Overview:

- Brief update on vaccine supply
- Vaccine distribution concerns
- CDC's role
- CDC and ACIP recommendations
- Vaccination Communication

A. Influenza vaccine supply:

1. Sanofi Pasteur: 60 million doses expected, 10 million after November; 58 lots released as of 10/5/05
2. GlaxoSmithKline: 8 million doses, all by end November; 21 lots released 10/05/05
3. MedImmune: 3 million doses, all by end November; 10 lots released 10/05/05
4. Chiron: 18m-26 million doses, most if not all by end November; 0 lots released as of 10/5/05 (expected lot release next week)

B. The 2005 ACIP recommendations published on July 29 include five principal changes or updates:

- ACIP recommends that persons with any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk for aspiration be vaccinated against influenza

- ACIP emphasizes that all health-care workers should be vaccinated against influenza annually, and that facilities that employ health-care workers be strongly encouraged to provide vaccine to workers by using approaches that maximize immunization rates.

- Use of both available vaccines (inactivated and LAIV) is encouraged for eligible persons every influenza season, especially persons in recommended target groups. During periods when inactivated vaccine is in short supply, use of LAIV is especially encouraged when feasible for eligible persons (including health-care workers) because use of LAIV by these persons might considerably increase availability of inactivated vaccine for persons in groups at high risk.

- The 2005--06 trivalent vaccine virus strains are A/California/7/2004 (H3N2)-like, A/New Caledonia/20/99 (H1N1)-like, and B/Shanghai/361/2002-like antigens. For the A/California/7/2004 (H3N2)-like antigen, manufacturers may use the antigenically equivalent A/New York/55/2004 virus, and for the B/Shanghai/361/2002-like antigen, manufacturers may use the antigenically equivalent B/Jilin/20/2003 virus or B/Jiangsu/10/2003 virus (see Influenza Vaccine Composition). |

- CDC and other agencies will assess the vaccine supply throughout the manufacturing period and will make recommendations preceding the 2005--06 influenza season regarding the need for tiered timing of vaccination of different risk groups. In addition, CDC will publish ACIP recommendations regarding inactivated vaccine subprioritization (tiering) on a later date in *MMWR*.

On August 5, CDC published priority groups for possible early vaccination. On September 2, CDC published recommendations for vaccination of these groups to occur through October 23, with vaccination of other persons, as well as continued vaccination of priority groups, to begin on October 24.

The priority groups include the same persons identified as priority groups for the fall of 2004, including

- persons aged ≥65 years with comorbid conditions
- residents of long-term--care facilities
- persons aged 2--64 years with comorbid conditions
- persons aged ≥65 years without comorbid conditions
- children aged 6--23 months
- pregnant women
- health-care personnel who provide direct patient care
- household contacts and out-of-home caregivers of children aged <6 months

C. Influenza Surveillance May-September, 2005

United States:

During May 22--September 3,[§] WHO and NREVSS collaborating laboratories tested 14,016 respiratory specimens; 120 (0.9%) were positive for influenza. Of the positive results, 66 (55%) were influenza B viruses, 33 (28%) were influenza A (H3N2) viruses, one (0.8%) was an influenza A (H1) virus, and 20 (17%) were influenza A viruses that were not subtyped. The majority (78%) of these isolates were tested from mid-May through late June, during which time 1.3% of specimens tested were positive for influenza. Since July, 0.4% of specimens tested were positive for influenza. The A/H3N2 viruses were all similar to the strain recommended for the northern hemisphere vaccine. The majority of B strains to date have not been similar to the strain in the northern hemisphere vaccine, but few specimens have been tested.

During May 22--September 3, the weekly percentage of patient visits to sentinel providers for ILI remained below the national baseline of 2.5%[¶] and ranged from 0.7% to 1.3%. The percentage of deaths attributable to pneumonia and influenza (P&I) as reported by the 122 Cities Mortality Reporting System remained below the epidemic threshold,** and no influenza-related pediatric deaths were reported as occurring during this period.

