NATIONAL IMMUNISATION PROGRAMME AND VIRAL HEPATITIS IMMUNISATION POLICIES

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National Immunisation Programme Review Committee

Health Council of the Netherlands

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GROWTH OF NIP IN THE NETHERLANDS

Diphtheria	1957
Pertussis	1957
Tetanus	1957
Polio	1957
Measles	1976
Mumps	1987
Rubella	1974
Hepatitis B – mother HBsAg+	1989
Haemophilus influenzae type b	1993
Meningococcal C infections	2002
Hepatitis B – children at risk	2003
Pneumococcal disease	2006
Cervical cancer	2009

NIP (Rijksvaccinatieprogramma, RVP) in the Netherlands

- Programmatic indeed!
- Publicly funded, free of charge
- Embedded in general infant wellfare and youth health care
- Linkage to population register
- Active invitations, recalls, outreaching activities
- Regular meetings with nurse/physician
- Voluntary
- Low threshold, high participation rates (>95%)

Organization of RVP

National Institute of Public Health (RIVM)

- Runs the programme at infant well clinics / school health services, provides continuous education of public and professionals, evaluates safety and effectiveness

- Netherlands Vaccine Institute (NVI)
  - Produces or buys the vaccines

- Health Council (Gezondheidsraad, GR)
  - Provides independent, scientific advice on content of programme

Committees of the Health Council

- Based on scientific state-of-the-art
- Multidisciplinary, including ethical and legal aspects
- Personal membership, not representing organizations
- Disclosure
- Peer review by standing committees
- Deliberations confidential, reports public
- Advisors from ministry, RIVM, MEB
- Hearings for social organizations, industry

Rijksvaccinatieprogramma

(11-2008,*mother HBsAg+, &population at risk)

Age	*Injection 1*	*Injection 2*
0 months	HepB*	
2	DaPTPHib (HepB*&)	Pn
3	DaPTPHib (HepB*&)	Pn
4	DaPTPHib (HepB*&)	Pn
11	DaPTPHib (HepB*&)	Pn
14	MenC	MMR
4 years	daPTP	
9	dTP	MMR
>65	Influenza (yearly)	

POTENTIAL FUTURE ADDITIONS TO NIP

- Hepatitis B, universal
- Intestinal rota virus infection
- Shingles
- Chickenpox
- Pertussis: older children and adults
- Influenza (children)
- Hepatitis A

- And (?): meningitis B, RSV, HSV, Pneumo (elderly), Helicobacter pylori, CMV, Chlamydia trachomatis, GAHS, GBHS, Neisseria gonorrhoeae, …, HIV?

NIP: DECISION-MAKING PROCESS

- Minister of Health takes final decision
- Based on advice from NIP Review Committee of Health Council

- Scientific evidence
- Surveillance data
- Ethical and legal aspects
- Communication science
- Organisational aspects

- Politics

The National Immunisation Programme should include a moderate range of vaccinations that are judged to be important, effective and safe

Health Council, 2001

PRIMARY OBJECTIVE OF THE NIP

- To protect the people and society of the Netherlands against serious infectious disease by means of vaccination

- Subtargets:

    1. To eradicate or eliminate a certain disease
    2. To reach and maintain herd immunity
    3. To protect as many individuals as possible

For each vaccination define goal and target group!

NEED FOR INDEPENDENT AND TRANSPARENT ASSESSMENT

- Is it a public health problem?
- Is vaccination a solution?
- What about side effects?
- Is vaccination acceptable to the public?
- Is it a good way of spending public money?
- Is it a priority?

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Ethical principles for collective immunisation programmes

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Abstract

Ethical issues arise in discussion of both the content and implementation of collective immunisation programmes. In this paper we propose and discuss seven principles that may guide reflection and debate in this controversial area. Whilst this paper is not intended to be a final and complete account of the relevant principles for collective immunisation programmes we hope that it can help stimulate more active discussion of these issues. Debate about these principles may help to make moral conflicts more explicit and open up the possibility of resolution. We argue that analysis and discussion of the ethical issues should be part of any justification of collective vaccination programmes.

Keywords: Ethics; Principles; Vaccinations

CRITERIA FOR INCLUSION OF A VACCINATION IN A PUBLIC VACCINATION PROGRAMME

Disease burden

1. The infectious disease is serious for individuals and has the potential to affect a large number of people

Effectiveness

2. Vaccination is effective for the prevention of disease or the reduction of symptoms
3. Adverse effects are not sufficient to substantially diminish the public health benefit

CRITERIA FOR INCLUSION OF A VACCINATION IN A PUBLIC VACCINATION PROGRAMME

Acceptability

4. The inconvenience or discomfort of vaccination is not disproportionate to the health benefit
5. The inconvenience or discomfort of **the vaccination programme as a whole** is not disproportionate to the health benefit

Efficiency

6. The cost-effectiveness ratio compares favourable with other means of prevention

Urgency/priority

7. Provision of vaccination serves a (potentially) urgent public health need

CRITERIA FOR INCLUSION OF A VACCINATION IN A PUBLIC PROGRAMME

- Not an easy exercise in filling out: to most of the criteria only qualified answers are possible
- Criteria supply a systematic framework to discuss all relevant aspects
- Independent advice by the Health Council
- Decision by the minister of health

THE NIP PUT TO THE TEST (2007)

