Addressing Communication Challenges During an Infectious Disease Emergency Response:

State Experiences from the H1N1 Pandemic

astho™

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Introduction

Communication overload can be a major challenge during an emergency response as large amounts of information are directed at federal, state, and local health agencies from multiple sources. Risk communication principles dictate that one must be first, be right, and be credible, but it may be difficult to balance these principles in a time when information is rapidly changing. During the 2009 H1N1 pandemic, data and guidance changed quickly. States found it difficult to keep up with and take action on all of the information they were receiving. After the pandemic, they were able to reflect on what worked well during the response and what areas could be improved.

This document draws from state experiences during the H1N1 pandemic response and discusses potential ways to address communication challenges that state health agencies (SHAs) may face when responding to an infectious disease outbreak, including tools available for more effective and efficient communications. These suggestions were compiled from evaluations of communications during the H1N1 pandemic, including three state after-action reports (New Jersey, Kentucky, and Iowa) funded by ASTHO.

Federal, state, and local agencies need to achieve and maintain consistent communications practices and messaging during emergency responses, both internally and with stakeholders. Successful emergency responses can be achieved by using routine approaches plugged into emergency structures. It is essential to create a robust communications infrastructure before the system is tried by an emergency situation. SHAs can use the recommendations and tools provided in this document to inform and improve their communications infrastructure and plans.

During emergency situations, SHAs have an increased need for constant communications with other agencies, stakeholders and community groups, the media, and the public. Delays or changes in communication at one level may have a "ripple effect" and hinder communication efforts more broadly. Transparency at all levels will help agencies collaborate and plan their response efforts. Consistent and timely federal messaging can enhance state and local efforts to communicate about guidance and response activities. In addition, coordinated messages can prevent "information overload," conflicting recommendations, or duplicated efforts. Throughout this document, SHAs can find suggestions for coordinated communications with all audiences, including specific suggestions on how to manage the high volume of communications and rapidly changing information during a public health response.

ASTHO has published additional documents providing resources and guidance around pandemic influenza, including:

- Assessing Policy Barriers to Effective Public Health Response in the H1N1 Influenza Pandemic.
- At-Risk Populations and Pandemic Influenza: Planning Guidance for State, Territorial, Tribal, and Local Health Departments.

Please visit www.astho.org for more information.

Federal and State Communications

Coordinating and streamlining messages from the national level to local communities helps minimize conflicting information and recommendations. During H1N1, some states felt that coordination and communication among the federal partners could be improved. For example, utilizing a national joint information center during national public health emergencies could improve real-time situational awareness and consistent messaging. Transparency is important to coordinate the response so that agencies know what others are working on and when they can expect information. SHAs can assist in coordinating messages by reviewing and consolidating federal guidance and releasing it to partners with more targeted state and local communications. State agencies should clearly designate authorities to respond to guidance issues or provide recommendations.

During H1N1 it was difficult to determine what information was most recent or how new guidance was different from previous versions. States desired more clarity on guidance and recommendations while keeping communications targeted and manageable. In an emergency response, communications should be prioritized and organized at all levels, ideally with a version number or date stamp on each document and a designated contact to answer questions. State agencies can summarize and consolidate federal guidance for state and local partners; organizations such as the National Public Health Information Coalition (NPHIC) and ASTHO can help in these endeavors. Communications can be released with a one-page summary or bullets to help manage volume. Agencies should communicate with each other often. These recommendations will help to ensure that communications are timely, accurate, and useful during the pandemic response.

Agencies should take advantage of various channels in the public health communications infrastructure to ensure they reach all relevant audiences. Agencies can communicate using a variety of channels, including conference calls, emails, websites, RSS feeds, and personal contacts. However, during a pandemic it is important to coordinate communications and be mindful of volume.

MANAGING NUMEROUS OR CHANGING COMMUNICATION ISSUES

- States suggested specific steps to prevent communication overload and make the volume of communications more manageable. These include: prioritizing key messages, with the focus on current issues, and including additional background in an attached document or web link; posting a version number on every guidance document including date and time stamping information; and summarizing revisions to communications and guidance in bullets, clearly outlining changes made.
- CDC's Health Alert Network (HAN) can be used as a central point for posting guidance documents, situational updates, and information on conference calls. HAN can also be used to send and receive alerts. However, it is important to remember that not everyone has access to HAN.

