



TETRADYN

*Applied Bio Cyber Sciences
in BioThreat Protection, Monitoring,
& Emergency Response*

Practical Public Health Guide for Prevention, Care & Resilience with respect to H1N1 and other infectious diseases

An ongoing interactive document with contributions from
a team of medical, public health, and social service experts

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**Description of the CHIPS Volunteer Program
(Civilian H1N1 and Infectious-Disease Public Service)**

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Preface

In the interests of time and for the benefit of the largest audience, this document is not presented as a formal academic paper. There are many excellent technical papers, but this document is written for all people, not only specialists. Nor is this like what you are likely to find in CDC and related government publications which tend to be focused upon abstract program recommendations, plans, and lists of prominent people and agencies. There is solid, multiple, peer-reviewed medical foundation for everything stated here, and there are plenty of good references available online. The National Strategy for Pandemic Influenza (2006) [1] and the Final Report of the national Biosurveillance Advisory Subcommittee (2009) [2, and Appendix A] both clearly spell out that what this country has needed is precisely what has been developed in, through and by our consortium of scientists, doctors, nurses, and other professionals. This document is an Action Plan for You, the Citizen, and it is also a description of a program in which you can participate as a volunteer to help others. I and my associates will provide more of that information to anyone seeking it. Our interests here are (firstly) to present the maximum number of people in America and the World with solid and practical information for preventing or, in the

case of infection, caring and weathering through H1N1 and similar diseases. Secondly, we aim to help you to overcome fear, rumor, stress, and also to remove the deliberate or implicit misinformation that is generated by others because of financial, political or personal motivations.²

Here, we want to emphasize a very important point. Nothing in this document offers a “magic pill,” literally or figuratively. There are none. You should do your best to obtain medical care in the form of a doctor’s visit, a clinic visit, to get lab tests, to talk to your doctor or his official staff by phone or email, and if necessary, seek and accept hospitalization. However, if you cannot get what you want and feel you need, then at least do your best, using information here and elsewhere, to minimize the stress and severity. Don’t forget that there is, also, “9-1-1” – don’t be afraid to use it. Please don’t worry about the costs – take this from someone who has zero, essentially. Your life IS important. So are those of your family members and your neighbors and friends! The bills can wait, and the banks certainly can. Better to be alive and even bankrupt than dead or to lose a loved one. And never, never give up hope and faith. Do not give up on yourself, ever! Pray to your God, in whatever name and method, and do not ever give up!

To this end, we have created CHIPS to serve you, if you are in need, stress, and especially if you are feeling desperate about finding medical care. CHIPS = Civilian H1N1 and Infectious-disease Public Service. CHIPS is a volunteer organization growing now nationwide. It is not a company, and it is not part of any government department. We are receiving endorsements from many public and private people and agencies. CHIPS is primarily a networking service, using phones, faxes, emails and social networks. One of the main things that CHIPS volunteers do is help people to find out where they can get medical attention, information, vaccines, medicines, and special care, in their communities, because the physicians, clinics, hospitals, and others are both overloaded and frankly inexperienced at this sort of thing. CHIPS volunteers have the experience, knowledge, and the devotion to Care.

This paper is divided into many brief sections covering topics that are important to virtually everyone. Some of it may seem like common knowledge, some of it may be known already to you. However, we all need reminding. We all have certain bad (or non-optimal) habits that we need to control and/or cut out, in order to better strengthen our physical, emotional, and social reserves. This pandemic is not an individual thing and it is not just about you or your individual family. It can effect, it is already affecting, everyone, and that includes in economic ways. When a company cannot remain open because too many people are out sick, when food cannot be properly or safely produced or distributed because of too many workers out sick, when schools must be shut because of not enough teachers, when social conflict and crime cannot be addressed because too many police or firemen are out sick – this affects all of us.