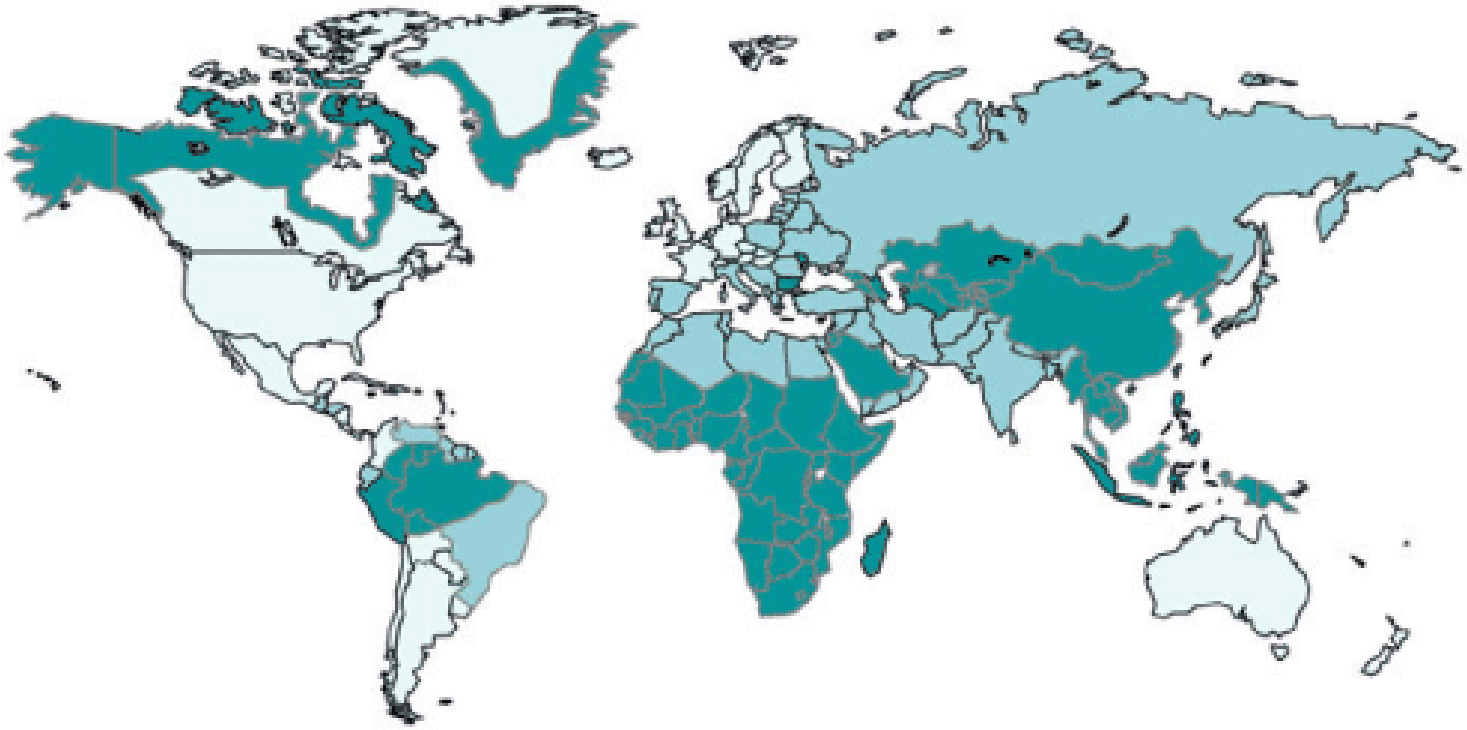
- All 15 current vaccinations meet the 7 criteria
- Of 23 candidate vaccinations no one received an unqualified positive recommendation, but 4 should be assessed more carefully:
  - Cervical cancer
  - Chickenpox/shingles
  - Intestinal rota virus infection
  - Universal vacccination against hepatitis B

The future of the National Immunisation Programme: towards a programme for all age groups

Health Council
of the Netherlands

2007/02E

Geographic Distribution of Chronic HBV Infection



level of endemicity	% of general population with chronic HBV infection	% of world population
high endemicity	greater than 8%	about 45%
intermediate endemicity	2% to 7%	about 43%
low endemicity	less than 2%	about 12%

HEPATITIS B VACCINATION IN THE NETHERLANDS

- Children born to carrier mothers (from 1989)
- Health care workers (intensified from 2001)
- Programmes targeted towards risk groups: homo/bisexual men, injecting drug users, promiscuous heterosexuals: outreaching, (rather) good coverage (intensified from 2002)
- Children who have at least one parent from a high or middle risk country (from 2003)

ASSESSMENT OF UNIVERSAL VACCINATION AGAINST HEPATITIS B, THE NETHERLANDS

- Hepatitis B serious, but uncommon in Northwestern Europe, mostly limited to specific risk groups (C1)
- Vaccines: safe and effective, some uncertainty about duration of protection (C2+C3)
- Vaccination not beneficial for most people, so only acceptable from public perspective, if targeted approaches do not reach risk groups sufficiently (C4+C5)
- CER (initial analyses): 25,000-57,000 EURO/l.y.g (C6)
- So far, targeted approaches were preferred (C7)

BUT:

- Transmission patterns in migrant population may mirror those in countries of high endemicity: include horizontal transmission (C1)
  - CEA with horizontal transmission: 9,500-26,500 EURO/l.y.g. (C6)
- Vaccine price has come down further (C6)
- Uptake of targeted programmes and impact on disease incidence?

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- Should the Netherlands introduce universal vaccination?

HEALTH COUNCIL ADVICE:

- Further improve vaccination of children born to HBsAg positive mothers

- Assess effectiveness of targeted programmes and compare with universal vaccination of infants or adolescents

  > advisory report December 2008

  > assessment depends on modelling very much!

THANK YOU FOR YOUR ATTENTION !

QUESTIONS / REMARKS ?

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