



LA HEALTH-SYSTEM PHARMACIST

Newsletter of the Louisiana Society of Health-System Pharmacists

Editor: Dana Jamero djamero@xula.edu

www.lshp.org

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September/October 2009

FROM THE DESK OF THE PRESIDENT

On August 8th and 9th, LSHP convened our annual Strategic Planning Retreat and Board of Director's Meeting in Woodworth. We had a strong presence of board members and committee chairs in attendance bringing new ideas and perspectives on the upcoming year. Logistically, the meeting was uneventful as usual due to great preparation and planning on the part of our Executive Director, Bland O'Connor and our Senior Association Coordinator Kati Craig. As far as productivity, all in attendance showed great enthusiasm towards serving LSHP for yet another year. I would personally like to thank each of you who attended, and for those who couldn't attend, thank you for communicating your input prior to the retreat. I would also like to congratulate our new officers that were sworn in by Jay Schwab, a Past-President and current committee chair. Teresa Nash is our new President-Elect and our new Board Members-At-Large are Greg Leader and Scott Dantonio.

For this particular edition of the newsletter, I would like to share with you a few key points that were discussed at our retreat this year focusing on committee involvement. Beginning this year we have expanded the number of committees to be more in align with ASHP. The new committee structure and Chairs are as follows:

- Education and Workforce Development, Ann Wicker (wicker@ulm.edu)
- Pharmacy Management, Barries Leung (bleung@ochsner.org)
- Pharmacy Practice, Kelsey Trimble (Kgree4@lsuhsc.edu)
- Public Policy, William Kirchain (wkirchai@xula.edu)
- Programming and Practitioner Education, Jay Schwab (jschwab@chnola.org)
- Membership and Marketing, Lisa Ross (rossulmedu@cox.net)
- Public Relations, Linda Mihm (lmihm@xula.edu)
- Technician Activities, Winona Thomas (winonathomascphpt@aol.com) and Jonathan Bost (Jon_bost@yahoo.com)

Committee functions and responsibilities along with the LSHP Board of Directors Policy and Procedure Manual (revised August 2009) can be found on the LSHP website under the Board of Directors link. We invite you to join a committee of your choice and actively participate. If you are interested in joining a committee, please contact the committee Chair and "jump right in". There's a lot of work to be done; your time and assistance, as always, will be welcomed and greatly appreciated.

The Education and Workforce committee and the Programming and Practitioner Education committee are

diligently working together to continue bringing you interesting programs at both the Midyear and Annual meetings. There will be a continued effort to provide a variety of pharmacist programs along with technician and student programming.

The Membership and Marketing committee has begun meeting to develop new strategies for new member recruitment and current member retention. As of early August, LSHP had 1016 members including all member categories; only 398 members are pharmacists! Your membership, recruiting efforts, and participation in all local, midyear, and annual meetings are vital towards the success of LSHP. Membership forms have been revised to reflect a few changes, primarily the committee names and any changes in chapter fees. These forms will be placed on the website for you to download closer to the end of the year. Recruitment activities will go in full swing in the months of November and December; please get involved with your local chapter to assist in these efforts.

The Public Policy committee is diligently reading the many revisions of the possible health care reform documents in an effort to stay abreast as to how healthcare reform will affect pharmacists and the citizens of Louisiana. The committee is also here to assist you with any questions that you may have as a member of LSHP. In addition to focusing on health care reform, the committee is also continuing to work on collaborative practice issues and the utilization of pharmacists in emergency situations such as natural disasters as it pertains to credentialing and entry into the areas of need.

On a different note, we are only a few days away from our fabulous Midyear meeting. By now, all of you should have received the program schedule and registration form for our exciting LSHP Midyear Meeting coming up in Shreveport during the Red River Rivel Arts Festival. The Board of Directors meeting will take place on October 9th followed by the Welcome Reception and Festival later that evening. The actual meeting, exhibit and lunch will be on October 10th. This year's

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SOUTHWEST-LSHP

VACANT

The LSHP
Mid Year Meeting
October 10, 2009
Sam's Town Shreveport

**Brochures have been mailed and
are available for download
on the LSHP website,
www.lshp.org.**

Register today!