We are not trying to paint a “horror story” picture at all. Our purpose here, and with CHIPS, is about reducing stress, worry, aggravation, and fear, because those are among the main factors in your body that contribute to weakened resistance by your immune system for handling H1N1 or any number of other diseases. Those are the factors that lead to you making mistakes, or being less observant about a child or other loved one, or your neighbor. Those are the factors that make any of us, from ages 1 to 100, male and female, educated and not so educated, make mistakes that can either cost lives or cause undue suffering and long-term effects. There are legitimate things to fear. The vaccine and the lack of it is not a big reason for fear and stress! The way you may have lived, eaten and behaved over your lifetime should be of more concern, but it is also not a reason for undue stress. The fact that hospitals are overloaded already is a concern but not a reason for extreme stress. The main thing you should fear is about anything that can reduce your ability to cope, to be “calm under fire,” to be alert and observant.

² Note that everything here is presently offered freely to you, the reader. We do need support in many forms, particularly to overcome apparent direct attacks on the distribution of this information and our medical technology by persons who are not acting in any official, legal or corporate capacity. We all know the problems we face in this era from such types and we do ask your patience and help.

We hope that this document, and the many others available online and through both print and video, the resources becoming available through our CRAIDO mobile labstations that should be soon going around the country, and the CHIPS volunteer program, will help You, your families, your neighbors, our communities, our Nation, our World.

H1N1 Explained, Simply

H1N1 is a form of influenza, but it has some peculiarities in terms of how it affects different members of the public community. These differences are not fully understood. Moreover, the virus is subject to rapid mutation, which is itself within the nature of a virus, particularly those of the influenza variety. Some of the differences and particular threats are fairly well known, and these are explained in this paper. We are not addressing much about future microbiological and genetic possibilities, but instead we are focusing on present actualities and what you can do to help yourself and your loved ones and also the general society in which we are responsible members.

There are many resources to learn details on the microbiology of H1N1. These are available widely. We at TETRADYN are doing our best to provide this information in easy, popular-accessible form, through printed and video (webcast, YouTube-style video clip) formats, both online and through our CRAIDO³ labstations, especially the portable ones that can go to shopping malls, neighborhoods, large factories and offices, parking lots, etc. Very shortly after the release of this paper, YouTube video clips, short and simple, will be appearing on a regular basis, and you also have the online resources including Blogs that are given in **Appendix B**.

H1N1 shows a disposition to have stronger effects upon persons who are young, ranging from infancy to their twenties, to women who are pregnant or recently pregnant, and to persons who have a variety of exacerbating other medical conditions, both respiratory, cardio-vascular, and other. This is not a real mystery in some respects. When your biological system is stressed by other demands upon the immune system, your circulation and nutrition, then the ability of the body to combat an influenza attack such as H1N1 is weakened. Additionally, your system becomes “taxed” and overburdened in its ability to fight off other diseases that can come up during or after an H1N1 infection, and these can be many, from pneumonia, to staph (especially MRSA, the most resistant form), and incidents of nearly any form of bacteria or virus.

The situation with children and youth and generally healthy, youngish, strong people, being more susceptible to H1N2 appears to be related in part at least to the fact that this part of the population has been far less exposed to similar influenza viruses. Thus, the body cannot react as fast to build up its immune defenses against H1N1 as, for instance, someone who may be in their 50's, 60's, or even older, and in good health, who has had some exposure to a variety of influenzas going back into the 1970's, 1960's, 1950's. There is plenty of solid medical evidence, many good papers, but I do not think you need to read papers and excerpts that are in almost a “foreign language” because of the technical detail. What matters to most of you is to know the basics and to be able to have the tools and resources for keeping yourselves and your families free of H1N1 and in good care if you do contract the influenza infection.

There is another interesting thing about H1N1 apart from anything concerning its possible and probable mutation into a more serious virus (e.g., by mutation on its own or in conjunction with the more deadly H5N1 or “bird flu”). This concerns the Respiratory System. This matter concerns anyone that contracts H1N1, period.

H1N1 shows a disposition, a tendency, to work its way deeper into the lungs. Your lungs are designed in a manner to optimize the exchange of oxygen into the blood and CO2 out of the

³ Community Rapid Response for Infectious Disease Outbreaks

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blood, and this is done through tens of thousands of tiny blood vessels that are inside your lungs. These parts of your lungs are very “finely constructed.” To make an analogy, the insides of your lungs are like gossamer silk compared to heavy wool or leather. A weird analogy, I admit, but I am trying to make this easily understandable to anyone.