FEDERAL COMMUNICATIONS WITH STATE AND LOCAL AGENCIES

- The states desired real-time contacts at CDC for questions and follow-up. Regularly scheduled phone calls are helpful to connect CDC staff with state and local agencies, but are not helpful when SHAs have

time-sensitive questions. States reported that contacting a specific CDC official was often difficult and that it would be useful to have designated CDC staff to respond to time-sensitive issues.

- To maximize the value of conference calls, the call coordinator could provide a schedule of conference calls and, when possible, keep conference call times and days consistent; ensure that consistent information is provided on calls to different audiences; and make call notes available to all invitees by posting these notes on a password-protected website.

STATE COMMUNICATION CAPACITY AND COORDINATION

- SHAs can consolidate federal guidance to ensure state and local partners are not overwhelmed by federal communications and that state and local communications are also being received. Specifically, this could be in the form of an executive summary of information from a single designated source at the state health department. State agencies can receive accessible and useful information from non-governmental national organizations as well. These sources often summarize CDC key messages and provide information to states about what others are doing. Two helpful nongovernmental resources are NPHIC's and the Center for Infectious Disease Research and Policy's (CIDRAP) websites. The NPHIC website offers a wealth of pandemic flu resources and the CIDRAP website offers practical communication guidance.
- SHAs should clearly designate state or other authorities to provide recommendations. Communication materials should acknowledge what recommendations or practices may conflict with national or regional practices and provide information on the reasoning behind such decisions. SHAs should develop efficient methods of communication between public health partners, public information officers (PIOs) and, when appropriate, the public. Public health personnel should clarify roles and responsibilities to avoid communication breakdown. If possible, PIOs should submit up-to-date information on a regular basis rather than only on an "as requested" basis. CDC resources that may assist in developing state communications include the Crisis and Emergency Risk Communication training program and the State, Tribal, Local, and Territorial Public Health Professionals Gateway.

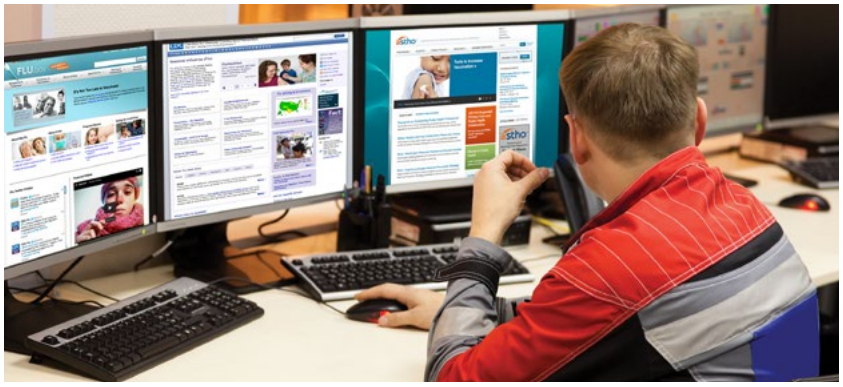
Communication with Partners and External Stakeholders

For efficient communications, federal and state agencies should utilize a coordinated approach to distribute outreach materials to various state and national stakeholder groups. Coordinated messaging and public information campaigns can provide timely and accurate information to stakeholders and address misinformation and rumors. SHAs can target messaging to specific audiences in their jurisdictions, including healthcare providers, minority communities, and unique populations.

PARTNER EXAMPLE

*The New York City Office of Emergency Management instituted the **Partners in Preparedness** program, which is designed to help organizations in the New York City metro area better prepare their employees, services, and facilities and develop a trusted communication system before disaster strikes. To become a partner and obtain a Partners in Preparedness seal, an organization must complete five preparedness activities and report its actions through a partner's survey.*

By identifying things that worked well during the response or things they wished had been done differently, the H1N1 communications after-action reports brought to light specific activities that health agencies can



undertake to better communicate with external stakeholders. For example, CDC released "A Year in Review" after the H1N1 epidemic. It includes summary documents and important lessons learned. The suggestions below can be used to inform communications either during a public health emergency or strengthen communications networks during periods of normal operation.