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CDC Influenza Vaccine Campaign
First, this season, to reflect what's going on with vaccine recommendations and also vaccine supply, CDC's insulins or vaccine campaign has three phases to it. The first phase is taking place right now and will continue through the 24th of October; and that phase will focus on the tier one audiences. The second phase will expand into all of the other target audiences; so not only the high priority audiences, but also all of the other audiences that we typically focus on-including household contact. Phase three will be our late season campaign during which we'll promote vaccination during December and January and beyond, if vaccine supply is still good and if disease has not peaked yet.

Key Messages
Our key messages during all of the phases will be letting people know who should get vaccinated and when they should get vaccinated, reminding them that influenza is a serious disease; that it can cause death, and that it does cause death. It also causes a lot of hospitalizations every year. We know through our qualitative research that the numbers 36,000 deaths a year and 200,000 hospitalizations on average per year are very motivational to people. We'll be reminding people that getting an influenza vaccination every year is their best protection against this disease. If this disease is something you're concerned about, then getting a vaccine is something you should do.

Getting vaccinated is a good way to help protect the people that you care about, for example, your grandchildren or your parents or other folks in your family that you care about. And we'll be reminding people that October and November are the best months to get vaccinated but then once we move into December and beyond, if vaccine supplies are still good and if disease has not peaked, we will be letting people know it's not too late to get vaccinated in December and beyond; and we have a special, separate campaign just to promote late season vaccination.

Logo and Slogan
Our logo and slogan this season will be the same as they were in the past, and that's for a couple reasons: one, because people recognize them; but two, because they tested well in different focus groups and in-depth interviews. Our slogan is "Protect Yourself, Protect Your Love Ones: Get Your Flu Vaccine", or "Protect Yourself, Protect Your Patients", or "Protect Yourself, Protect Your Children", depending on which target we're focusing on.

Core Elements
Our campaign has quite a few core elements to it. First, we depend a lot on CDC's Web site. We use the Web site to get out guidance language to folks, to share surveillance reports, to share MMWR's and also facts sheets. It's also the location of our influenza gallery, which I'll talk about in a little more detail in just a moment. We do a good bit of media outreach every season. We promote public service announcements, audio news releases, and video news releases; so we're actually out there actively promoting influenza as a topic that we'd like the media to cover. We're actively out there trying to get members of the media accurate information on influenza disease and on the vaccination, hoping that they will cover the story accurately and share the key messages that we would like to see shared. In most seasons they do a pretty good job of that.

There are other media activities that we participate in as well such as press conferences and radio tours. We also have our print campaign, which is also available for download from the Web. The print campaign includes posters, fliers, and brochures. There are also templates for buttons, and templates for stickers. All of the materials are in the public domain, and virtually all of them are in both Spanish and English, and in black and white and in color; so we try to make them easy for those of you who just have a black and white office printer to just be able to print them in the office and photocopy them. But then, sometimes there are larger organizations that actually want to make use of our full color posters, and so we make those available, too. All of those items can be found in our flu gallery at www.cdc.gov/flu/gallery.

Partnerships
We depend a lot on partnerships with organizations like yours, and with the health departments, etc. to get the print campaign out. In most seasons, we don't have funds for printing; and because of the way the government printing system works, we often can't turn things around quickly enough to get them printed and then get them distributed to you before the winter holidays, so we really have found that it's most useful to folks out in the communities if we're able to do the qualitative research and the message testing, develop the materials, use our graphic staff, do the photography, get everything created for you, and then make them available on the Web. So, the last few seasons, that's what we have done. There are materials that target the public, but also materials that target providers.

Education and Outreach
We also do education and outreach to clinicians. We have Web conferences that we do. We do outreach at professional conferences. We do a bit of things by telephone, also on the Web. And then we do communications research, which I've alluded to a couple of times, and that includes focus groups and surveys and in-depth interviews.

