDAR CIJEPLJENJA - Vaccination schedule		
	DOB	CJEPIVO
P	U RODILIŠTU - at birth	BCG, HB
R	2 MJESECA / months	Hib, HB
E	3 MJESECA / months	DTaP, IPV
D	4/5 MJESECI / months	DTP,OPV, Hib
Š		
K	6 MJESECI / months	DTP, OPV, Hib, HB
O		
L	2. GODINA / year	MPR, DTP, OPV, Hib
S		
K	4. GODINA / year	DTP, OPV
A		
	I raz. – 7. GODINA / year	MPR, Td , OPV
	II raz. - 8. GODINA / year	Testiranje PPD bez cijepljenja
O	VI raz. - 12. GODINA / year	HB x 3
L		
S	VII raz. - 13. GODINA / year	BCG
K		
A	VIII raz. -- 14. GODINA / year	Td, OPV
	19. GODINA / year	Td
	60 GODINA / years	ana-Te x 3

Secondary health care

- **County hospital Zadar – Pediatric department**
- **32 beds, 13 pediatricians**



Secondary health care

- County hospital Šibenik-Knin – Pediatric department
- 28 beds, 8 pediatricians



Tertiary health care

- **Clinical hospital center Split – Pediatric clinic**
- **110 beds, 28 pediatricians**
- **PICU**



Project: For the children smile in the hospital

- All pediatric departments in Dalmatia



Project: For the children smile in the hospital



Thank you for your attention



The official statistical data of the Central Bureau of Statistics – Republic of Croatia were used in this lecture