Now your lungs, and mine, and everyone’s are filled constantly with impurities and toxins, many of which are unavoidable, simply because of Nature. In addition, many of us have accumulations of “crap” in our lungs from smoking, secondary smoke, air pollution, home pollution (cooking), and all sorts of causes including past diseases. Some of these accumulations are with us for the rest of our lives. But you should not be getting hypochondriac about this. We do have very beautifully and well-designed bodies that are meant to work and work, and to “work around” problems, and to self-compensate and adjust. This is why people can recover from even years of bad air-intake, and even be athletic. You will do more damage worrying about what you did, ate, smoked, etc. before, than from many of those effects, and one of many “rule #1’s” is to put aside the worrying. Imagine and visualize that you have a fresh, clean, wholesome, recuperating body. Don’t ever forget what are its conditions, its disabilities, its past hard work trying to cope with bad intakes, but use the power of your mind to help your trillions of cells who are truly, because of God’s beautiful design, working together as one whole community.

Enter now H1N1, a swarm of viruses, with a disposition to get its way, as a massive wave of viruses, into the tissues, into the cells, deep inside your lungs. When this is first happening, you are not noticing it! One reason is because a virus is not the same as a bacterium, or parasite, or a foreign cell from another body. It is not a “living thing” in the same way as cells. It needs your cells to do anything! It needs to first get into your cells and start using your DNA, your protein, your cellular “stuff” to turn that cell into a factory making more and more of itself. So, this does take a little time, and that time is critical for your body to build up its defenses and countermeasures.

After a point, with the rest of your system weakened by the virus overall, and by your weakened behavior (nutrition, sleep, care, stress), and by possible other infections that are bacterial or viral, and simply “waiting” for your system to be overstressed by the H1N1, you now can start to feel the effects in your deep lungs. Here is where things can get very, very bad and very, very fast.

This is particularly the problem with children who may not be able to properly express what is going on (infants, young children), or with others who are older and because of their strong feelings, pride, and other emotions don’t want to talk about these things in detail, or with others who simply for whatever reason are not receiving the proper attention, care, belief, and help from their parents or other guardians. But these problems can occur in people of any age, social group, education, intelligence, period.

So what we must do, each and every one of you, is to be Extra-Aware about each level of change in a person’s condition – especially with the respiratory system, but of course, not only that! In the case of children, you must pay extra attention to their breathing – when active, when sitting still, when sleeping. You must also really follow the guidelines given in the sections below, to help breathing when it is under stress from something like H1N1 !

Do you begin to see the “common thread” in what we are saying here? Observation and alertness is Key to prevention and to care and healing. And those of you who do not get sick, you do have a mandate, an obligation, for doing your best to help others. It is part of the key to your long-term survival and happiness to help others whom you do not even know or like.

Preventive Measures You Can and Should Do

Top of the list: There is no reason to panic or increase your stress level and that includes lining-up for hours and days for a vaccine.

What people need to do is take preventive measures and this means doing a number of actions simultaneously. Yes, it is effort, it requires attention, but it is better than panicking or spending hours in lines outdoors, risking more infection, and reducing immune strength.

1. Be suspicious about possible exposure. You know where you go, where you have gone. Talk with others with whom you live and work. Be observant. You need to assume that if someone has been out in public, in possible close contact with someone with H1N1, that they may have it, and may be at a stage where they can transmit it to you. But this does not mean changing your social and interpersonal activities, or doing anything whatsoever to impose unnecessary self-quarantine or forced virtual quarantine upon someone else!

However, don't let this suspicion turn into something hostile or socially negative! There is no reason for that, ever. Let's not have any behaviors like what we saw in the 1980's directed toward HIV patients or in the more distant past toward people suffering from leprosy and other illnesses. "Suspicion" here means observation. You can have a wonderful, smiling conversation with someone who has H1N1 or signs of it through coughing or sneezing, but at a safe distance, and not make that person feel bad – remember – the psychological states of you and him or her do make a big difference in how we all stay healthy and regain health.

2. MINIMIZE Close Contact. Control the direction of your breath intake and how you exhale. The influenza virus can be transmitted only by coming out of an infected person's body and then coming into another person's body. Now there are many ways this can happen, but by far and away, the most common, the easiest, and practically the only usual way, is through something that is exhaled by mouth or nose. This material, an exhaled breath, a cough, a sneeze, can go much farther than you think. So distance is paramount, but not isolation!

