Introduction to the Vaccine Safety Net

The World Health Organization (WHO) officially launched the Vaccine Safety Net (VSN) in August 2004 in response to the growing number of websites providing misinformation regarding vaccine safety. The main objective of the VSN is to improve global dissemination of web-based vaccine safety information that adheres to good information practices.

Through the VSN, WHO identifies websites that provide information on vaccine safety and evaluates them against good information practices criteria established by the Global Advisory Committee on Vaccine Safety (GACVS). WHO invites institutions whose websites ultimately meet the criteria to participate in the VSN; they are added to the WHO list of vaccine safety websites meeting good information practices criteria. The VSN formally re-evaluates each website every two years to ensure they continue to meet GACVS criteria.

The VSN has grown since it was established a decade ago and now hosts 38 members with websites in 10 languages. Its diverse membership includes Ministries of Health, academic institutions, government agencies, professional associations and non-governmental organizations.

VSN’s global reach extends to four of the six WHO regions.

- European Region
- Region of the Americas
- Southeast-Asia Region
- Western Pacific Region

As a result of their combined efforts, the VSN and its membership help to ensure that key stakeholders, including parents and other caregivers, public health authorities, health professionals, and the media have access to balanced evidence-based vaccine safety information via the internet. Despite progress in this area, misinformation continues to proliferate on the internet. Consequently, WHO is working on identifying new ways to increase VSN’s impact and expand its global reach.

GACVS good information criteria for vaccine safety websites fall into four categories:

- essential criteria (with respect to credibility);
- important criteria (with respect to content);
- practical criteria (with respect to accessibility); and
- desired criteria (with respect to design).


A Note from the VSN Coordinator

Welcome to the first edition of the Vaccine Safety Net Newsletter. This publication aims to disseminate news and information regarding the VSN, foster communication and synergy among VSN members, and promote good information practices for websites providing information on vaccine safety.

In order to avoid overlap and complement existing WHO serial publications on vaccines and immunization, the Newsletter will focus exclusively on information related to vaccine safety and will address the following topics:

- VSN policies and procedures;
- compliance with GACVS criteria for good information practices; and
- information resources for websites providing information on vaccine safety
- GACVS information and statements.

The newsletter will also include news items and articles submitted by VSN members, covering topics such as:

- recent or upcoming conferences or events with a robust vaccine safety component;
- information campaigns or initiatives with a vaccine safety focus or component; and
- innovative web-based technologies and platforms that facilitate dissemination of vaccine safety information.

Although the publication addresses the specific information needs of VSN members, we expect that it will also serve as a resource for a broader group of stakeholders including interested members of the international vaccine community as well as staff from WHO Headquarters, Regional Offices and Country Offices.

The newsletter will be published in English, on a quarterly basis. WHO would appreciate assistance from the VSN community to translate it into additional languages. As this is a pilot edition, we anticipate that the structure and content will be refined over time, based on your feedback.

I hope you enjoy the Vaccine Safety Net Newsletter; I look forward to receiving your comments and suggestions.

Isabelle Sahinovic
Vaccine Safety Net Coordinator

Please send comments and suggestions to gvsi@who.int
Welcome to new members

Thus far in 2014, two institutions have successfully completed the VSN evaluation process: Programa Nacional de Control de Enfermedades Inmunoprevenibles, Ministerio de Salud de la Nación, Argentina (ProNaCEI) is the official website of Argentina’s National Programme for Control of Vaccine Preventable Diseases; and The History of Vaccines/La Historia de las Vacunas is an educational website created by The College of Physicians of Philadelphia, one of the oldest medical societies in the United States. WHO congratulates and extends a warm welcome to the two new members.

Programa Nacional de Control de Enfermedades Inmunoprevenibles, Ministerio de Salud de la Nación, Argentina (ProNaCEI)

Language: Spanish
VSN evaluation completed: April 2014
Audience: Members of the public, health care personnel and the media.

Description: This is the official website of Argentina’s National Programme for Control of Vaccine-Preventable Diseases. The virtual platform includes a number of important resources including an interactive version of the national vaccine schedule; print, radio and audiovisual materials; and information for health care professionals including technical guidelines, training materials and recommendations from both national and external advisory groups. The website also contains clear and concise information for the general public including basic information about vaccines, frequently asked questions (FAQs), vaccines for travelers, and vaccines for different age groups.