**The conference hotel is
Sam's Town in Shreveport.
Sam's Town is located at
315 Clyde Fant Parkway.**

**Don't forget to join us Friday night,
October 9, for the Welcome
Reception at the Barnwell Memorial
Garden & Art Center
and fun at the Red River Revel!**



**For the Mid Year Meeting agenda,
see page 3.**

**LSHP Bimonthly Newsletter****LA HEALTH-SYSTEM PHARMACIST****Publisher Information**

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Copy, advertising and nonmember subscription inquiries should be directed to the Copy Editor, Kati Craig, at (225) 922-4520. Advertising rate sheets and deadlines are available upon request.

Please send article submissions to the newsletter editor, Dana Jamero, via email at djamero@xula.edu.

2009 Mid Year Meeting Agenda

Saturday, October 10, 2009

8:00-9:00 a.m.

Prevention and Treatment of Cancer-associated Thrombosis: Improving Patient Outcomes*

John Fanikos, MBA, RPh

204-000-09-425-L01-P

OR

Pain Relief, No Prescription Needed!

Sheramie Verret, PharmD

179-000-09-031-L01-P / 179-000-09-031-L01-T

9:00-10:00 a.m.

The Prevention and Management of Febrile Neutropenia in Oncology Patients**

Marlo A. Blazer, PharmD, BCOP

204-000-09-427-L01-P

OR

Shining a New Light on Proton Pump Inhibitors: New Information on America's "Purple Pill"

Elizabeth Perry, PharmD

179-000-09-032-L01-P / 179-000-09-032-L01-T

10:00-11:00 a.m.

Treatment of Resistant Hypertension

Tibb Jacobs, PharmD, BCPS

179-000-09-033-L01-P / 179-000-09-033-L10-T

OR

Swine Flu: Facts versus Fiction

Keneshia Pace, PharmD

179-000-09-034-L01-P / 179-000-09-034-L01-T

11:00 a.m.-12:00 p.m.

Exhibits

12:00-1:00 p.m.

Lunch with Exhibitors

1:00-2:00 p.m.

Pharmacotherapy of Alzheimer's Disease

Christopher Betz, PharmD, BCPS

179-000-09-035-L01-P / 179-000-09-035-L01-T

OR

Pharmaceutical Waste Management

Janay Woodard, PharmD

179-000-09-036-L03-P / 179-000-09-036-L03-T

2:00-3:00 p.m.

CA-MRSA

Nicholas Beyda, PharmD

179-000-09-037-L01-P / 179-000-09-037-L01-T

OR

USP Chapter 797 Guidelines for Compounded Sterile Preparations: A Summary

Courtney Robertson, PharmD

179-000-09-038-L01-P / 179-000-09-038-L01-T

3:00-4:00 p.m.

Increased Intracranial Pressures Treatment: Mannitol vs. Hypertonic Saline

Thaddeus Wallace, PharmD

179-000-09-039-L01-P

OR

Sleepless in Louisiana

Gilda Jefferson, PharmD

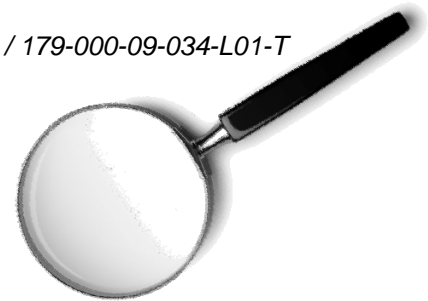
179-000-09-040-L01-P / 179-000-09-040-L01-T

4:00-5:00 p.m.

C.diff: Update on the Incidence and Known Risk Factors & What's New in Treatment

David Cluck, PharmD

179-000-09-041-L01-P / 179-000-09-041-L01-T



* Planned and conducted by ASHP Advantage. Supported by an educational grant from Amgen.

** Planned and conducted by ASHP Advantage. Supported by an educational grant from Eisai, Inc. and sanofi-aventis U.S.

ULM Student Chapter Update

Monica Morgan

ULM LSHP Student Chapter President

Hello fellow LSHP members. The fall semester for the ULM student chapter has started off with a bang! We held our first general meeting on September 2nd and we had a fantastic turnout with approximately 50 students attending the meeting. We also have plenty of educational and fun events planned for the upcoming months, including the LSHP Midyear meeting in Shreveport. As part of maintaining our SSHP recognition with ASHP, we have themed our service projects toward poison prevention and have invited Director of the Louisiana Poison Control Center, Mark Ryan, to speak at one of our general meetings. We have also planned to visit several elementary schools in the North Louisiana area to educate them on “good

drugs vs. bad drugs.” Lastly, we are having the clinical coordinator of Central Mississippi Medical Center, Dr. Davey Legendre, speak to our student chapter about his infectious disease residency. Our student chapter is very excited about our fundraiser this year, as we will be selling t-shirts and window decals to our students and alumni, and we would also like to extend an invitation for you all to participate in our fundraiser as well! The ULM LSHP student chapter will be selling these t-shirts and window decals at the LSHP Midyear and Annual meetings. We are very much looking forward to seeing many of you in October at the Midyear meeting!