One thing you need to do is minimize oral contact. Sorry! Many of us have someone whom we want to kiss or to be kissed by. If there is any kissing, there is likely oral exchange of some bodily fluid. remember also that the virus does not "live" on your skin, on your hands, or in genitalia, but let's have some common sense here – people touch their nose, their face, their mouth, for lots of reasons, unconsciously. Viruses can get onto hands, and then onto other body parts, and onto dishware, utensils, handles, counters, etc.

So you need to practice some basic, simple, but consciousness-demanding practices to minimize the possible exchange of viable viruses from one person to another.

You can have good communications, relations, and even intimacy without being all over each others' faces. And as for sex, even though it is one of the least likely ways for H1N1 to go from one to another, it makes sense to use safe sex measures and even some alternatives which, by the way, can spice up the relationship with some variety. I need not say more about that. Just avoid what can be exchanged through the nose and mouth.

3. Eat well and eat properly. This includes normal, balanced meals and vitamins. Focus on balance, and that means type and quantity. Many of us eat poorly. We do not get proper nutrition, and often we get our nutrition through quantity. Well, quantity means Extra Work for Your Body, and extra work at processing foods and other things we put into our bodies means less energy for your body to be directing itself toward the work of its immune system.

There are no magic pills, no magic vitamins, no magic herbs, no magic meals.

Balance

You need to have balanced, non-excessive, and sufficient meals. You should be eating three times a day and not too much. If you need to be putting something in your mouth, try tea, black or green, both are good for your health. Even coffee is OK, just not to the point where you are a

zombie. But eat sufficiently, good protein and balanced carbohydrates. Let your system work easily and efficiently.

Soups – you cannot overestimate the value of good soups and the basic broths. Best if they are made at home, but if not, get the best quality. Don't skimp at the store, please. The best are with meat or chicken broths, and with vegetables, including, again, those dark, green veggies, and beets, too. Borscht, whether Russian or Jewish in style, is a particularly good one. A dab of sour cream on the top will not be bad for you!

Water – there are many cities in the USA with too many chemicals including even arsenic and other heavy metals. Preferably, buy yourself a BRITA (or similar brand) water filter system – the cheap kind, a plastic one-gallon container, and replaceable filters. Drink plenty of water, but try to drink cleaner water than you have been doing!

Juices – you cannot go wrong on virtually any juice so long as you don't have a specific allergy, and also, just don't do it to excess. But particularly of benefit for building and maintaining your immune system and general anti-H1N1 strength – Orange, Apple, Cranberry, and other Berry juices. Skip the exotica and high-priced stuff. Get the basics. With apple juice, the unfiltered darker type is better. Avoid "juice drinks" – too much sugar and water. It is better to buy the more expensive pure juice and then dilute it at home with water than to drink the cheap garbage.

Your Stomach and Intestines

Your intestinal (GI tract) system needs to be cared for, in advance and especially if you have H1N1. Do what you can with non-medical means preferably to have regularity. Eat fibers. Drink prune juice. Eat prunes. Drink one tablespoon of good olive oil in the AM and PM if you have problems of constipation. Take a couple of tablespoons of mineral oil before bedtime – that is another option. But don't do everything at once or overdo anything!

Vitamins and Minerals – you need your balance, and you definitely do not need to overdo things.

Vitamin A&D – most Americans get too little. Take one a day. But do not overdo it! Excess accomplishes nothing except putting you at risk for other complications including poisoning from vitamin A in particular. A good choice is to take one small supplement daily, and eat plenty of carrots, and get as much sunlight outdoors as you can manage – watching out of course for excess UV. And tanning booths – forget those!

Vitamin B complex – ditto!

Vitamin C – I recommend 500mg x 2 each day, for a total of 1000mg daily, but not all at once.

Iron – one a day or even one every two days. Judge how much you are getting from other iron-rich sources such as the all-important Dark Green Vegetables you should be eating every day. Women – please take some (not excessive!) iron supplements during the window of time around your menstruation.