URL: http://www.msal.gov.ar/pronacei/

The History of Vaccines / La Historia de las Vacunas

Languages: English and Spanish
VSN evaluation completed: April 2014 (Spanish version) and June 2014 (English version)
Audience: Parents making decisions about vaccination for their children, secondary school and post-secondary students, and members of the general public who are interested in vaccines and their history.

Description: The History of Vaccines provides a living changing chronicle of the compelling history of vaccination, from early variolation practices to cutting edge approaches to novel vaccines and vaccine delivery. The site aims to increase public knowledge and understanding of the ways in which vaccines work, how they have been developed, and the role they have played in the improvement of human health. The site includes timelines, articles, activities, and a blog.

URL (English): http://www.historyofvaccines.org/
URL (Spanish): http://www.historyofvaccines.org/es/content

Karie Youngdahl
History of Vaccines Director
VSN news

VSN webpage now provides information in 10 languages

In order to facilitate access for users across multiple languages, WHO recently updated the VSN webpage to include information about each participating website in its original language. Prior to this update the content was only available in English. WHO would like to thank the VSN members who provided the translations; this update would not have been possible without your kind cooperation.

Website descriptions are now provided in 10 languages.

- Catalan
- Dutch
- English
- French
- German
- Hungarian
- Italian
- Polish
- Spanish
- Swedish

VSN is expanding and needs your help

WHO is currently focusing on increasing the number of languages represented in the VSN to provide access to current, accurate evidence-based vaccine safety information for more of the global population.

Due to resource limitations, the VSN team relies on the assistance of a network of expert volunteers to carry out this important work. At present, the VSN team is working closely with colleagues in India and China who are helping to identify and review promising websites, and we would like to grow even more.

Assistance is needed in several areas.

- Translation of your website into one or more additional languages (limited to current VSN member websites).
- Identification and/or review of candidate websites for the VSN (requires written and spoken fluency in English as well as an additional language, a medical background, and excellent knowledge of vaccine safety issues).
- Translation services to assist the VSN team in conducting outreach to under-represented populations (requires written and spoken fluency in English as well as an additional language, and a medical background).

If you are interested in helping to broaden the reach of the VSN, please contact the VSN Coordinator at gysi@who.int

VSN web analytics

VSN was the most visited page on the WHO Global Vaccine Safety website for the period 1 January-25 June 2014, thanks in large part to referrals from VSN members. Six of the top 10 websites that referred visitors were VSN members.

Top 6 VSN members that referred visitors to the WHO Global Vaccine Safety website, ranked by the number of visitors referred.

1. Robert Koch Institut
2. Comité Asesor de Vacunas, Asociación Española de Pediatría
3. American Academy of Pediatrics
4. Public Health England
5. U.S. Centers for Disease Control and Prevention, National Center for Immunization and Respiratory Diseases
6. Programa Nacional de Control de Enfermedades Inmunoprevenibles, Ministerio de Salud de la Nación, Argentina (ProNaCEI)

Countries with the most visits to the VSN page, ranked by number of visits.

VSN members are encouraged to link each other’s websites as well as to the VSN webpage, to enhance credibility and increase visibility.

Please link to the VSN webpage using this URL:

VSN member digest

The VSN member digest contains submissions by VSN members. The authors alone are responsible for the views expressed in this section of the newsletter, and they do not necessarily represent the views or policies of the World Health Organization.

VSN members are invited to contribute news items and articles for inclusion in the December 2014 issue of the newsletter.

Argentina’s vaccine safety surveillance system

Contributed by: Maria Eugenia Perez Carrega, Programa Nacional de Control de Enfermedades Inmunoprevenibles, Ministerio de Salud de la Nación, Argentina (ProNaCEI) and Carla Vizzotti, Programa Nacional de Control de Enfermedades Inmunoprevenibles, Ministerio de Salud de la Nación, Argentina (ProNaCEI)

Beginning in 2015, Argentina’s National Vaccination Calendar (CNV) will be composed of 19 free and required vaccines whose safety profile is analyzed through the system of passive surveillance of possible events allegedly attributable to vaccination or immunization (ESAVI).

The National Program for Control of Vaccine Preventable Diseases (ProNaCEI) and the national regulatory agency (Drug, Food, and Technology Administration —ANMAT), jointly receive ESAVI notifications from all 24 of the country’s jurisdictions in order to consolidate the information, and to provide support for timely high quality investigation at the provincial level.