Xavier Student Chapter Update

Mia Incaprera

Xavier LSHP Student Chapter President

Xavier University of Louisiana College of Pharmacy Student Chapter is dedicated to the promotion and evolvment of health-system practitioners. As an organization we enlighten our student body of the endless possibilities that are available upon commencement from the College of Pharmacy. This is achieved by allowing the student body to recognize that retail pharmacy is not their only option.

This year the Xavier University chapter is looking forward to our upcoming meetings where we will present students with pharmaceutical career choices as well as provide much needed information regarding residencies.

Our annual membership drive is fast approaching and we hope to multiply our chapter members. Having service learning and community service projects scheduled throughout this semester, we know the end of 2009 will be a learning and growing experience for all who participate. We are also looking forward to our annual Clinical Skills Competition for the College of Pharmacy, hosted by Amne Borghol, PharmD. Our top two finishers will be awarded a stipend towards ASHP Midyear expenses and represent Xavier in Las Vegas, NV.

Technician's Corner

Winona Thomas, CPhT

LSHP Technician Representative

Hello fellow technicians. I want to remind everyone about the upcoming LSHP Conference that is being held in Shreveport. The planners have gone to great lengths to make sure that this year's meeting is as wonderful as last year. It will offer great opportunities to meet other Technicians from all over the state. There is a welcome reception planned on Friday night with good food and don't forget the Red River Revel activities that are going on right next door. I would like to see as many of my fellow Technicians that can attend. Together we can make a

difference. If you are in attendance please find me and introduce yourself, I am on some committees that are striving to improve the quality of the field and I would like your input. If you are unable to attend please stay in contact. I enjoy responding to your questions, concerns and comments. I can be reached at Winonathomascpht@aol.com. I look forward to hearing from you.



**ASHP presented a webinar on August 31 entitled,
“What do we need to know about the healthcare reform discussions
and how can we impact the outcome?”**

The webinar has been posted on the ASHP Website at

<http://www.ashp.org/stateaffiliates?WT.ac=hp%5FPopLinks%5FState%5FAffiliates>

**Scroll to the section that says “News and Highlights” and click either the
PowerPoint alone or the audio synched audio & video version.**

Diprivan® (Propofol): Would change in status improve safety?

Conchetta White Fulton, R.Ph., Pharm.D., FASCP

Clinical Associate Professor, Xavier University College of Pharmacy

A 50 yr-old African American male was pronounced dead after being found nonresponsive in his home and numerous failed CPR attempts to revive him. The patient had a history of drug abuse having spent time in a rehabilitation center for addiction to pain killers and anxiolytic drugs. Recent attention has been focused on the patient's personal physician who is reportedly a cardiologist.

One was a blonde bombshell sex kitten. Another was the King of Rock N Roll. The most recent was the self-proclaimed King of Pop. The death of superstar Michael Jackson has once again thrust the indiscriminate and inappropriate use of prescription drugs into the spotlight. Like Marilyn Monroe and Elvis Presley before him, the true and complete stories of what happened to these cultural icons may never be fully known. What is known, however, is that the death of all three can be attributed to improper drug use and/or the use of illegal drugs.

The "alleged" causative agent is not on the Top 200 drug list nor was it a household name until now. This most recent case involves the chemical propofol (trade name Diprivan®), largely unused even by most healthcare professionals. Most frequently used by anesthesiologists and surgeons due to its indication as a general anesthetic and IV sedative hypnotic, there are numerous recommendations which, if followed, would ensure patient safety.¹

