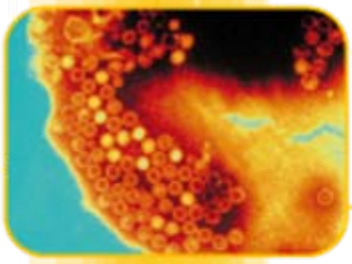
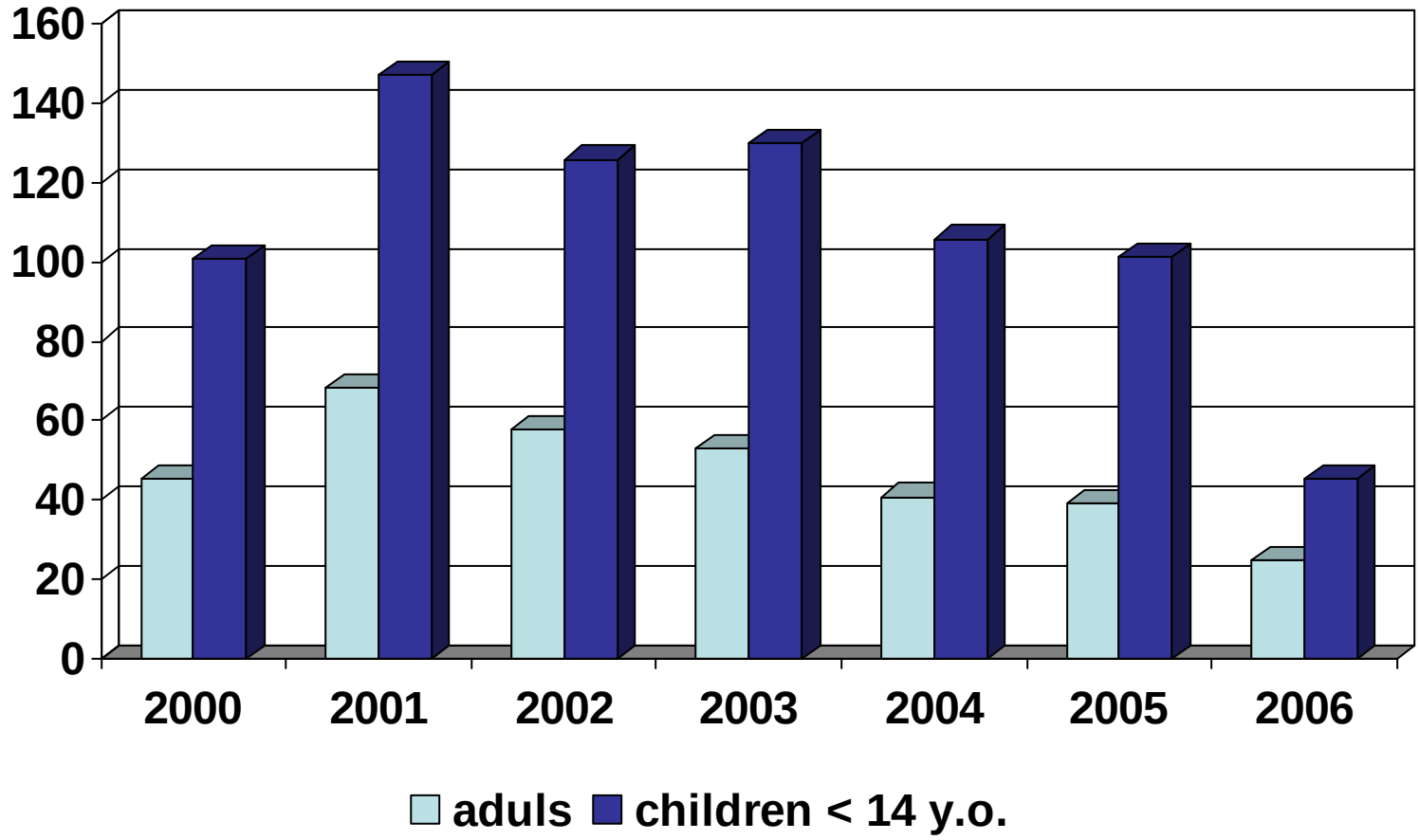