The National Commission of Vaccine Safety (CoNaSeVa), established under a ministerial resolution in 2013, is composed of representatives from national scientific societies, ANMAT, ProNaCEI, and a representative from the WHO/Pan American Health Organization’s Argentina Office, who participates as an independent entity from the National Ministry of Health. The main role of the commission is to assist the national authorities in giving closure and final classification to the cases.

The national surveillance system underwent a marked awareness in 2009 following the influenza A H1N1 pandemic and the subsequent incorporation of influenza vaccine to the CNV for risk groups. This enabled evaluation of the safety profile of not only the influenza vaccine, but all CNV vaccines aimed at priority populations, such as pregnant women.

Constant training of health professionals, proper mechanisms at different levels of programs and the regulatory body, as well as proper communication and timely dissemination of consolidated information, are fundamental elements for the population to continue trusting the CNV vaccines, and for preventing diseases that have a high cost on society and public health.

ImmunizeCA: A new one-of-a-kind mobile app puts immunization information in the hands of Canadians

Contributed by: Lucie Marisa Bucci, Senior Manager, Immunize Canada, Canadian Public Health Association and Chandni Sondagar, Project Officer, Immunize Canada, Canadian Public Health Association

ImmunizeCA is a new, free bilingual app created to help Canadians and their families keep track of their immunizations. Funded by the Public Health Agency of Canada and developed through a collaboration between the Canadian Public Health Association, Immunize Canada, and the Ottawa Hospital Research Institute, ImmunizeCA provides round the clock access to jurisdiction-specific vaccination schedules.
\"It also offers reliable, expert-approved information about vaccinations for children, adults and travellers, and useful tools such as appointment reminders and local outbreak notifications – ideal for people constantly on the go,” says Susan Bowles, Chair of Immunize Canada.

Incorporated into the app are evidence-based resources that address questions and concerns about the safety of vaccines administered in Canada. Access to frequently asked questions, information about vaccine safety standards in Canada, and links to credible resources ensure users are receiving the most up to date information to guide their decisions. The aim is to distinguish between evidence-based immunization information and the vast misinformation found on the internet.

The benefits of immunization are substantial, and the ImmunizeCA app is a tool that gives Canadians the confidence they need to help make the best informed decisions about their health and vaccine safety. ImmunizeCA is available for iPhone, Android and Blackberry operating systems, and is proving to be a popular new tool for keeping Canadians informed and on track with their immunizations.

For more information visit immunize.ca/en/app.aspx

Human papillomavirus, vaccine safety, and Spain

**Contributed by:** Maria José Álvarez Pasquín, Director, Vacunas.org

Spain authorized the inclusion of human papillomavirus (HPV) vaccines in their immunization schedule on 24 August 2007. At that time a large group of health professionals in Spain called for a moratorium on the introduction of HPV vaccines claiming to have serious doubts about their efficacy and the huge cost to the public health system.

On 4 February and 6 February 2009, two girls were admitted to the same hospital in Valencia, both in critical condition after HPV vaccine administration, and a Majorcan girl had the same symptoms as those in Valencia. In response to this situation, the National Health Authorities of Spain issued some statements with reassuring messages regarding HPV vaccine safety. In contrast, some articles have been written by health experts who believe that HPV vaccines should be withdrawn from the Spanish calendar of vaccines. Now there is a growing problem concerning vaccine trust, which affects not only lay people but health care workers as well.

The Spanish Association of Vaccinology is giving answers in the Ask the Expert section of their website, and participating in debates in the media when required. They will give additional information based on evidence in the upcoming Symposium of the Spanish Association for Vaccinology, which will take place 13-14 November 2014 in Murcia, Spain.

Information regarding the symposium can be accessed here:

- [http://www.vacunas.org/es/info-profesionales/congresos/118672-vii-symposium-de-la-asociacion-espanola-de-vacunologia](http://www.vacunas.org/es/info-profesionales/congresos/118672-vii-symposium-de-la-asociacion-espanola-de-vacunologia)

**Additional resources:**
Vaccines on the Go: What You Should Know

Contributed: Charlotte A. Moser, Assistant Director, Vaccine Education Center at The Children’s Hospital of Philadelphia

In the information age we currently inhabit, it’s no longer enough just to create useful resources. Those resources must be available whenever the audience wishes to consume them.

