

# Viral Hepatitis Prevention Board

## **How to reach healthcare workers?**

**BARCELONA, SPAIN  
15-16 November 2012**

# Objectives

- To review recent data on vaccination coverage against hepatitis B and other vaccine-preventable diseases in health-care workers
- To review policies and recommendations for vaccination of health-care workers at national and global levels
- To evaluate how policies are implemented and organized
- To examine the acceptance of vaccination by health-care workers
- To review and learn from examples of best practices for increasing vaccination rates among health-care workers
- Also to share experience of similar problems between two diverse groups that had previously little interaction: VHPB and other vaccine-preventable disease (especially influenza) groups

# Context/current situation

- Huge, diverse population of HCWs globally, from students to surgeons, doormen/janitors to medical directors
- World Health Assembly has adopted resolutions on viral hepatitis and endorsed a global plan of action on workers' health, both of which cover HCWs and safe injection campaigns (and in 2011 the global vaccine action plan and World Immunization Week)
- World Day on occupation safety and health has spotlighted HCWs and vaccination weeks are valuable opportunities
- Value of vaccination as a pillar of public health recognized, in this context to protect HCWs, to protect their patients, and to protect their families, and to protect essential health-care services
- European Hepatitis Care Index launched by ELPA: tool for reviewing and comparing health care provision and policies, with need for programmes for finding infected HCWs

# Context/current situation - continued

- Guidelines and recommendations on vaccination have been issued by intergovernmental, international and national bodies
- PAHO taking the lead in the Region of the Americas, especially Latin American countries, in developing regional strategy on hepatitis B and implementing global plan of action on workers' health (including vaccinating HCWs against hepatitis B) with excellent results and starting intercontinental cooperation
- Surveys of vaccination policies have been done in the European region: a mosaic
- VENICE II project collects, shares and disseminates knowledge and best practice in field of vaccination, including hepatitis B, through a network of European country experts
- Decisions due by CDC/ACIP re vaccination policies and recommendations for HCWS in USA
- HCWs who have been vaccinated at birth or in early childhood are starting work, raising issues about management and immunity

# Context/current situation - continued

- Despite policies, recommendations and health promotion activities, vaccine uptake rates are low, often shockingly so
- Studies show that many HCWs (including pregnant HCWs) are not vaccinated against vaccine-preventable diseases, indeed with very low vaccination coverage rates in some countries and groups, and rates even declining with time in some countries; difference with age, socioeconomic group, between and within countries
- Studies also show worrying ignorance, negligence and misconceptions among HCWs; benefits of vaccination programmes forgotten (hundreds of thousands of deaths due to measles, diphtheria etc in 1900); anti-vaccine movements continue their misinformation campaigns; and media often publish scare stories (bad news sells newspapers) or wrong information
- Although numerous surveys of knowledge, attitudes and vaccine uptake are generally small, the results tend to be consistent
- Risk of exposure (bidirectional transmission between HCWs and patients), including common exposure to blood and almost daily occurrence of needlestick injuries, and outbreaks in health settings often have an HCW as the index patient

# Context/current situation - continued

- Role of occupational health physicians and departments - generally poorly perceived, but where employees are dynamic they can be seen as working to protect HCWs and able to motivate senior management
- Vaccination of HCWs is not just an issue for hepatitis B but for other vaccine-preventable diseases as well
- Outbreaks of vaccine-preventable diseases (e.g. measles, pertussis and varicella) in hospitals and HCWs (often the index case) - higher rates of susceptibility found in medical and paramedical students
- Serious nosocomial outbreaks not only have high morbidity and mortality but high costs of containment; data are not communicated or publicized
- Difficulty in identifying HCWs potentially exposed to risk
- Fully protecting staff through vaccination is cost-effective - especially during influenza epidemics for instance

# Context/current situation - continued

- Data collection: England has national system for surveillance of influenza vaccine uptake (feasible but not easy); European web-based tool for vaccine coverage (EVACO) being piloted and European project HProImmune (package on immunization status); in USA, now mandatory for hospitals to report influenza vaccine uptake to CDC
- Countries with monitoring systems had higher VCR than those with no such system
- Nevertheless good, comparable data are still lacking - little documentation about HCWs' immune status; few, if any, registries or databases
- Campaigns to increase vaccine uptake by HCWs generally not successful
- Setting targets and measurable objectives correlates with increased VCRs

# Lessons learnt

- Job mobility means all HCWs may be at risk of infection and transmission (although few firm data); need to avoid categorization of HCWs and to target broader groups
- Education and promotion of vaccination don't seem to be sufficient
- Core policy elements that contribute to increasing VCR (influenza) include monitoring VCR and personal letters or vouchers for free vaccination and, but combination with other elements benefits impact
- Best are comprehensive, multi-component approaches, tailored to different audiences (e.g. students, nurses, physicians)
- Involvement of and consultation with other parties such as unions and religious groups
- Identify leaders, role models, opinion-makers (an example was an older nurse whose outspokenness made her a thorn in the side of management)
- Need to improve access to, and convenience of, vaccination and to ensure that vaccine supply can meet demand

