Western North Carolina Antiviral Use Knowledge/ Attitude/ Practice Surveys

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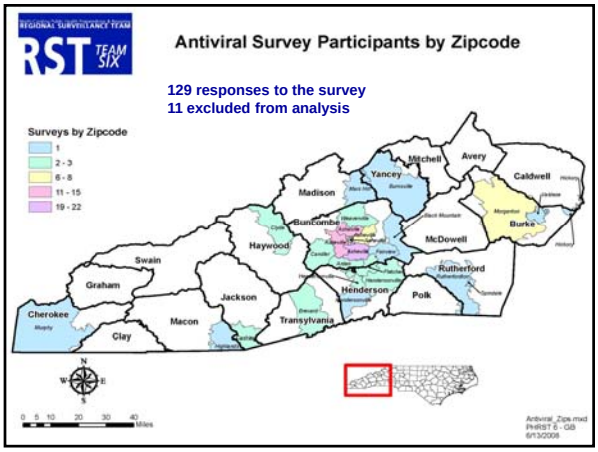
Two Surveys

- Primary care prescribers
  - 19 counties of western NC and Eastern Band of Cherokee Indian
  - MDs, DOs, PAs, NPs
- Pharmacists
  - 15 hospital pharmacies in western NC

Prescriber Survey Methods

- Web-based survey
  - Antiviral prescribing practices for influenza-like illness (ILI) during 2007-08 flu season
  - Knowledge of antivirals
- Email invitation
  - NC Medical Society
  - Buncombe County Medical Society newsletter
  - MAHEC residency program
- Sweepstakes incentives
- Administered in April 2008



Antiviral Treatment of Influenza-Like Illness

- 87% (n=102) prescribed antivirals for treatment
  - 100% used oseltamivir (Tamiflu®)
  - Few used amantadine (n=3) and zanamivir (Relenza®) (n=3)
  - None used rimantadine
- Primary reason for not prescribing
  - Presented more than 48 hrs after onset (54%)
  - Negative flu test (18%)
  - Influenza is self-limited (8%)

Antiviral Treatment After 48 Hours

- 31% (n = 35) “sometimes” or “usually” prescribe after 48 hours of symptom onset
- Reasons for late prescribing
  - Questionable time of onset (47%)
  - Decrease transmission to contacts (23%)
  - Patient request (16%)

Other Key Findings

- Overall mean self-rated knowledge = 3.1
- Ob/Gyns (n = 11) prescribed less often, had lower self-rated knowledge of antivirals
- 49% (n = 55) prescribed antibiotics to ILI patients
  - Patient had symptoms of bacterial infection
  - Patient had comorbidity increasing risk of infection

Conclusions

- Prescribers rapidly adopted CDC recommendations against use of adamantanes for influenza
- Most prescribers in Western NC are very knowledgeable about influenza and antivirals
- Use of antibiotics for ILI requires further study
- Web-based surveys in physician groups are challenging

Pharmacist Survey Methods

- Telephone survey
- 15 hospitals in Western NC Health Network
  - 13 of 15 hospitals responded (87%)
- Administered in June 2008

Antiviral Use at Hospital Pharmacies

- Hospital size varied from 24 to 800 beds
- 12 of 13 (92%) reported antiviral use
  - 9 used oseltamivir in 2007-2008
  - 2 used limited amount of amantadine
  - % used for inpatients varied widely
- 2 of 13 (15%) report stockpiling antivirals
- 3 of 13 (23%) use antivirals for staff prophylaxis

Long-term Care Facilities

- 6 of 13 (46%) hospitals had an associated LTCF
- All LTCFs were served by the hospital pharmacy
- 5 of 6 (83%) use antivirals for influenza treatment
- 2 of 6 (33%) use antivirals for prophylaxis of staff

Other Key Findings

- Use of prophylaxis of staff and patients in 1 LTCF last flu season anecdotally resulted in significant decrease in flu (illness & absenteeism) → further study
- Ease of retrieval of data on antivirals (# doses, inpatient vs. outpatient, etc.) varied widely
- Stockpiling, staff prophylaxis policies, use in outpatients also varied widely