Hepatitis A Seroprevalence in Different Age Groups in Kiev City, Ukraine

Dr. Anna Moisseeva, MD, PhD

Center of Immunobiological Products, MoH, Ukraine

Hepatitis A Incidence in Ukraine (per 100,000 population), 2000-2006

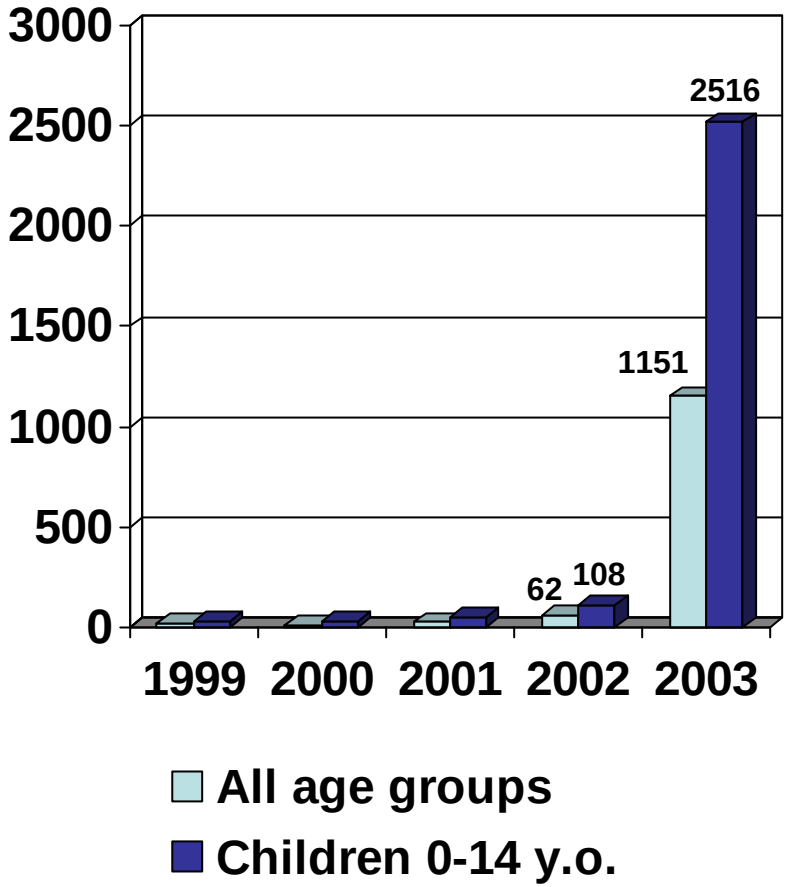


Dr. Anna Moisseeva, MD, PhD
Center of Immunobiological Products, MoH, Ukraine

Hepatitis A Outbreaks in Ukraine (2003)

Hepatitis A incidence in the Krasnodon region: 1999-2003
(per 100,000 population)

- **2003**
  - 3 outbreaks
  - 790 patients
  - The largest was in Sukhodol'sk town: 744 patients including 244 children



Dr. Anna Moisseeva, MD, PhD
Center of Immunobiological Products, MoH, Ukraine

Outbreak control: Sukhodol'sk' experience (2003)

July 9, 2003: single dose of Avaxim™ vaccine, coverage 38% of children population

→

September 22, 2003: no new cases of hepatitis A in the town, outbreak is stopped

Hepatitis A incidence among children in Sukhodol'sk town					
	Vaccinated		Non-vaccinated		
Age (years)	Cases/N	Cases/100,000	Cases (N)	Cases/100,000	Fold reduction*
2-6	0/293	0	6/451	1330	-
7-14	1/615	162	62/1045	5933	36.6
Total	1/908	110	68/1496	4545	41.3

Effectiveness of one-dose vaccination: 98-100%

Dr. Anna Moisseeva, MD, PhD
Center of Immunobiological Products, MoH, Ukraine

Hepatitis A Outbreaks in Ukraine (2004-2007)

- **2007 (January – October)**
  - **4 outbreaks**
  - **113 patients including 57 children**
- **2006**
  - **10 outbreaks**
  - **146 patients including 96 children**
- **2005**
  - **9 outbreaks**
  - **173 patients including 68 children**
- **2004**
  - **5 outbreaks**
  - **71 patients including 54 children**