Diprivan® (propofol) is an ultrashort-acting, non-narcotic, non-barbiturate anesthetic agent used for sedation in critically ill patients. The drug was initially approved by the FDA in 1989 for the induction and maintenance of general anesthesia. By 1993, approval was also obtained for use in the sedation of adult patients receiving mechanical ventilation. Often used for procedural sedation in emergency rooms due to its shorter duration of action than midazolam to which it is often compared, the drug has a rapid onset and termination of action.² The pharmacokinetics of propofol follow a three-compartment model: rapid distribution, metabolic clearance and slow redistribution.³ Diprivan® (propofol) is becoming the intravenous anesthetic of choice for ambulatory surgery in outpatients. The main advantages of its use are listed as favorable operating conditions and rapid recovery whereas disadvantages include a high incidence of apnea and blood pressure reductions. In May of 2007, the **FDA Alert** reported several cases of patients who developed fever, chills, body aches or other symptoms of acute febrile reactions shortly after receiving the drug for sedation and

general anesthesia. These patients were encouraged to be evaluated for bacterial sepsis.⁴ Seizure is also a potential side effect but the incidence is low.

Once thought not to have addictive potential, this view changed following numerous reports of abuse and addiction largely by anesthesiologists and other medical professionals that became addicted to the drug. Prior to the first case report in 1992, abuse of or dependence on propofol had not been reported in the literature.⁵ There have been seven reports on propofol abuse and cravings in the literature.⁶

The first reported case of murder with propofol involved a 24 yr-old female in Gainesville, Florida in 2005. In 2008, the suspect was found guilty of first degree murder and sentenced to life in prison without the possibility of parole.¹ Will the death of Michael Jackson be declared the second propofol murder? Will regulating the drug more closely with tighter controls prevent further occurrences and save the lives of other celebrities and healthcare professionals who have become addicted? Will changing propofol to a controlled substance aid in the improvement of patient safety?

You're the drug expert; what is your opinion?

References

1. Kirby, RR, Coslaw, JM, and Douglas MM. Death from propofol: accident, suicide or murder? *Anesth Analg* 2009; 108:1182-4.
2. Dunn T, Mossop D, Newton A, et al. Propofol for procedural sedation in the emergency department. *Emerg Med J*. 2007 Jul; 24(7): 459-61.
3. Propofol in Anesthesia. Mechanism of Action, Structure-Activity Relationships, and Drug Delivery. *Curr Medicinal Chem*. Vol. 7 Issue 2 pp.249-271 (23)
4. FDA Alert 6-2007. www.fda.gov. Accessed August 11, 2009.
5. Follette JW, Farley WJ. Anesthesiologist addicted to propofol. *Anesthesia* 77:817-818, 1992.
6. Bonnet U, Harkener J, Scherbaum N. A case report of propofol in a physician. *J Psychoactive Drugs*. 2008 Jun; 40 (2):215-7.
7. Haensch K, Schultz A, Krauss T, et al. Women need more propofol than men during EEG-monitored total intravenous anesthesia. *Biomed Tech* 2009; 54(2); 76-82.

Continued from page 1

meeting will offer 13 hours of continuing education opportunities for pharmacists and technicians; maximum 7 hours per individual. If there are any particular issues that you would like brought to the Board's attention, please email myself or a board member prior to the meeting. Please save the date and mark your calendars to be in attendance beginning on October 9th at Sam's Town. We look forward to seeing you there!

Keturah R. Robinson, Pharm.D., BCPS
LSHP President

Watch your email inboxes for the *new* monthly
LSHP Monthly Newsbriefs.

The *Newsbriefs* will contain LSHP, ASHP,
and general pharmacy news.

If you did not receive the August or September editions of *Newsbriefs*, please call or email the office to make sure we have a current email address on file for you.

Health Care Reform

William Kirchain, Pharm.D.

LSHP Public Policy Chair

Unless you have successfully managed to avoid all media for the last few weeks you are likely aware that the US Congress is debating health care reform. There are eight major bills that have been filed in the House and Senate, but only one has the backing of the White House. What will likely be known as the Kennedy Bill is actually titled America's Affordable Health Choices Act of 2009 (HR 3200). As of the beginning of September, it contains the following major provisions:

