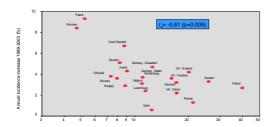
John Paul II Upper Silesian Centre for Child Health Medical University of Silesia University Hospital No 6 Katowice, Poland,



Przemyslawa Jarosz-Chobot, Grazyna Deja, Mariola Minkina-Pedras



- •4% of Poland's area
- •13% of its population (~5 milions of inhabitants)
- most industrialized "black region" coal and steel industry with high pollution
- •almost 80% of Upper Silesia population lives in towns
- the capital city Katowice is inhabited by 340,000
- 13 towns with population of 100,000 or more
- 10 towns with population between 50-100,000



Inverse association between annual incidence increase during 1989-2003 and incidence rate in 1989-94

EURODIAB Workshop, Pécs 8 March 2008





Silesian Diabetic Centre in Katowice

- Number of children and adolescents with Type 1 Diabetes in 2008 (0-18 y): 850
- Mean age: $11.98 \pm 4.28 \text{ y}$
- Number of adults with Type 1 Diabetes in 2008 (> 18 y): 50
- Our region: ~4 000 000 inhabitants
- Our team:

Doctors: 6 (part-time) Nurses/educators: 4

Dietician: 1 Psychologist: 1







The Silesian University of Technology Faculty of Automatic Control, Electronics and Computer Science Gliwice, Poland

Andrzej Polanski, Joanna Polanska, Lukasz Pracki, Michal Marczyk

The Silesian University of Technology is the second biggest university of technology in Poland (after Warsaw University of Technology) - 33,000 students at 16 faculties

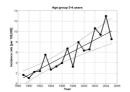
Faculty of Automatic Control, Electronics and Computers Science – established in 1964

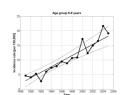
- •Almost 5,000 students
- •Runs BSc, MSc and PhD studies, including degree in bioinformatics and biomedical engineering

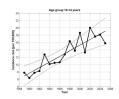
Bioinformatics Group

- headed by Prof.Andrzej Polanski
- •15-year experience in data analysis
- •Active participation in EU and NHI projects

Epidemiology of type 1 diabetes among Silesian children aged 0-14, 1989-2005 Jarosz-Chobot P., Deja G., Polanska J. Acta Diabetologica 2008







INCIDENCE:	AGE AT FIRST INS.INJECTION				
BOYS:	0-4	5-9	10-14	0-14	
No. of cases	125		399	779	
Av. population size	116 116	143 613	167 067	426 795	
Inc. rate (per 100,00	5,98	9,86	13,27	10,14	
C.L.(95%), lower: (a)	4.98	8.69	12.00	9.44	
C.L. (95%) higher: (a)	7,13	11,15	14,64	10,88	
Cum.risk (per 1000)	0.30	0.79	1.45	1.45	
C.L.(95%), lower; (a)	0.25	0.71	1.35	1.35	
C.L. (95%) higher: (a)	0.36	0.88	1.56	1.56	
GIRLS:	0-4	5-9	10-14	0-14	
No. of cases	98	254	364	716	
Av. population size	109 551	136 238	159 386	405 175	
Inc. rate (per 100.00	4.97	10.36	12.69	9,82	
C.L.(95%), lower; (a)	4.03	9.12	11.42	9.11	
C.L. (95%) higher: (a)	6,06	11,71	14,06	10,56	
Cum.risk (per 1000)	0.25	0.77	1.40	1,40	
C.L.(95%), lower; (a)	0.20	0.69	1.30	1.30	
C.L. (95%) higher: (a)	0.30	0.85	1.51	1.51	
BOYS AND GIRLS:	0-4	5-9	10-14	0-14	
No. of cases	223	509	763	1495	Stand.
Av. population size	225 667	279 851	326 453	831 971	rate:
Inc. rate (per 100.00	5,49	10.10	12.98	9,98	9.52
C.L.(95%), lower; (a)	4.79	9.25	12.08	9.48	9.04
C.L. (95%) higher: (a)	6.26	11.02	13.94	10.50	10.02
Cum.risk (per 1000)	0.27	0.78	1.43	1.43	
C.L.(95%), lower; (a)	0.24	0.72	1.36	1.36	
C.L. (95%) higher: (a)			1.50		