Dr. Anna Moisseeva, MD, PhD
Center of Immunobiological Products, MoH, Ukraine

Most Recent Hepatitis A Outbreak in Ukraine (September-October 2007)

- **Schelkino town, Crimea**
  - **11,320 inhabitants**
  - **48 acute cases of hepatitis A from September 3rd to October 15th, 2007 (17 children)**
  - **Renewal of canalization system one month before appearing of the 1st case**
  - **Immediate selective vaccination of at risk groups (schoolchildren, adults with special occupations)**

Dr. Anna Moisseeva, MD, PhD
Center of Immunobiological Products, MoH, Ukraine

Objectives of Epidemiology Study

- **To evaluate Hepatitis A seroprevalence in different age groups in Kiev city, Ukraine**
- **To evaluate a rationale for implementation of routine vaccination in Ukraine**

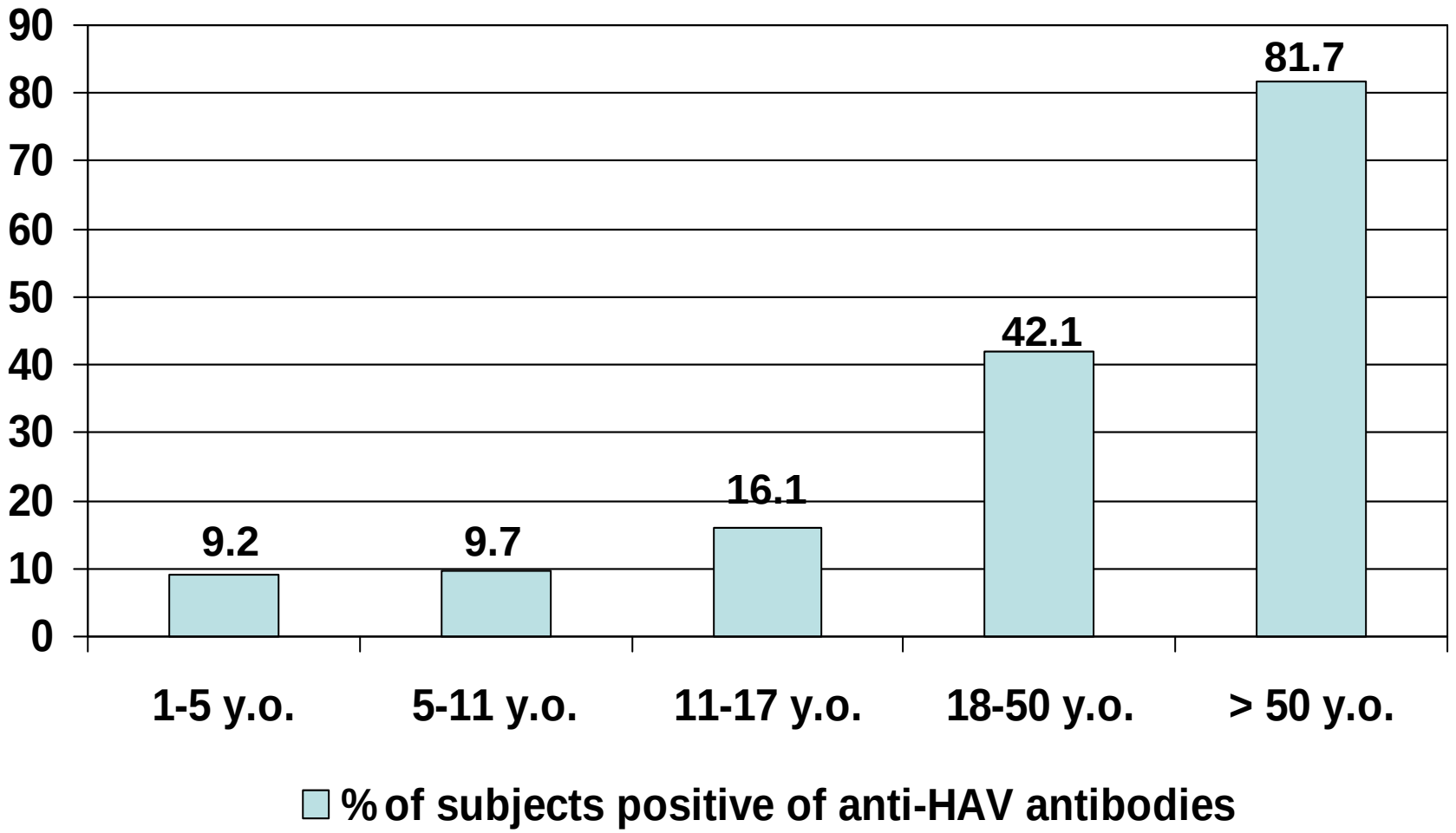
Dr. Anna Moisseeva, MD, PhD
Center of Immunobiological Products, MoH, Ukraine