Website
CDC's homepage for influenza is www.cdc.gov/flu. That's your one stop shopping for anything that's related to the disease or to the vaccine. That's the Web site where you can find the weekly surveillance

report. You can find links to MMWR's. You can find links to the flu galleries. Anything that's influenza related, you should be able to find from that site.

And again, the flu gallery site, which you can link to from there, but the direct link is www.cdc.gov/flu/gallery; and at the gallery site, again it's broken into sections. There's a section with provider materials, and then there's also a section with materials for the public.

This season, for the first time, when we have three materials available that I'd like to highlight to you and promote to you because many of you deal with providers. We were able to, through a special grant from the National Vaccine Program office, engage in some qualitative research with nurses and allied health professionals during the past year. Through that research, we've developed three posters that target nurses, and encourage them to get vaccinated against influenza.

Most health care provider's studies show that providers have a vaccination rate around 38% to 40%, which is fairly low for a group that should all be getting vaccinated. And we at CDC are very concerned about that vaccination coverage rate, and so here in our office we were interested in figuring out how we could use communications to increase vaccination coverage rates among health care providers. So through this focus group research and in-depth interviews, we were able to design and test these three posters; so the whole mini-campaign is called "They Count on You", and these three posters are available on our flu Web site, in the flu gallery.

Questions and Answers

Hello, I work for the Everett Clinic in Everett, Washington. And my question is actually a statement of concern is that we are a fairly large health care organization which routinely orders about 20,000 to 25,000 flu shots per year. In the Chiron year, two years ago, we got essentially no vaccine until the very end; and since then, Chiron and since then Avantis has been prioritizing us to the lowest tier because, in each cycle, they have used the previous order to distribute vaccine. That's one concern.
The second concern we have is that we consistently see large vaccination companies, such as Maxim or Visiting Nurses, obtain vaccine before we do. And when they do that, it puts a shift in the demand; and then we end up getting stuck with a lot of vaccine at the end of the year. And I just wanted to make sure that people on the national level were aware of these problems as fairly large organizations try to order large doses of vaccine in the private health care sector.

R. Strikas I thank you for the comment; and these concerns are not unique to your practice, as I expect you are well aware, and I don't have solutions for them. As I said, and again you're well aware of this, but influenza purchase and distribution is a primarily a private enterprise. Sanofi is, I think, trying to, as best we can tell, get some vaccine to everybody; but if you weren't a prior customer, as you just pointed out, you fall to the bottom of their priority list. As far as we can tell, both from newspaper reports and a conversation that one of my associates just had with Chiron, they still are planning to have vaccine in the hands of those who ordered their vaccine within the next two weeks. That's not optimal, it's not what you wanted; but you will, hopefully, have vaccine in a relatively timely way to vaccinate your patients.

And again, CDC and ACIP say the optimal times to vaccinate are October and November. But again, since influenza doesn't usually peak until January or later in the United States, one can keep vaccinating into December and beyond.

Again, I realize you've got lots of other things to do in your practice, but the opportunities do exist for vaccination later on. And again, having said all that, I would agree that it is desirable to have more vaccine earlier on so you can use the month of October as well as November to vaccinate.

The other thing to say is, again, reflects the private nature of this business and pre-existing customer bases at Sanofi's filling; companies such as Maxim have been buying from Sanofi for some time. As far as we can tell, since we work with Maxim a fair bit, they do follow the priority guidance for vaccination; but obviously, you have priority patients in your practice, as well, that you want to vaccinate. And I'm inferring that you're not necessarily ready to send them off to Maxim to get their influenza vaccine, nor should you have to if you're willing to provide that service.