COMMUNICATION WITH PARTNER ORGANIZATIONS

- To avoid duplication of effort and the potential to confuse messaging, public health partners should share plans for distributing materials to stakeholders as soon as possible, ideally before they are distributed. If advance notice is not feasible, partners should communicate as they are beginning distribution. This way, partners can be involved in planning where the materials are being targeted, suggest additional distribution channels, and avoid the potential for inconsistent messaging.
- SHAs can conduct regular conference calls with local public health agencies, hospitals, state agency points of contact, and individual counties. Operator-assisted conference calls are recommended. Webinars are another possible communication channel.

COMMUNICATION WITH HEALTHCARE PROVIDERS

State and local health agencies can:

- Identify or develop contact lists for individual providers and educate agency personnel regarding proper procedures and recommendations for delivering information to area healthcare providers. Clearly indicate health agency points-of-contact for all communications.
- Increase communication with local providers and notify healthcare provider offices when communications are sent out (e.g., messages sent home with children through a school system, which may increase visits to local providers).
- Broaden distribution of communications to include association groups that represent other (non-physician/non-clinical) healthcare providers.
- Target providers who treat populations that may be at greater risk for severe consequences if they become ill.
- Prepare FAQs for office staff who answer the phones.
- Provide guidance in a format that is easy to understand and implement. Distill state guidance/changes to one page of bullet points that are sent with entire guidance document. Clarifying how the latest iteration differs from previous versions is helpful because it further highlights and reinforces the latest and best messages.

- Provide guidance to address questions and concerns specific to healthcare workers (e.g., inconsistencies between messages to the public and messages to healthcare workers, work attendance, or related to protecting their own families).
- CDC provides Seasonal Influenza Vaccination Resources for Health Professionals, which offers a host of information for healthcare providers. CDC also has information on Preventing Seasonal Flu with Vaccination that highlights vaccine safety and product information.

COMMUNICATION WITH MINORITY COMMUNITIES AND UNIQUE POPULATIONS

State and local health agencies can:

- Follow well-established and proven risk communication strategies prior to launching public information and health education outreach campaigns focused on minority communities and unique populations.
- Develop communications policies that are culturally competent and address barriers to access during an emergency. These policies should reflect input from the target populations.
- Increase emphasis on alternative media, both through news articles and advertising, such as media with primarily minority audiences and media aimed at rural areas.
- Create greater engagement within minority communities by delivering information through ethnic, religious, social service, community, or neighborhood organizations (e.g., churches, barbershops, and beauty shops).
- Provide information in languages in addition to English and Spanish. Distribute general disaster preparedness materials to increase the state's credibility among skeptical populations.
- Generate guidelines about undocumented or migrant workers. Messaging should reassure them that residency status (1) will not limit or hinder their access to medical care; and (2) will not result in prosecution.
- Provide improved messaging to geriatric populations about changes in regular medical appointments due to provider shortages.
- Develop a centralized location to house translated documents and share with appropriate stakeholders.

AT-RISK POPULATIONS

Communicating effectively with at-risk populations before, during, and after a pandemic is integral to minimizing illness, disability, and death. At-risk populations are those most at risk of severe consequences from the pandemic, including societal, economic, and health-related effects. Effective communication with at-risk audiences requires additional steps because of each population's unique needs. ASTHO has released "At-Risk Populations and Pandemic Influenza: Planning Guidance for State, Territorial, Tribal, and Local Health Departments," which provides information on communicating with at-risk populations. These populations may require different messages or channels of communication, which should be identified and planned in advance.

COMMUNICATION CHANNELS

Channels for communications with stakeholders include: local, regional, and state public health publications (providing area-specific information); websites (including the CDC's or SHA's websites); meetings organized locally by the health department; fax blasts; CDC email updates; hotlines; and media services (via USPS as free government service). Radio, television, public service announcements (PSAs), billboards, and local newspapers are effective means of communicating as long as the information provided is accurate and reliable (see Archived H1N1 PSAs).

FLU-RELATED WEBSITES

CDC Flu News & Spotlights

Flu.gov

vaccines.gov/diseases/flu/

Websites provide a channel for states to provide a repository of information to various stakeholder audiences. SHAs can post links to current guidance and recommendations for prevention and response. In addition, the website can display different sections or tabs for different audiences, including the public, healthcare providers, public health professionals, media, schools and child care facilities, and workplaces. Each section can include relevant information on current events, guidance, and recommendations. Local health departments can link to this website as a central source of accurate information. In addition, SHAs can allow stakeholders to register on the state's website for automatic information alerts. CDC's archived H1N1 Flu Clinical and Public Health Guidance website is a strong example of providing diverse stakeholder resources on a single web page.