Methods

- **Qualitative ELISA kit (Total HAV, Dia-Sorin, Italy) for total anti-HAV antibodies, sensitivity > 10 mIU/ml**
- **1000 non-vaccinated subjects enrolled during March - June, 2007**
- **Five age groups (200 subjects per group):**
  - **1-5 years**
  - **6-11 years**
  - **12-17 years**
  - **18-50 years**
  - **> 50 years**

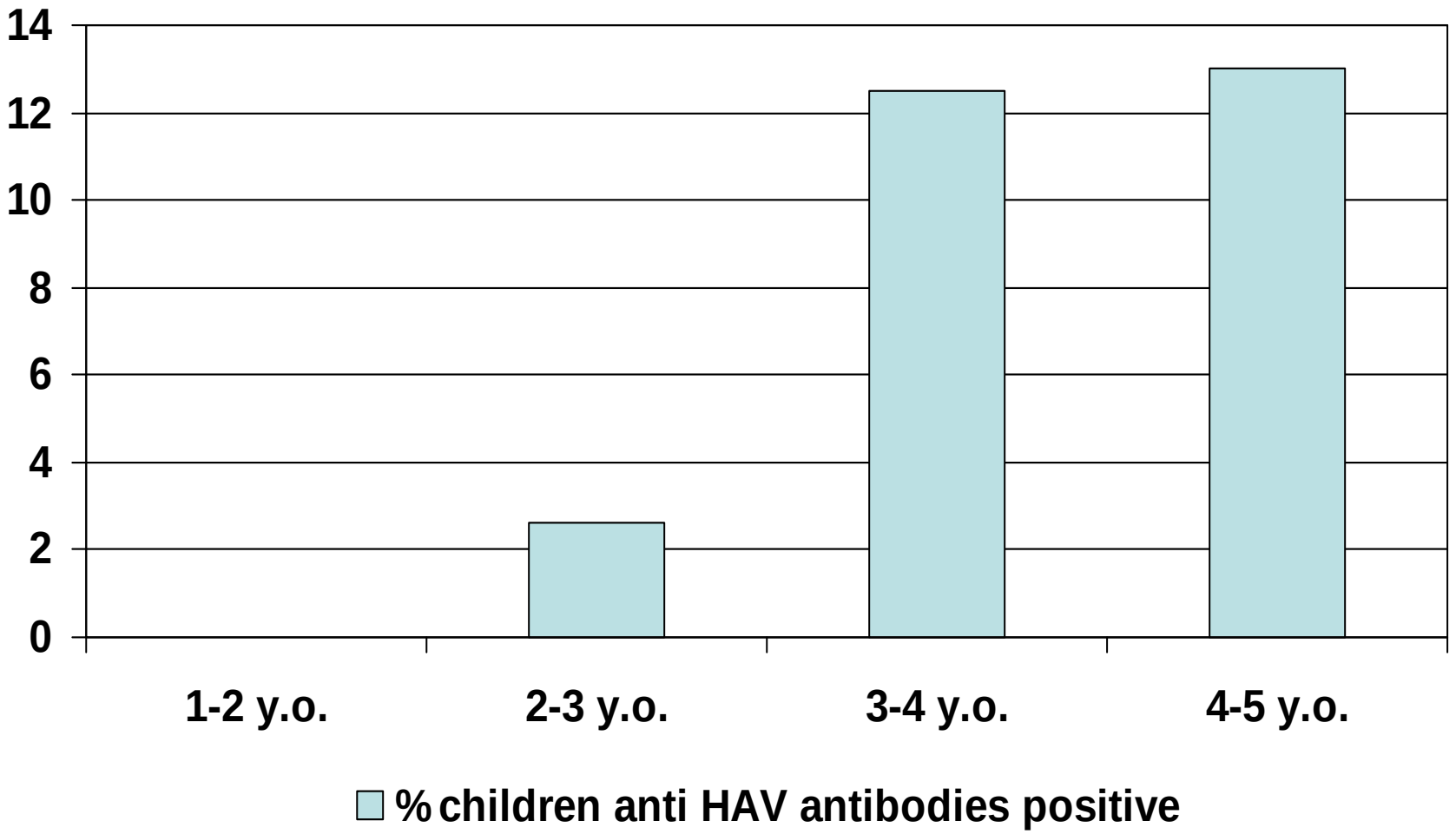
Dr. Anna Moisseeva, MD, PhD
Center of Immunobiological Products, MoH, Ukraine