So, the only thing I can point to that may be a source of improvement for perhaps next year is that GlaxoSmithKline has proposed to rapidly increase production of vaccine for the United States at their facility in Germany. They have just bought the Canadian company, ID ViaMedical, that it had proposed to try and license their influenza vaccine in the U.S. for next year. So, it is conceivable there will be an additional some tens of millions of doses in addition to what we're supposed to receive this year coming from Glaxo; it's now a subsidiary-ID ViaMedical-and if indeed that comes to pass, ordering would be a little easier, unless demand rockets up, and demand is fickle.

So all I can really do is acknowledge your concerns and say, again, one of the solutions to this really is to having a more dependable, timely and larger supply of vaccine that can be used, that is consistent from year to year; and we haven't seen that for some time. And it leads to the types of difficulties that you just described.

With respect to health care workers, if there are plans to recommend that health care institutions begin excluding workers who are not vaccinated, regardless of outbreak status. It seems to me that that would give all the leverage needed, but health care facilities in our area have not felt at all comfortable doing that in the face of health care shortages; and when competing employers do not require vaccine.

R. Strikas

I can only comment that the efforts I'm aware of, through the Advisory Committee and Immunization Practices, or ACIP, with a fellow advisory committee that CDC has on health care infection control for health care institutions. We'll hopefully soon issue more detailed, evidence based recommendations on this topic. And the closest they come to that is asking workers for a signed declination form. That is, if you don't wish to receive influenza vaccine in your institution, you sign a form saying you acknowledge you're not receiving it; that if there were to be an outbreak of influenza, you might be asked to not work, and that you could be vaccinated later on. Something along the lines of the form that people sign who don't wish to receive Hepatitis B vaccine.

The other thing I'm aware of is there is an effort underway to the Joint Commission on Accreditation of Healthcare Organizations to have a performance measure in place where institutions that subscribe to being reviewed by the Joint Commission would be required to document that they're actually measuring, offering, and receipt and not-receipt of influenza vaccine by their health care workers.

So those are efforts I'm aware of. I'm not aware of any strong mandate to exclude workers, and I don't think we've had a significant discussion-at CDC, with our advisor committees-about that in the absence of an outbreak. So it's a touchy issue. There have been any number of reports of workers and unions getting very upset if anything approaches mandatory vaccination requirements, so I think, to move ahead, we've stopped short of those types of things; and that's all I can say about it.

I'm concerned about the new EMS rule that took affect: conditions of participation for nursing facilities that require all nursing facilities to offer the influenza vaccine to its patients. My concern-it's good that nursing facilities offer it, of course-but my concern is that it will splice in a way some of the vaccine that the nursing facilities had ordered for their health care workers. Most nursing homes, that I'm aware of, pre-ordered their vaccine months ago. So now they may not have enough. What should they do?

R. Strikas

Well, that's a good point. Well, hopefully the rule will increase the number of people vaccinated, Janice, and that's obviously the intent. We'll have to see whether that happens, and again as this requires documentation it was offered and what the outcome was.

As far as needing additional vaccine, there is an impression-I didn't talk about this earlier-that there was a lot of double booking going on. Double booking is shorthand for saying practitioners, because they were very concerned about receiving any influenza vaccine, placed orders with several horses. And once they receive some vaccine from one source, will cancel and order from another. So I wouldn't be surprised if some vaccine, Chiron's in particular, comes up later in the year; and people have received vaccine from Sanofi or the Glaxo vaccine or are using FluMist instead, may cancel some Chiron orders. And that vaccine may well be available later in the year, but that's a suspicion on my part. I can't document it except for the isolated acknowledgement by a few sources that they had indeed double booked.

The other thing to remind people of is for health care workers, many though not all can use FluMist, which is a perfectly acceptable vaccine; should be able to used in essentially nearly all nursing facilities. The downside to that product is that it is more expensive than the inactivated vaccine. But as far as I know, there is FluMist available that again can be used for any health care worker who's otherwise healthy and less than 50 years of age.