Zinc – there are strong arguments that taking zinc supplements are good and in particular, in combination with vitamin C, for avoiding and building up strength for the common cold and other non-influenza respiratory viruses. I recommend you take zinc, but again, in moderation.

Melatonin – this is something your own body produces in a gland near your brain, but it starts producing less and less after the age of 25-30. Its production is also affected negatively by staying up late at night or working a night shift. I strongly recommend that people over the age of 25 take from 100mg to 300mg per evening (or before sleep). there are no known negatives or allergies. there is plenty of literature on it. A magic pill, again, it is not. But it helps to boost the overall system strength, and it is a natural relaxant. It is not like valium or diazepam or some other anti-anxiety drug, anti-depressant, or barbiturate, but you should expect to feel a little sleepy, a little sooner, after taking it.

Vitamin E and pretty much all the rest – do things in moderation. Take the time to read about what you eat and what those foods have – all of this is freely available on the web. Don't take vitamins and minerals just for the hell of it. You can harm yourself with excesses.

Special Concoctions you can buy at all the stores and markets – I recommend against them, period. You don't know all that is in them, they can be confusing, and some herbal compounds are simply not good for the general population. Stick with the basics! Your body is very strong, very well designed, and it can accommodate diseases like H1N1, but if you hit it up with strange combinations, you are stressing your body's ability to be balanced and to be able to produce its white blood cells and to process waste. Remember, your kidneys, your liver, your whole intestinal tract, is being hit hard by H1N1 or any similar influenza. You need to not throw more poisons at it. You also do not know what possible allergies you may have to different "herbal" compounds.

FOODS

In general, I recommend you include these following foods in your diet – just pay attention to Balance, and watch out for allergies:

Dark green vegetables – spinach, broccoli, kale, green onions, brussel sprouts, mustard greens

Seaweeds – you can buy them almost anywhere. Use almost as a spice or a "light vegetable" in soups and salads. The mineral content is beneficial to you. The taste may be a bit strange to some, but look, the objective is to build up your health and resistance to H1N1 and other diseases.

Miso (just watch out on the amounts – the salt content)

Brown rice

Lentils and other legumes including red aduki beans

Non-hormone-treated meats, poultry and dairy products. I recommend "Trader Joe's" as a store, not because of any financial interest or gain, but because they have good stuff, good prices, and great service.

Fish, particularly salmon and tuna but fresh, not canned. You may do well to avoid, as a precaution, any uncooked seafood such as oysters. It's not that they are bad, nor any sushi, but you do run the risk of some contaminants, and that will weaken your ability to fight off H1N1.

AVOID FAST FOODS AND JUNK FOODS LIKE THE PLAGUE – these wear down your system, they reduce your ability to have a strong immune system response to H1N1 and similar diseases. Just avoid this crap, because it will put more of a load on your system. Would you go driving your car around with the parking brake in the "engaged" position? That is what you are doing to your body with poor quality food. Yes, I am talking about more work, and sometimes, but not really, more cost (most fast foods are as expensive or more expensive, per nutritional values, than food you get at the supermarket and eat raw or cook at home.)

BE CAREFUL ABOUT SPOILAGE. I myself have been in the habit of eating all sorts of things that will make other people sick, because I seem to have an "iron stomach." That is (was) my bad habit, my foolishness. Don't eat it if it is too old or if you have a feeling that it may be spoiled! If you get food poisoning, first of all, you can die just from that, or end up in the hospital and barely make it out alive. Secondly, any stress and strain, my friends, this brings down your immune system. Be good to your immune system and it will work its best for you!

4. AVOID SMOKING and that includes secondary smoke.

There is nothing much to say here because it is so very basic. Smoke of any sort going into your lungs causes stress and extra work and it also weakens those sensitive lung interiors I mentioned earlier. DO NOT SMOKE, DON'T BE AROUND SMOKE, and that goes for smoke from barbecues, fireplaces, oily cooking, and simply anything. Even incense and too-strong aromatic candles. But above all, avoid any smoke that you can see and that includes all tobacco and burning wood fires, etc.

5. AVOID anything approaching excess drinking - Never get "Drunk". This does not mean going "cold turkey" and being a total "teetotaler." But it does mean keeping your alcohol content to a minimum. Actually, I believe that for most people, in good health, a glass of good quality red wine per day, and even a slow, drawn-out shot of good whiskey or brandy is not harmful and can be good. That is my personal feeling, and I do not "recommend" that because it is simply not for everyone, and no one can prove its benefit.