Hepatitis A Seroprevalence in Different Age Groups in Kiev, 2007



Dr. Anna Moisseeva, MD, PhD
Center of Immunobiological Products, MoH, Ukraine

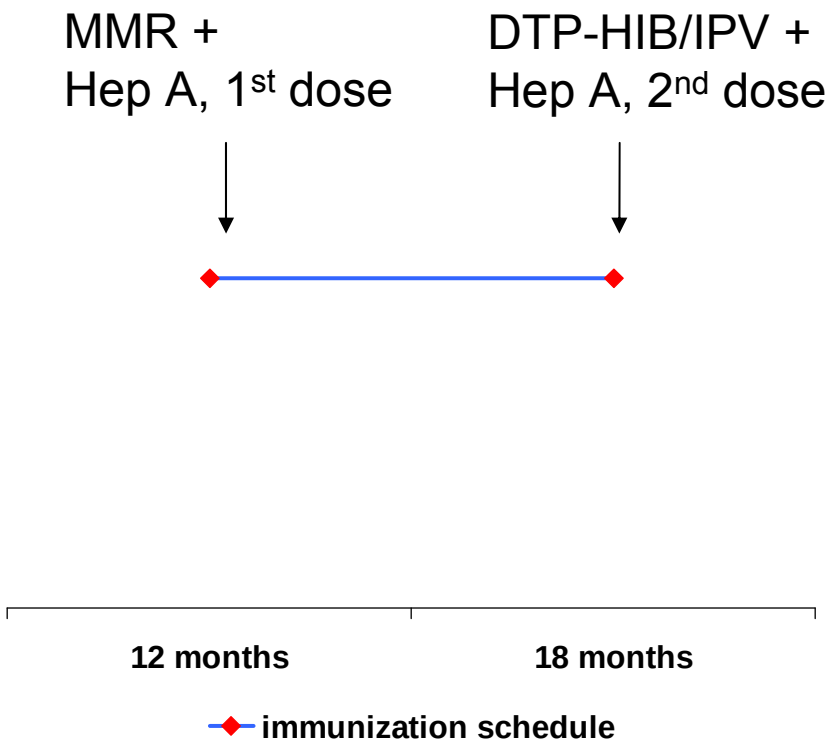
Hepatitis A Seroprevalence in Children in Kiev, 2007



Dr. Anna Moisseeva, MD, PhD
Center of Immunobiological Products, MoH, Ukraine

Possible Strategy of Routine Hepatitis A Vaccination in Ukraine

- **High susceptibility to HAV was observed in all age groups in children and young adults in Ukraine**
- **The optimal age for Hepatitis A vaccination in National Immunization Schedule is likely to be from 12 months to 3 years of age**



Dr. Anna Moisseeva, MD, PhD
Center of Immunobiological Products, MoH, Ukraine

Conclusions

- **Susceptibility to HAV decreases with age, but remains high in adolescents and young adults in Kiev**
- **Average range of anti-HAV seropositivity: 32%**
- **Routine Hepatitis A vaccination can become the most effective prophylactic measure**
- **Universal vaccination have to be considered for all young children in Ukraine**

Dr. Anna Moisseeva, MD, PhD
Center of Immunobiological Products, MoH, Ukraine

Thank You for attention

Dr. Anna Moisseeva, MD, PhD
Center of Immunobiological Products, MoH, Ukraine