The last option is state health departments have an opportunity to get a modest amount of vaccines from CDC "free", where it's a vaccine we purchase with federal funds; one of the exceptions to my statement of "the CDC doesn't usually buy vaccine". Eight hundred thousand doses of activated vaccine and smaller amount of FluMist will be made available to state health departments, and they may have some vaccine on hand to plug some holes such as the one you just described; and each state is trying to make a judgment as to how much of this vaccine they want and think they can use.

This vaccine won't be available until December; it's Chiron vaccine. So there's a smaller amount there that could be used, as I said, to plug some holes. So there

are a few options, and hopefully those would assist nursing homes that found themselves in need of more vaccines.

My concern is in regard to the number of vaccine available for this year. Due to the publicity received by the … of avian flu in Asia, it's logic to expect an increase in the demand of vaccine from the general population; and I am hearing people still talking about the same amount of vaccine that we had in the few years back. Are we prepared for this increment on the demand of vaccine? If so, how we are?

R. Strikas

First of all, again anecdotal information; I won't pretend we've done a systematic survey, and Carrie, you may want to chime in here. We're not aware of some very large or obvious increased demand for influenza vaccine, so far. That's what colleagues who are running very large community vaccination programs have told us, and so we, at least to some extent, we're not aware it's manifested itself.

The real answer is that we don't have a solution. The max amount of vaccine that may be available and Chiron's vaccine will come later this year. It's 97 million doses of vaccine, which is more than the United States has ever had available. The previous high was 95 million. But as several people have told us, many times vaccine coming later than November is often problematic to get used. And so, I think the availability will be there. Again, Chiron is supposed to have that vaccine on the street within two weeks. We'll see, if and when it happens because, of course, we thought they would have vaccines last year on October 4th, and October 5th we were told something entirely different. But this year, the message is that we seem to be consistent, and there are no red flags from Chiron or from FDA; so we are hopeful that it'll appear.

So there is somewhat more vaccine available; it'll be coming a little later. And again, anecdotes suggest demand is not hugely increased; but I agree with you, there's a lot of information about avian influenza out there. And even though you and I know that the annual vaccine is no specific remedy or prevention for avian influenza infection, people may think it is and it's great that they want to get vaccinated, but we're not going to be able to help them with that. And so, I guess we're just going to have to track this and see how it goes.

Carrie, I don't know if you want to talk about this from a communication perspective?

K. Sapsis

I don't actually have anything more to add. I haven't heard that any of the interest in avian flu, or any of the increase in media has actually led to people desiring more vaccine. So, I don't have anything to add. Thanks.

We had a question concerning the availability of non-egg-based flu vaccines for those people who are allergic to eggs and cannot avail themselves of the current vaccine. And actually, it tails on the last question having to do with people having increased concern because of the avian flu. I think, as we go along and you get better communications with all of us out there, you may find that there is really that increase that you haven't heard about yet in demand for the flu vaccine.

R. Strikas Right now, there is no vaccine to prevent influenza that's not egg-based available in the United States. There have been a fair bit of dollars expended, to Sanofi Pasteur in particular, to develop a vaccine and sell culture non-egg-based vaccine. And we're aware other vaccine companies, on their own, are moving in that direction. It's going to take several years before such a product can be brought to consideration for license, so right now there is no such vaccine.

The option for people who want to prevent influenza, or deal with that, is to talk to their physician; and depending on their health status-how significant a chronic illness they have, or other considerations-an option is that one can take some anti-viral drugs as prophylaxis, a preventative measure, once influenza is in the community. But then, you have to take it for four, six, eight weeks to assure some protection if indeed you have a severe egg allergy and cannot receive the current influenza vaccine, or either of the vaccines. But there is no other preventive other than the standard things we talk about of covering your cough and staying away from sick people and hand hygiene; and of course, that's not fool-proof because people can be incubating influenza and spreading the viruses before they actually realize they're sick. And so, it's not perfect. So, at this point, there is limited things that one can do if indeed you cannot receive the current influenza vaccine. But anti-viral drugs are one to consider, to talk to one's physician about.