1. Establishment of a State-licensed Health Insurance Exchange (Senate Version: American Health Benefit Gateway). The HIE will sell insurance to individuals or small business employers at a subsidized rates based on income (individuals) or payroll (businesses). Eligible individuals currently would have annual incomes of 150% to 400% of the federal poverty level (FPL = \$73,240.00 for a family of three in 2009). The HIE would offer a Basic Plan (70% of costs); an Enhanced Plan (85% of costs); a Premium Plan (95% of costs) and a Premium Plus Plan that adds Dental and Vision; all at progressively higher premiums.
2. Expansion of Medicaid Eligibility to 150% of FPL and inclusion of childless adults as eligible.
3. Establishes a National Mandate that all individuals have acceptable health coverage or face income-based penalties.
4. Establishes a National Mandate that all employers offer acceptable health coverage for all employees or face penalties based on size of business.
5. Establishes a Reinsurance process for employers who provide health care benefits to persons 55-64 years old.
6. Provides for the absorption over time of CHIP into the HIE process.
7. Keeps Medicare, VA, PHS, TRICARE intact for the short term, but lays the ground work for these to be absorbed into the HIE process over time.
8. Establishes a Center for Quality Improvement to fund comparative effectiveness research (Senate Version: Center for Patient Safety).
9. Increases required reporting of financial relationships amongst providers and institutions (includes pharmacists and pharmacies).
10. Establishes community wellness and prevention programs.
11. Eliminates the Medicare Part D donut hole.
12. Reforms graduate medical education to redistribute funding toward primary care and away from specialty care training.
13. Establishes a Public Health Workforce Corps and a National Commission of the Health Care Workforce.
14. Creates a waiver process for states wishing to establish a single payer system for health care.

ASHP along with the Pharmacy Stakeholders for Health Reform Coalition have lobbied hard for the following elements:

1. Currently included in the bill, funding for medication therapy management demonstration projects aimed at the data requested by the Congressional Budget Office and other members of Congress.
2. Currently included in the bill, restoration of funding for PGY-2 residency programs through Medicare.
3. Currently NOT included in the bill and perhaps the most important element is the recognition of pharmacists as non-physician health care providers, without descriptors or modification.

ASHP is asking members to go to www.ashp.org; click on Advocacy; click on Government Affairs; click on Grass Roots Action Center; and send a letter to your Congressman and Senators supporting the three elements above. As of September 1st only 800 letters had been sent.

Northeast Chapter Update

Jessica H. Brady, Pharm.D., BCPS

NELSHP Chapter President

The Northeast Chapter wishes to recognize those members who were awarded honors at the LSHP Annual Meeting. Marty Steffenson was presented with the Outstanding Service Award while Candace Chelette, Roxie Stewart, Anthony Walker, and Greg Smith each contributed to winning research posters.

Several fall meetings are planned including a continuing education program entitled "*Anticoagulation: Inpatient to*

Outpatient Management" on September 18 presented by Jessica Brady. Clyde Dearman of Vantage Health will present "*Asthma Pharmacotherapy Update 2009*" on October 15. NELSHP also congratulates members Roxie Stewart and Greg Leader for their election to the LSHP Board of Directors and our ULM Student LSHP Chapter for continued recognition as an ASHP Student Society of Health-System Pharmacists.

Congratulations to the following LSHP Members who were appointed to the ASHP Section of Inpatient Care Practitioners Section Advisory Group on Support Personnel

Helen Calmes, PharmD, MBA	Terri Mundy, RPh
Winona Thomas, CPhT	Trey Wynn, RPh, MBA

Clinical Guidance for the Treatment and Chemoprophylaxis of 2009 Novel H1N1 in Infants Less than One Year

Bionca Williams, PharmD Candidate; Laquisha Thomas, PharmD Candidate and Cori Brock, PharmD, CDE

Emergence of the 2009 novel H1N1 virus which is a combination of swine, avian, and human strands of influenza, has generated a pandemic in the United States and abroad. All are at risk of contracting the virus; however, some patients are more prone to developing complications. According to the *Morbidity and Mortality Weekly Report* of the Center for Disease Control and Prevention, roughly 60% of the total influenza hospitalizations this year from April to August have been documented in children. Thirty-six have died due to influenza complications. Furthermore, children less than 1 year are at a greater risk of morbidity encouraging the CDC to implement interim guidance to assist healthcare providers in the management of this extremely susceptible population. The purpose of this article is to provide healthcare professionals with comprehensive clinical guidance on the treatment and chemoprophylaxis of H1N1 in children less than 1 year.

Beyond prevention, treatment against 2009 H1N1 is paramount in minimizing health complications; therefore, symptom recognition and early diagnosis is important. Children should be assessed for classic flu-like symptoms such as fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. In addition, a rapid test (i.e. BinaxNOW[®]) should be performed to confirm the presence of the virus. If there is a high suspicion of flu based on signs and symptoms and benefits of therapy outweigh the risk, treatment should occur within 48 hours of onset with appropriate antiviral therapy.