To this end, the Vaccine Education Center (VEC) at The Children’s Hospital of Philadelphia has taken its comprehensive information on vaccines, their safety, and the diseases they prevent, and put it right into the hands of parents, physicians, and others with an award-winning mobile app: Vaccines on the Go: What You Should Know.

The app provides parents with reliable information on the science, safety and importance of vaccines and the diseases they prevent while offering unique and valuable resources such as novel graphics, storage for questions to ask the doctor, games that familiarize and entertain during downtime, and links to a variety of VEC videos and printed materials. As such, Vaccines on the Go serves as a powerful tool that healthcare professionals can offer parents not only to provide trusted information during an appointment, but also to offer an easy way to get answers to questions that arise between visits.

Vaccines on the Go is just one of the ways that the VEC supports its central mission of delivering accurate, up to date information about vaccines to both parents and healthcare professionals. Through a host of communications vehicles, the VEC dispels some of the common misconceptions and misinformation surrounding vaccine safety while communicating scientific facts related to how vaccines are made and work; why they are safe and necessary; and when and how they should be given.

The app has earned awards and nominations both for its design and content and has garnered more than 20,000 global downloads.

For more information, or to download the app on an Apple or Android device, visit vaccine.chop.edu/mobileapp

AusVaxSafety

Contributed by: Donna Armstrong, Editing and Publications Officer, National Centre for Immunisation Research & Surveillance and Kristine Macartney, Deputy Director, Government Programs, National Centre for Immunisation Research & Surveillance

AusVaxSafety is an enhanced surveillance system to monitor adverse events following immunization with influenza vaccine in children under 5 years of age. It is led by the National Centre for Immunisation Research and Surveillance (NCIRS) and is funded by the Australian Government Department of Health.

In 2010, a significant vaccine safety issue occurred in Australia with the suspension of use of influenza vaccines in children under 5 years of age due to an increased occurrence of fever and febrile seizures following vaccination. The increased risk was found to be associated with only one vaccine brand.

Although this vaccine is no longer registered for use in children under 5, surveys of parental confidence indicate concern regarding the safety of influenza vaccines in children, and there has been a decline in influenza vaccine uptake in young children.

Australia has since developed a network of different systems of enhanced post-marketing surveillance of adverse events in children following influenza vaccination. AusVaxSafety commenced in March 2014 and brings together information collected via these systems.

Under AusVaxSafety parents/caregivers of children who have received influenza vaccine are sent an SMS message or email three days after their child’s vaccination, soliciting information on how their child felt after vaccination. Information is provided either by reply SMS or web based survey and each week data from all parent/caregiver reports are combined and analysed. This data pro-
vides important and reassuring information on the safety of licensed southern hemisphere formulations of influenza vaccine in young children. Results were presented at the recent Public Health Association of Australia National Immunisation Conference: <http://www.phaa.net.au/14thNationalImmunisationConference.php>

Data on active surveillance of the safety of influenza vaccination of pregnant women and health care workers conducted in Western Australia is also available via the AusVaxSafety page of the NCIRS website: <http://ncirs.edu.au/surveillance/ausvaxsafety/index.php>

Useful tools and resources

**Global Vaccine Safety Initiative Bulletin**

The Global Vaccine Safety Initiative (GVSI) Bulletin provides updates on the implementation of the GVSI, a forum aiming to synergize the knowledge and expertise of vaccine safety stakeholders to help ensure the safety of vaccinations through the implementation of the three strategic goals of the Global Vaccine Safety Blueprint which are summarized in a products portfolio.

To optimize collaborative activities, the GVSI Portfolio aims to provide all stakeholders of the Initiative with a practical overview of activities identified. Components of the portfolio and activities of GVSI stakeholders that match the eight objectives of the Global Vaccine Safety Blueprint and profiles of stakeholders are presented to increase visibility of actions and support synergies.

Information on the GVSI can be accessed at: http://www.who.int/vaccine_safety/initiative/en/

The Global Vaccine Safety Blueprint: http://extranet.who.int/iris/restricted/bitstream/10665/70919/1/WHO_IVB_12.07_eng.pdf?ua=1


**WHO e-learning course on vaccine safety basics**

The WHO Global Vaccine Safety group has developed an online e-learning course on vaccine safety basics to help understand the origin and nature of adverse events, the importance of pharmacovigilance, and risk and crisis communication.