Thank you. Of course, that brings up the question about availability. I see where Tamiflu now has to have pre-authorization because they're stockpiling it?

R. Strikas Yes. The other thing I should have said, and thank you for following up on your question, is there are two classes of anti-viral drugs against influenza. And while the … inhibitors, which … is the newer group, and the ones to which the avian influenza virus is not resistant, the only ones that we might be able to use right now, if that were to be a problem.

The annual influenza virus is at least the type A viruses, which are the more common and the more likely to cause severe disease on an annual basis, are still could be managed by older, and frankly, cheaper drugs-…-that are sold in a variety of configurations. And so, those are options that people can consider for the annual influenza disease; treatment and/or prevention. And they may be better options. And certainly, these are drugs the nursing facilities often use for outbreak control, primarily because they work and because they're cheaper; and outbreaks are usually caused by type A viruses. So again, there are some other options besides Tamiflu.

Yes, thank you. Actually, some of the issues that I wanted to address have already been addressed. I just want to mention one thing, a comment and a question together. I have been purchasing flu vaccine for my practice; I take care of asthmatics, so just about everybody in my practice has to get a flu shot. And I've been purchasing from Avantis for quite some time, so I didn't see a terrible backlash last year because I had placed my order well ahead of time. I'm a regular customer. This year, when I wanted to double my purchase, willing to pay for it, they would not allow for that. They wouldn't allow any more distribution than they had previously given to a private practitioner; and I suppose, given what I have already heard, there's

probably good reason for that. But the question is, is there a potential that if I went back to them, they would then have available vaccine for me to purchase, since I'm a regular customer? So that was one issue.

The second issue has to do with egg allergy because, as a person dealing with allergy and asthma patients, I have several asthmatics that can't get the flu vaccine because they are highly allergic to egg; and no one has really taken the step to look at that, to see if in point-of-fact they could probably just get this vaccine. So everyone seems to be backed off. There's no good studies. I'm waiting for someone to have the courage to do it. But I'm concerned about resistance to some of the anti-virals, and how effective the anti-virals are, truly, in the infants and children-particularly the asthmatics. Is there any concern about giving an anti-viral to a young child?

R. Strikas Yes, I cannot speak for Sanofi. It's always worth asking them if they'll sell you more vaccine. And, as I said, I'm speculating; you can quote me, but you better say I'm speculating there'll be some Chiron vaccine available, which I would remind listeners, it's only licensed for kids over four years of age, which at least would be the bulk, I hope, of your practice, but not all of the kids who might want vaccine. So it's worth asking Sanofi, but they were sold out in the private sector within 36 hours of listing vaccine for sale, last spring. And I have a notion that there really won't be much Sanofi vaccine available. What is available is vaccine, I was told, small amount of vaccine in pre-filled syringes-in the half dose syringes targeted for children less than three years of age. But again, that probably is a minority of your population. But it was reportedly available some weeks ago.

There were older data, but you probably know literature better than I do, doctor, that one could desensitize kids to egg allergy, and actually give them egg-based vaccines; but I'm not an allergist and I won't attest to the robustness of those studies. They were done 25 years ago, or more; and so, there were some people who suggested you could do this. But I defer to those who work in the field whether that makes sense of not.

Resistance anti-virals is a big concern, if you use them for too long or use them inappropriately. And the older drugs can develop resistance fairly rapidly, though it's not widespread enough to where the drugs are not useful. But again, they're only useful in type A influenza; and kids can have a fair bit of trouble with type B, and so then you're stuck with … inhibitors again.

So I don't have good answers for you except to acknowledge your concerns; and frankly, I won't quote because I don't recall the data on the degree of safety and effectiveness of the anti-virals in kids-specifically kids with asthma. I just can't recall the data well, off the top of my head, but I know that the license does permit one to use these drugs, for the most part, down to young children-I think with the exception of … So, they are still available.