Possible Future Activities

- Conduct a larger survey of hospital pharmacy antiviral (and other) practices
- Study treatment and prophylaxis in LTCFs, both hospital-associated and free-standing
- Examine hospital staff prophylaxis policies and promulgate consistency across the region/ state
- Study impact of new HHS guidance on pandemic stockpiling and other preparedness activities in healthcare facilities

Buncombe County Local Receiving Site Exercise

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Exercise Design

- This was a Full-scale Local Receiving Site (LRS) exercise developed in compliance with Homeland Security Exercise and Evaluation Program (HSEEP) guidelines
- Exercise developed through three prior planning conferences with regional planning partners
- The FSE incorporated a separate Joint Information Center (JIC), on location LRS, and 4 SimCell LRS functional table-top exercises

Exercise Coordination

- The exercise consisted of evaluators, controllers, participants, and observers
- Every facet of the exercise included separate evaluators and controllers in addition to participants
- Controllers coordinated the exercise for participants and maintained contact with the control cell which was responsible for coordination of the master scenario and events

Tools

- Player Handbook
- Evaluator/Controller Handbook
- Buncombe County SNS plan executive summary
- Applicable ICS forms
- Applicable Job Action Sheets (JAS)
- Incident Map
- Distribution Plan (re-apportion/traffic plan)

Conduct

- Participants were free to utilize any of the material on hand and make simulated requests for additional equipment or other needs
- Simulated scenario elements were injected by the controllers in order to simulate possible real world issues
- Each exercise section documented actions on a master scenario events list (MSEL)

Evaluation

- Trained evaluators outside the scope of the exercise documented actions on appropriate Exercise Evaluation Guides
- EEGs were developed prior to the exercise based on the objectives developed during the early planning process
- Just-In-Time Training (JITT) surveys were completed by all participants to gain identify exercise JITT needs

Improvements

- Every County Health Department participating in the exercise developed their own Corrective Action Plan (CAP) after working through the exercise and noting issues that in their current plan
- The individual (CAPs) were discussed during the post-exercise hotwash but were finalized by the individual preparedness coordinators

Lessons Learned

- JITT is not sufficient as the sole means of training
- PH professionals do not have basic warehouse skills
- Need to train multiple backups and cross-train wherever feasible
- Resource allocation methodology was too complicated for untrained individuals

Benefits

- Multiple agency coordination
- Regional planning for disasters {disasters are local but PH is not limited by boundaries}
- Improved knowledge & preparedness awareness by Health Department administrators
- Improved the sharing of information and resources across the region

Issues

- Neither Public Health nor the County has the staff to operate all required PODs 24hrs
- Current plan does not address Special Needs population in enough detail
- Public Information passed through typical means does not reach everyone

Results

- Established LAPC that deals only with Vulnerable Populations
- Developed SNS Push Program in which agencies, businesses, and treatment centers may pick up SNS materials and dispense to Staff/Family Members of Staff/and Clients
- Developed contact listserv of media outlets and grassroots organizations who can pass along emergency information

Vulnerable Populations Initiative (VPI)

- Task Force of City/County agencies and officials, Community Based and Faith Based organizations, and special needs populations steering committee volunteers
- Identified who's vulnerable
- Meets to address the planning needs of the County's Vulnerable Populations
- Creates products which work to achieve the initiative's mission
- Document Review of Seattle-King Program

Push Partner Program

- Objective - 25% of County population on this push program
- Lofty goal however VA dispense to all clients
- Essential Services makes up 7.5% of population
- Program can include family members
- Moving to Electronic Web-based document

Community Outreach Information Network (COIN)

- CDC related program
  - Method of disseminating emergency Public Information throughout the community which targets vulnerable populations who do not receive their information through typical means
- Network managed by Public Health PIO
- Includes contacts of Community Based and Faith Based Organizations who pass information on to their clients

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Thank you!

…Questions or comments?...