But drinking any quantity of cheap, funky low-quality beer or wine or whiskey is bad for you, plain and simple. And drinking too much, meaning, to the point where you are inebriated, and that means even close to the point of legal intoxication – this is definitely not good any time of your life, in any condition, and it is particularly harmful if you are trying to have a strong, "alert" immune system for fending off H1N1 and for defending and healing you if you have it.

Also, the effects of having a drunk person around in the house with a sick child or mate, and even the smells of the excess alcohol – this can be harmful to the person who has H1N1. So just cut it out and definitely cut it down – and you know what? You will probably find yourself drinking less afterwards, and that is no harm now, is it?

If you are feeling so stressed out that you feel you "need" that drink of alcohol, try the following:

Go for a walk outside

Talk to a friend, or call someone on the CHIPS team (info on this further below in this paper)

Talk to your local county or city mental health hot-line

Go prepare something interesting to eat

Surf the web for something interesting and positive

PLAY with your kids or spouse or significant-other if you have one

Go do some community service, somewhere

Drink tea, coffee, juice

Or, if after all these suggestions, you simply are going to have that drink, then take that alcohol and do the following: dilute the beer with lemonade – the Brits do it, or mix the wine with some juices and turn it into a 6% "Sangria", or pour only half that shot of whiskey and add something else. Anything.

You can control your drinking, your eating, and any smoking. YOU CAN !!!!!!!

6. MINIMIZE stress, aggravation, worry, anxiety. What more can I say here? Whatever is the cause, you need to minimize it. Every bit of the "fear and flight" mechanism that is built into our systems (for good purposes, like dealing with attacking bears and saber-tooth tigers) is cutting into the strength of your entire body to resist infection and to fight it off.

Make every possible conscious effort to not argue, to not do anything that gets someone else angry, hostile, stressful, worried.

Make use of CHIPS and also your other community social services agencies. They, and we, are here for you. Become a part of something that helps others. Look, with all the problems in my own personal life, with all my own sufferings, losses, and disabilities, I am doing this, I am being

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Chief Scientist for the leading bio-diagnostics-response company in the nation, I am organizing and serving on CHIPS to help people find doctors, hospitals, clinics, help for H1N1, and I am trying to reach out to talk with people who are thinking about committing suicide for some of the exact problems that I have dealt with or face. **YOU CAN DO THIS TOO** and you will feel a lot better for it. You can help people stay out of crime, prostitution, self-abuse, family abuse, prison, gambling, drunkenness, and a lot of other things caused by themselves or by selfish and inconsiderate other people. And doing so will make you feel better in a very real way. Trust me on this one!

Reduce your stress and your whole system gets stronger, more resilient, more sustainable, more able to protect yourself and your loved ones against microbes and viruses, or against attacks by mean people.

7. Avoid rapid changes in heat and cold and exposure to cold-inducing elements (e.g., cold rain). This may be a hard one to understand, but it is very important. Our bodies are well-designed to handle all sorts of wild conditions of heat, cold, wet, dry, windy, etc. Of course, you need to avoid extremes – that will wear down your system and your resilience. But something that you may not be considering and that is important concerns what can best be described as rapid non-linear changes. Going from a hot or warm environment to cold, without properly “bundling up.” Leaving body parts exposed, especially around the head and the mid-torso. Breathing in too fast, too hard, very cold air, or very hot air!

You do not realize perhaps how simple it is to take care of yourself in this very important area, and especially for children!!! Make sure everyone is adequately dressed when transitioning from one environmental condition to another. From cold to hot or vice versa.

This really comes down to good old-fashioned common sense.

8. Taper down and minimize the physical exercise that puts stress, heavy breathing, sweating, and other heavy loads on your body. You can resume the marathon practices, the heavy workouts, LATER. You don't need to stop entirely! You just need to “shift gears down.” Make sure this is something you are doing not only for yourself but for any Children! Help them to have some other activities that can be real, physical activities, but less strenuous.