Yes. I think there was an issue with … and asthmatics …

R. Strikas Yes, there was; and it's not gone away. So you're limited, as you point out, to the other three drugs; and there are always some gaps in our knowledge. They are an option. And I guess I should ask you back, have you had occasion?

Have you felt it reasonable to give some of your patients who have severe egg allergy any anti-viral drug to prevent influenza for an extended period?

No. Maybe one or two. In general, most of my patients have been able to be vaccinated. There's a very small group that can't be because of their egg allergy. And just anecdotally-and very, very, very anecdotally-I'm reported by the patients, "Oh, but he got his flu shot last year and he was perfectly fine." In other words, no one asked if the kid had an egg allergy.

R. Strikas Yes, people …

So, I don't know whether; then you have to go back and look at how valid the egg allergy history is. You have to do the testing and the validation. And sometimes, I'm really surprised. You will have either positive blood or skin testing, or at least a reasonable history; and yet, you will document the kid's actually gotten the flu vaccine. But of course, it's never been done in any study that I've looked at, so we're not inclined to do it; but there's just a story here, a story there that people get it anyway.

R. Strikas Yes. Well, thank you for your experience; and it gets back to what the previous questioner asked, and it would be nice-not just nice, but important-to have an alternate means of vaccinating the people that doesn't depend on eggs, that offers additional flexibility for the supply of vaccine, and may actually be a little quicker to produce cell-based vaccines. So a variety of things would lead to development, in that regard. And again, we hope that those vaccines may be on the market within a few years, but it's going to take a few years.

On one question last year, do we know that any of the influenza A and/or B was resistant to anti-virals?

R. Strikas You never say never. The answer is that, of course, there was some; but I'm not aware of any large amounts of that going on. I'd have to ask my colleagues in the laboratory. If you want to send me an e-mail, doctor, I can pass it on to my colleagues in the lab who would have a better sense of that. My e-mail is rstrikas@cdc.gov.

Thank you. I appreciate this information given. I'm a fairly new family nurse practitioner, and a wound specialist; and I find down here in central Florida most of our people fall in the top priority for the flu shots. And unfortunately, at a lot of the public drugstores and supermarkets, they give out these flu shots; and I daresay that no one gives their place up for their shot for anybody else who may be sicker. So we have a problem in that area.

But I've been reading the information on the avian flu fairly closely, and the run that we're having down here is on Tamiflu because it seems if that reaches our part of the country, or maybe I should say when, it seems that that's the only type of thing that would maybe be mute or cut the time of symptoms for such a flu, whether or not somebody gets the flu shots, since that's not effective. Can you give me any insight as to how you feel about all of that?

R. Strikas Well, the comment on your first statement is that if you're aware-and it's not your job to be policewoman-but if you're aware of organizations that are offering influenza vaccine and not following CDC guidelines, if you don't feel like following up on that-and it's not your job-I agree that you might ask your local health department if they're willing to remind people what the recommendations are. And again, the recommendations are not laws. And I've heard of some physicians saying, "Well, if I have someone bring their older parent in and they're 52 years of age and healthy, I'm going to not vaccinate them? Is that what you're telling me to do? Tell them to come back?" There's no easy answer for that. So it's a challenge to do these priority groups; and it's not a perfect system.

Regarding using Tamiflu, or hoarding it, or buying it; we don't have a policy, and we certainly haven't recommended that any anti-viral drug by purchased by the public and held in their medical cabinets or at home in anticipation of influenza use, be it avian or annual. We think, right now anyway, that's better done in a consultation with a physician. But certainly, people are looking seriously at the concept of not just for influenza treatment and prevention, the idea of should people have some essential medical kit at home with certain products, drugs, supplies in the event of a variety of urgent health threats because the concern is could government get products out to people quickly enough if they were to need to use it.