Media and Ad Campaigns

Media outreach and use is an important element of an emergency response. One state described the H1N1 outbreak as a "media outbreak." Initially, many states' communication messages were responses to media inquiries. If possible, being proactive instead of reactive allows greater control of the message and establishes credibility by demonstrating transparency. In addition to responding to inquiries from national, state, and local media, SHAs need to be aware of what information is circulating. Agencies can take advantage of new communication platforms, such as social media, to gauge public perception or disseminate information. SHAs reported they could use additional strategies and tools for media outreach, ad campaigns, and messaging.

News media reporting is an effective way to educate the public as long as the information reported is accurate and reliable. However, inaccurate information or media sensationalism can add to public confusion or trigger panic. It is important that media messages are consistent to ensure public trust. State and local agencies can develop contacts with local media before an emergency event so that these relationships are already established when an event occurs. Agencies can work together to ensure that reported information is accurate and consistent.

In addition, agency messaging and advertising campaigns are important elements in communication strategies. Agencies should communicate with each other and partner so that messaging and materials are coordinated from a national to local level to avoid duplication of effort or conflicting messages. Early planning and collaboration can ensure that federal and state messaging is consistent and timely.

MEDIA OUTREACH

- SHAs should enhance partnerships with local media and communications outlets and establish media contacts. During the response, health agencies and media outlets should work together to ensure that messages are consistent to maintain public trust and cooperation. Agencies can share media releases and post them to their websites as information becomes available.
- Health agencies and the media should work to protect patient confidential information and privacy.

SOCIAL/NEW MEDIA ISSUES

- States commented that it would be helpful if CDC endorsed/encouraged the state and local agencies' use of social media and helped them overcome security or IT barriers. Social media is generally an inexpensive communications medium that allows health departments to quickly disseminate their messages to potentially large audiences.
- States might draft a statewide social media policy and provide it to all state agencies for implementation. SHAs can also provide policies and templates to local health departments, which can be used to address current pandemic flu needs and as references for future events. Additionally, the state may want to develop guidance on how to use social media so that stakeholders do not have to try to learn while in the midst of an emergency.
- CDC has a social media web page and toolkit designed to help health communications professionals leverage social media. The toolkit provides guidance to help get started using social media—from developing governance to determining which channels best meet communication objectives to creating a social media strategy.
- During a public health emergency, the state may want to share sample tweets with stakeholders to ensure that messaging remains consistent from the community's trusted health leaders. This also eases the work burden on stakeholders' communications teams. States may find it effective to hold Twitter chats in an emergency situation to educate the public and stakeholders, share instructions, and address misconceptions. Before a chat, it is important to prepare a script to guide discussion, including prepared messages to share and answers to anticipated questions, and have an expert on hand to field questions. State agency staff should establish a special hashtag for the event, promote it on social media leading up to the chat, and use it during the chat to monitor the discussion and respond to questions.
- If states are unable to proactively contribute to social media, they can passively observe social media trends (e.g., monitor common hashtags, such as #flu, on Twitter). This can also serve as a way to gauge public perception and behavioral challenges, and identify opportunities to address circulating misinformation.

CDC SOCIAL MEDIA

twitter.com/CDCgov
twitter.com/CDCFlu
twitter.com/CDCemergency
facebook.com/CDC

AD CAMPAIGNS AND MESSAGING

CDC can actively partner with SHAs, especially those with large media markets, to coordinate federal messages. Agencies should begin developing ad campaigns and public service announcements early in the response. A coordinated effort during the development of campaign themes will help ensure that federal and state ad messaging is complementary. Ideally, there should be a hybrid effort in which CDC has a national advertising presence in addition to the individual states' area-specific efforts. In addition, it would be helpful if CDC could provide template materials that locals can "brand" as their own. Federal and state agencies should streamline the clearance process for messages to the public and stakeholders, and the rules regarding states' use of federal ad materials should be made clear upfront (even before they become available to the states). Some states requested greater flexibility with CDC funding so it can be used on media campaigns for timely messaging to the public in areas that would not otherwise have a budget for this.