# Lessons learnt - continued

- High VCRs can be achieved (evidence from USA): some incentives and barriers identified, but innovative approaches needed
- Reasons for low uptake of vaccines by HCWs include:
  - Lack of commitment at senior management level and lack of feedback
  - Lack of awareness (from seriousness of diseases to existence of vaccines) and misconceptions
  - Fears - of needles and adverse effects of vaccines
  - Belief in invulnerability (it won't happen to me) – strong and unjustified feeling of immunity in familiar situations
  - Lack of awareness of immune status
  - Lack of time for, or inconvenience of, vaccination
  - Ignorance of vaccine (e.g. “it causes flu”)
  - Denial of risk to and consequences for patients

# Lessons learnt - continued

- Factors increasing uptake of vaccine by HCWs:
  - Commitment and leadership from senior management/directors
  - Older age
  - Personal advice and peer pressure
  - Reminder systems (including social media)
  - Education (including lectures for HCWs): perception of vaccine effectiveness and knowledge about recommendations
  - Perception of risk of infection and disease (having cared for severely ill patients and work in departments such as paediatrics)
  - Provision of vaccine free of charge
  - Easy access and availability of vaccine services (bring the vaccine to the HCW), including use of mobile vaccination teams
  - Incentives (including badges to indicate vaccine status and threat of job loss)
  - Earlier knowledge about vaccines (e.g. students) and earlier implementation of vaccination programmes in medical and paramedical curricula
  - Ownership of programmes (e.g. engagement of unions) and involvement of stakeholders in programme design
  - Support of unions and religious groups

# Matters for consideration or future action

- Terminology:
  - Need to use a term that embraces students as well as those who are paid – “health care professional”, “health care personnel” are no different from “health care worker” (with implications of having a contract and being paid)
  - Maybe replace “mandatory” by “conditional” to reflect appropriate vaccination being a condition of health care employment or education
- The vaccination debate now needs to address adult vaccination, including geriatric immunization
- Ongoing debate on how to reach HCWs; how to improve their perceptions so that they recognize being at risk (medicine is not a risk-free occupation) and to recognize the risk they pose to patients and family
- VCRs may become part of quality evaluation system for hospitals
- Analysis of determinants of uptake show that intuitive approaches such as better education and communication don't necessarily work and has shown the complexity of the issue
- Monitor effectiveness of campaigns – and recognize that patience is needed: it takes time to achieve success

# Matters for consideration or future action - continued

- Policy development covers a wide range, from ethics and patient safety to legal and economic
- Mandatory policies exist (e.g. France and USA) and evidence shows that they can work, but objections have been put forward including civil rights issues, ethics (including the issue of coercion vs voluntarism) and juridical considerations; declination statements can facilitate implementing such policies
- Surveys of attitudes have revealed surprising support for mandatory policies among HCWs
- The debate around mandatory policies and recommendations is ongoing, but ...
- despite many recommendations for vaccinations, their poor implementation is leading public health specialists to agree that a mandatory approach needs to be considered – this could include obligatory health checks (including immune status) for medical students
- Rank interventions of elements of campaigns and compile manual of best practices

# Possible future activities

- Strengthen the role and perception of occupational health (“not ‘real’ doctors” ...) and make their courses for students compulsory
- Increase number of occupational health physicians (feasibility in current economic times?) and implicate infection control teams in raising vaccine profiles and uptake – but use evidence to support their effectiveness
- Resolve logistical problems of vaccinating (especially on an annual basis), consider intranasal vaccination, and review possibilities such as use of pharmacists for vaccination
- Consider use of incentives to raise VCRs, ranging from termination of employment and restricting access to hospitals etc for non-vaccinated HCWs to removing privileges e.g. parking
- Provide vaccinated HCWs with certificates that can be kept easily and record information about act of vaccination
- Expand collection of data on vaccination status of HCWs (e.g. HProImmune project)
- Aim towards European standard for immunization requirements for HCWs

# Possible future activities - continued

- “Willingness to vaccinate begins with HCWs’ willingness to be vaccinated themselves”; pressure from patients and patients’ groups
- Start education and information at the beginning, i.e. with medical, nursing and other health care students: introduce courses and training about immunology, vaccines, patient safety etc at the earliest moment in their training and repeat before clinical experience
- Offer vaccination at medical and nursing and midwifery schools
- Expand survey of attitudes and knowledge of vaccination in medical students with social media
- Increase the use of communication through social media (Facebook - e.g.s in Barcelona and Antwerp), especially for the generation entering the health care profession
- Identify and share best practices (including examples of mandatory programmes that are feasible, successful and sustainable) and find innovative approaches
- Communicate often and accurately and on every vaccine

# Possible future activities - continued

- Provide clear, accurate, authoritative information for HCWs (as well as for the general public and health providers generally) - a task for all, from patients' organizations to health ministries
- Take a holistic/comprehensive rather than disease-specific approach
- Work towards ensuring that immunization policies exist in health entities and put those policies into practice
- Foster leadership
- Provide a solid evidence base to support any vaccination policy
- National action plans need to be written (by governments and other agencies such as patient organizations)
- Empower patients and HCWs through involvement in design and implementation of national policies