So that's being evaluated, but there's no recommendation to do that; and no one's going to suffer horrible ill effects if they take Tamiflu unnecessarily except the concern, as the previous caller said, about engendering resistance-that the virus has become resistant to these drugs if they're used inappropriately. And that would be my big concern. If people had this anti-viral or any antibiotic at home and didn't follow the rules for its use or consult with a practitioner before they used it. So again, there is no national guideline as yet. It's not recommended; and I hope any physician or practitioner prescribing such drugs that they realize they're going to be held at home, consult with people. And so, we don't recommend that be done. But if you're going to do it, consult with a patient and explain that this is to be done only if you give them some guidance on how to use it.

Yes, hello. Thank you. I don't know that there's an answer to my question, and it just regards the recommendation for the partial shipment. I don't really know if there's any easy answer for it, but we're in Santa Barbara and we're a large multi-specialty clinic. And our particular clinic does a lot of community service flu clinics. We loose money every year, but that's okay. We just do it as a community service. And the partial shipments always cause such distress because you're trying to set up these clinics for the community, for the churches, for some nursing homes, or businesses; and you never know when you're going-with the partial shipments it makes it so hard to plan that, as far as getting it. And so, I didn't know if there was any-in your consideration in the future for the recommendations-I don't know if there could really be something special done for places like us that do that.

We're similar to the very first question who we used to always use Avantis for ever and ever, as long as I've been doing this. Last year, they decided to go with Chiron because they thought they would save a fair amount of money. We all know what happened with that. And so, we also got pushed to the lowest tier; and we just tried to use some creative ordering to get

some vaccines. So, we're okay. We're going to be probably 5,000 or 6,000 doses short of what we normally get, which is between the 20,000 and 25,000. I don't really know if you have an answer to what I'm saying.

R. Strikas I don't have an answer except to acknowledge your concern, and it's the concern that underlies a lot of the questions here, and we've heard over the last few weeks, as well as in previous years. I guess the one thing I can say, and it's easy for me to sit here-who doesn't run a business or run clinics-but the suggestion would be that; well, we suggested the priority groups receive the vaccine so then running clinics for businesses or for situations where there might be fewer priority patients in other places such as senior centers could be delayed a bit, since we said delay the clinics. So that's an option where you take a smaller amount of vaccine and try to focus it. Again, it may not be as easy to do as some of us might think, but it's an option.

The other thing is that nursing homes, or why we put them in the priority group population-and they are indeed at very high risk of complications in influenza, some of you all recall these are older people who tend to loose antibody more quickly than do younger, healthier people; and vaccinating them a little bit later-like in November-is probably a better idea than doing it now because it gives them more chance of maintaining antibody and protection through the usual time when influenza circulates. So delaying nursing home clinics into November is a reasonable strategy, particularly if you have to ration your available vaccine.

Again, none of these are attractive options. The bigger answer to all of this is reviewing the distribution policy of each company with them; and we intend to do that a little bit later this year, and certainly well in advance of next spring's ordering season, and say, "Well, the partial shipments we still think are a good idea. Can it be modified to perhaps a larger amount of vaccine goes out in the partial shipments?" certainly, if there is more vaccine being sold, brought into the country by whichever source that would be a plus because there are over 180 million people in this country for whom the vaccine is recommended, either because they're high risk or because they're in contact with high risk people; and we're only trying to vaccinate-with the current vaccine-maybe half of them. So it would be terrific to have more vaccine, and that might allay a lot of the concerns and either let us get rid of partial shipments, or let the partial shipments be larger and more useful to you.

So, none of that really answers you're concerns; and I don't have a ready answer, that there are some things you might consider in setting up your clinics.

D. Hadzibegovic Thank you very much to our speakers, Dr. Ray Strikas and Ms. Kari Sapsis for giving us the opportunity to hear more about upcoming flu season. You can see our slides on the Web. Our Web site is www.bt.cdc.gov/callcap. And stay tuned for our next COCA conference call.