HEALTH COMMUNICATIONS RESOURCES BY CDC AND OTHER ORGANIZATIONS

- CDC Health Communication Tools and Templates
- National Influenza Vaccination Week: Resources for Health Professionals and Partners
- State, Tribal, Local, and Territorial Public Health Professionals Gateway
- Public Health Practices: Risk Communication
- H1N1 Risk and Crisis Communication: Successes and Challenges (PowerPoint)

VACCINATION CAMPAIGNS

- Public information campaigns about vaccination can be established early in the response utilizing a unified consistent message. In particular, messaging for vaccine demand and excess vaccine supply should be prepared ahead of time.
- HHS, CDC, and individual healthcare providers can provide consistent messages to stakeholders about the vaccine's safety and efficacy, the importance of being vaccinated, and other prevention strategies.
- HHS manages vaccines.gov, the federal online resource for information on vaccines and immunization.
- Efforts can be made at all levels to increase interest in getting vaccinated.

SHARE YOUR STATE'S STORY

ASTHO collects and disseminates stories that highlight promising and useful practices and implementation strategies developed by state and territorial health agencies. ASTHO staff are actively seeking new stories about communications during and after the 2009 H1N1 pandemic to broaden our understanding of how states can adjust and improve their ability to respond to pandemic situations. If you have information to share about how your state has communicated with the public, partners, or other stakeholders during an infectious disease emergency response, please contact **infectiousdisease@astho.org**. contact. A complete archive of ASTHO's state stories is available **www.astho.org/stories**.

APPENDIX – LIST OF PANDEMIC COMMUNICATIONS TOOLS

Health Alert Network (HAN)

http://emergency.cdc.gov/han/

CDC's Health Alert Network (HAN) is CDC's primary method of sharing cleared information about urgent public health incidents with public information officers; federal, state, territorial, and local public health practitioners; clinicians; and public health laboratories. HAN has both an RSS feed and email updates available.

CDC Email Updates Listserv

http://www.cdc.gov/Other/emailupdates/

CDC offers a customizable email subscription service. The available topical areas span the entirety of CDC's activities, including Influenza news and highlights.

CDC Social Media

http://www.cdc.gov/socialmedia/

This page contains tools and guidance designed to help health communications professionals leverage social media. The Social Media Toolkit provides a social media overview, shares CDC's top "lessons learned", and gives recommendations for developing a social media strategy.

Twitter: https://twitter.com/CDCgov / https://twitter.com/CDCFlu / https://twitter.com/CDCemergency
Facebook: https://www.facebook.com/CDC

Crisis & Emergency Risk Communication (CERC)

http://emergency.cdc.gov/cerc/

The CERC training program draws from lessons learned during public health emergencies and incorporates best practices from the fields of risk and crisis communication. The training manual offers detailed technical assistance on risk communication topics as specific as "media and public health law" and "working with the media" along with topics as general as "psychology of a crisis" and "messages and audiences." The manual can be applied by all who have a risk communication message.

CDC Flu News & Spotlights

http://www.cdc.gov/flu/news.htm

This page highlights new and noteworthy influenza-related developments around the world and features stories for each influenza season. It also has an influenza news archive broken down by season and strain.

State Preparedness Fact Sheets

http://www.cdc.gov/phpr/preparedness.htm

These fact sheets were developed by CDC and give a state-by-state snapshot on their preparedness for a public health emergency. They present information primarily on the state's laboratory and emergency operation coordination capacity and response speed.

State, Tribal, Local, and Territorial Public Health Professionals Gateway

http://www.cdc.gov/stltpublichealth/

The gateway connects the public health workforce to information, tools, and resources on topics such as "science and research," "accreditation and performance," and "professional development."

H1N1 Flu (Swine Flu): State, Local, Tribal, and Territorial Health Officials

http://www.cdc.gov/h1n1flu/statelocal/

This archived web page was a technical resource for health officials during the 2009 H1N1 pandemic. It contains information for state, local, and territorial health officials, as well as a number of materials for tribal health officials.

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2012 State-by-State Update Report on Preparedness and Response

http://www.cdc.gov/phpr/pubs-links/2012/index.htm

The preparedness and response report provides information and trends on public health laboratory testing, emergency operations coordination, and emergency public information and warning. It is designed to increase accountability with the nation's investment in public health preparedness. The report includes in it the State Preparedness Fact Sheets mentioned above.

Solving a Communication Gap with Partners in Preparedness

http://blogs.cdc.gov/publichealthmatters/2013/03/solving-a-communication-gap-with-partners-in-preparedness/

This CDC blog post describes the New York City Office of Emergency Management's Partners in Preparedness program. Partners in Preparedness is a local effort to help organizations and businesses prepare for an emergency.