The course covers the main elements of vaccine safety (definitions, introduction of vaccines and adverse event following immunization (AEFI) surveillance, vaccine safety stakeholders and communication). It includes modern learning tools and assessments, advanced search functionality, navigation aids, and a glossary.

The course, available in English and French, is designed to serve a broad range of individuals involved in vaccine safety, including vaccinating health professionals, national regulatory staff and immunization staff. This is an especially valuable resource for existing or prospective VSN members who wish to update vaccine safety information on their websites, or add additional information.

VSN members are encouraged to add this course to their list of online resources. Broadly distributing the course will help build a common core knowledge base of vaccine safety expertise, and improve vaccine safety practices in countries in a cost effective manner.

For users that do not have constant online access, the course is downloadable in both CD-ROM and PDF formats.

For additional information and to access the course materials, please visit: http://vaccine-safety-training.org/ (English) and http://fr.vaccine-safety-training.org/ (French).
Spotlight on the Immunisation Advisory Centre

IMAC is a nationwide organization based at the School of Population Health at The University of Auckland. Primarily funded by the New Zealand Ministry of Health, IMAC provides a variety of products and services for consumers, health professionals, government agencies and the media to improve the understanding and quality of immunization in New Zealand.

VSN commends IMAC on the website’s ease of navigation; attractive and uncluttered design; and breadth and depth of information, which is presented in easy to understand terms. A notable component of the IMAC website is a section titled Making an informed decision which explains to parents and caregivers the importance of making an informed choice regarding their child’s immunizations. Making an informed decision encourages parents and caregivers to seek out resources that provide relevant, current, and evidence-based information on vaccines and vaccine-preventable diseases. This section of the website can be accessed at: http://www.immune.org.nz/making-informed-decision

During a recent question and answer session with the VSN team, IMAC communications manager, Theo Brandt, provided insight into IMAC’s design successes, plans for the future, and visitor profile.

Describe one of your site’s design success.

We strongly believe that the site should not make too many distinctions between public and health professionals, as this leads to not only duplicating information, but can create an appearance of ‘hidden’ information. However, as an organization we find that much of our work relates to educating health professionals, so the website was designed to allow both members of the public and health professionals to access information at a level of detail they needed. This led to one of our small design successes: providing one page for a certain disease or vaccine, and then layering under that depending upon the user’s needs.

How many users access your site each year?

Our visitor numbers vary throughout the year, but on average we attract 1000-1200 users on a week day and 450 users a day on the weekends. May has proven to be our busiest month, with just over 24 000 visitors in 2013 and 23 000 this year. The majority of our users reside in New Zealand (64%). Interestingly, 8% of our users reside in the United States, with 4% each in the United Kingdom, India and Australia.

What is the most visited section of your website?

Approximately 20% of visitors go straight to our section on vaccines, and can get very complete information on any vaccine provided for use in New Zealand (not including travel vaccines).

What are the most frequently asked questions?

IMAC provides a free telephone service for all public and health professional queries. As well as these live phone calls, the team also manages email queries from a number of sources, including our own site. The queries in the last month have focused upon measles, as New Zealand is currently in the middle of another outbreak. People often want to know about the safety of the MMR vaccine, and whether they are able to have their children vaccinated early, as the first dose is normally provided at 15 months. We also received many enquiries from new migrants to New Zealand, or their doctors, to work out the correct vaccines to catch up upon arrival in their new home.

Describe an aspect of the website of which you are particularly proud.

The National Immunization Schedule provides the funded childhood vaccinations as well as later booster doses and influenza vaccination. The schedule changed from 1 July 2014, bringing in a universal rotavirus vaccine as well as changes in pneumococcal vaccines and other details. Because we are a small and relatively nimble organization, this is where we can make a real difference for health professionals needing information on such changes. We were able to provide a one stop shop for all the common questions and resources that health professionals need to access.

In today’s social media heavy world we intend to simplify the front entrance and focus on guiding people more effectively to where they want to go. We are also keen to integrate more short form video, as time and budget allows.

Describe your experience as a member of the VSN.

Being part of the VSN has meant that we feel supported and confident that our site provides information in a way that is both honest and understandable.

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Theo Brandt
IMAC Communications Manager

Karin Batty
IMAC Technical Writer