The CDC reported that more than 98% of the circulating influenza viruses are susceptible to oseltamivir (Tamiflu[®]) and zanamivir (Relenza[®]).

Oseltamivir and zanamivir are approved for the treatment of influenza in children greater than 1 and 7 years, respectively. However, epidemiological data has revealed that children less than 1 year are at an increased risk for morbidity and mortality from viral influenza and may also benefit from the use of such agents. Hence, the CDC recently published new interim guidelines for the treatment of 2009 H1N1 in pediatric patients less than 1 year using oseltamivir based on Emergency Use Authorization (EUA). With these recommendations in place, providers can prescribe oseltamivir to children less than 1 year when medically necessary based on clinical judgment and age-based dosing (see Table 1).

As an alternative to set dosing, some experts prefer weight-based dosing for children aged younger than 1 year, especially for the very young or premature infant. When using weight-based dosing, those 9 months or older should receive 3.5 mg/kg/dose twice daily. Those younger than 9 months should receive 3.0 mg/kg/dose twice daily.

The use of oseltamivir in infants is highly debated due to insufficient clinical trial data. A retrospective study conducted in Japan on 103 infants younger than 1 year using oseltamivir for influenza demonstrated no increase in mortality or influenza-related complications. Furthermore, clinical studies in children with influenza on oseltamivir therapy have demonstrated both efficacy and safety although approximately 14% of the patients experienced vomiting compared to 8.5% on placebo.

Infected patients typically undergo a period of viral shedding one day before the presentation of symptoms through seven days after the symptoms of the flu arise. During the viral shedding period, novel H1N1 virus is transmittable. In children, the viral shedding period could be longer thus patients should be considered contagious 24 hours before the onset of fever and 24 hours after fever subsides devoid of any anti-pyretic agents. Chemoprophylaxis is indicated for patients that are in close contact with a suspected or confirmed patient with either H1N1 or seasonal flu during viral shedding or those individuals who are at high-risk of flu-associated complications. Healthy adults and children should not receive chemoprophylaxis if they are not categorized as high

Table 1: Age-based treatment dosing for infants less than 1 year

Age	5 day treatment, oseltamivir
Less than 3 months	12 mg twice daily
3-5 months	20 mg twice daily
6-11 months	25 mg twice daily

*Zanamivir has no EUA in infants less than 1 year
Source: DHHS:<http://www.flu.gov/vaccine/antiviralguidance.html> DC. 2009-2010 Updated Interim Treatment Guidance.

risk. Infants are considered high risk because of the increased risk of hospitalization, severe complications, and mortality. Chemoprophylaxis lowers but does not eliminate the risk of complications, and protection stops when drug therapy is stopped.

Chemoprophylaxis with oseltamivir, approved for use in infants through the EUA review, should be administered within 48 hours of exposure for ten days. Therapy in patients less than 3 months is not recommended due to limited pharmacokinetic data, but clinicians should consider drug therapy if the risk of exposure and complications are high. Recommended dosing can be found in Table 2. Weight-based dosing for chemoprophylaxis in infants can also be used and is as follows: infants 9 months or older should receive 3.5 mg/kg/dose once daily, and those aged younger than 9 months should receive 3.0 mg/kg/dose once daily.

Due to the high incidence of morbidity and mortality in infants less than 1 year, the treatment and chemoprophylaxis recommendations provided in this article should be followed to effectively prevent and eradicate novel H1N1 viral infections. Additionally, adherence to these guidelines will likely prevent subtherapeutic regimens that may potentiate antiviral resistance.

Although the release of the influenza A 2009 monovalent vaccine is expected mid to late Fall, the vaccine is not available for infants less than 6 months of age. This further emphasizes the importance of the recommendations for treatment and chemoprophylaxis in infants. Practitioners should use their clinical judgment to determine if the benefits of drug therapy outweigh the risk of influenza complications.

References available upon request.

Table 2. Aged-base chemoprophylaxis dosing for infants less than 1 year	
<u>Age</u>	<u>10 day chemoprophylaxis, oseltamivir</u>
<3 months	Not recommended unless situation critical
3-5 months	20 mg once daily
6-11 months	25 mg once daily
*Zanamivir has no EUA in infants less than 1 year	
Source: US.DHHS: http://www.flu.gov/vaccine/antiviralguidance.html	
Source: US.DHHS: http://www.flu.gov/vaccine/antiviralguidance.html	