State and Local Pandemic Influenza Planning Checklist

http://www.flu.gov/pandemic/history/checklist.pdf

HHS and CDC developed a comprehensive checklist for pandemic flu planning at the state and local level.

Pandemic Flu Preparedness Tools

http://www.cdc.gov/flu/pandemic-resources/tools/index.htm

CDC developed several different software tools to help hospital administrators and state and local health officials prepare for an influenza pandemic. One example is FluSurge 2.0, which quantitatively helps hospital administrators predict the demand a pandemic will put on their services using the demographics of their community.

Recommendations for Protocol Development for 9-1-1 Personnel and Public Safety Answering Points (PSAPs)

http://www.nhtsa.gov/people/injury/ems/PandemicInfluenza/

The U.S. Department of Transportation released recommendations for protocol development for 9-1-1 personnel and public safety answering points. The report includes both guidelines for protocol development and examples of effective protocols.

Novel H1N1 Flu (Swine Flu) Public Service Announcements (PSAs) [Archived]

http://www.cdc.gov/h1n1flu/psa/

This archived web page features PSAs used during the 2009 H1N1 pandemic. Most of the PSAs are available in Spanish and English.

National Influenza Vaccination Week: Resources for Health Professionals and Partners

http://www.cdc.gov/flu/nivw/resources.htm

The National Influenza Vaccination Week web page is a diverse resource for health professionals and partners. The site includes a media toolkit, print materials, broadcast quality media (videos, PSAs, and podcasts), and a section devoted to faith-based organizations.

CDC Response: A Year in Review

http://www.cdc.gov/h1n1flu/yearinreview.htm

This resource contains summary documents and macro-level lessons learned from the 2009 H1N1 pandemic.

H1N1 Flu Clinical and Public Health Guidance [Archived]

http://www.cdc.gov/h1n1flu/guidance/

This archived web page contains influenza and vaccination guidance from the 2009 H1N1 pandemic for a wide array of health professionals: state, local, tribal, and territorial health officials, epidemiology and surveillance, clinicians, infection control, laboratory testing, patients, pregnant and breastfeeding women, businesses, emergency personnel, community settings, education settings, and the travel industry.

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CDC Emergency Operations Center (EOC)

http://www.cdc.gov/phpr/eoc.htm

EOC is activated during public health emergencies and is the central hub for analysis, communication, and coordination. It operates under the umbrella of CDC's Office of Public Health Preparedness and Response.

Office of Public Health Preparedness and Response

http://www.cdc.gov/phpr/

CDC's Office of Public Health Preparedness and Response is the agency's primary body for bolstering the nation's capacity to prepare for and respond to threats to the public's health. This includes hazards that are natural, biological, chemical, and radiological.

H1N1 Risk and Crisis Communication: Successes and Challenges

http://www.cdc.gov/about/grand-rounds/archives/2010/download/09-September/Covello_Risk_Comm_Presentation.ppt

This PowerPoint presentation by the Center for Risk Communication highlights key concepts and strategies in effective risk communication. Its principles are applicable to all who have a risk communication message.

Public Health Practices: Risk Communication

http://www.publichealthpractices.org/practice-categories/communication

The Center for Infectious Disease Research and Policy (CIDRAP) offers a collection of practices implemented in community-based organization and local and state public health agencies concerning risk communication, among other preparedness topics. One example highlights a "dark website" created by the Florida Department of Health to act as a ready-made template for quick implementation during an emergency.

National Public Health Information Coalition (NPHIC) Pandemic Flu Resources

http://www.nphicpanflu.org/

The National Public Health Information Coalition hosts an amalgamation of pandemic flu resources. The vast database is searchable by topic, resource type, and audience. Topics include community preparedness, quarantine, and surge capacity. Resource types encompass letters, fact sheets, talking points, and presentations. Audiences range from journalists to senior citizens to business.

Preventing Seasonal Flu with Vaccination

http://www.cdc.gov/flu/protect/vaccine/index.htm

This CDC resource outlines specific vaccine product and safety information.

Seasonal Influenza Vaccination Resources for Health Professionals

http://www.cdc.gov/flu/professionals/vaccination/index.htm

This CDC resource provides information for health professionals regarding clinical guidelines, patient education, and vaccines. Topics range from dosage and administration to target populations along with information on patient education.

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