9. TALK. Especially to your children and other family members. LISTEN. HEAR. Pay Attention. Nobody comes down with the flu without a gradual set of symptoms. If they are pushed off, not addressed, this can be the matter of life and death. Take care also with the most important at-home treatment - REST. Reduction of physical exhaustion. Plenty of sleep, warmth, and clear, clean air. Cut out not only the smoke but the grease and any irritants from cooking.

10. If you think this sounds simplistic, just consult the medical books and your doctor, and pay attention to history. Remember - not everyone died from the 1918 Flu. and we are not, so far, facing that kind of dire situation. We may, especially in places where people and local agencies ignore the warning signs and the offers of help, but so far, we look like we are headed for a big pandemic that does not kill a lot of people and that is not so rough for people who follow the guidelines such as are expressed here and in many other sources.

Now we need to address some other preventive and countermeasure topics, and the matter of self-care and family/friend-care for persons who do come down with H1N1.

Vaccines

This is an incredibly short section, and I hope you will all understand why. There are vaccines for H1N1, and the following holds true presently:

1. They are in very, very short supply, and there is no point right now to raising a ruckus about blame, conspiracy, etc. – they are simply in short supply. You have to accept the fact that there will not be enough for all those who want it. You also need to accept the fact that the risks of side-effects are far outweighed by the benefits, for those who are most at risk – children and youths and pregnant women.

2. You can get yourself sicker, and also get H1N1, more likely from the stress you create for yourself, and/or from spending hours and hours or days in line, generally outside under inclement weather conditions, and with people who may include sick people- sick with H1N1, or with something else contagious. I strongly recommend that you do Not get into the line-waiting phenomenon. You have all seen photos and news clips of people standing in line, often with their children, from 6:00am and for hours, in the cold rain, hoping to get a vaccine. That is plain Stupid.

This is also why we have created CHIPS in order to help those people who want the vaccine, or medical care, or medical advice, to get connected, networked, referred, by our volunteers, to doctors, clinics, hospitals, and live people at places that can set them up or take them in. What you don't need is a busy signal, answering machine, or bla-bla-bla automated response that does not help you.

3. If you want the vaccine for yourself or a family member, do what you can to arrange an appointment. But don't get yourself sick and more vulnerable, or contract H1N1, by standing hours in some lines!

4. we designed CRAIDO - Community Rapid Response for infectious Disease Outbreaks – as a network of both stationary and fully mobile (trailer based) labs to give fast (2 hour) diagnoses, accurate diagnoses, for H1N1 and other related infectious diseases, and to provide information – live, in person, and by webcasts and broadcasts on the sides of the CRAIDO stations. We had hoped and tried and done our best to get these out into the streets and cities by this past Summer of 2009!!! We were stymied and blocked, frankly and truly, by bureaucrats and politicians, yes indeed, but especially by so-called investors, venture capital firms, private equity firms, and essentially “Wall Street.” We are not going to waste your time with the sad story about those “losers” who could not see the value and importance of CRAIDO and the whole CUBIT Suite of healthcare and public health tools for You. This is just another sign of our times about rampant greed, avarice, and selfishness, whether it is in a venture capital clique or a bureaucracy in Virginia.

What we must do is overcome those obstacles, and we are doing this now with the Virtual CRAIDO, which is CHIPS – Civilian H1N1 and Infectious Disease Public Service, a volunteer organization.

4. If you do not want the vaccine because of known or prior bad reactions with other flu vaccines, you should think carefully about getting it, and perhaps under your circumstances, you will be less likely to contract H1N1.

5. If you are afraid of the vaccine because it has not been well-tested and because back in 1976 there were specific problems with a totally different vaccine, a totally different era of production quality and testing, and a different influenza virus (in spite of the shared name of “swine flu”), then you are welcome to not get the vaccine, but you really need to examine the trade-offs, and you sure better make a big effort to follow the other guidelines in this paper and in many others!

6. There is no solid scientific evidence that the current H1N1 vaccine is harmful. Could this change with new research and new findings? Yes! Do I and many other scientists - who are definitely not under pressure or with any possibility of personal or professional gain from the vaccine business – of the opinion that it is harmful or will be found to be harmful? The answer is No. Could there be some new unforeseen side-effects and consequences? Yes, but the probability of such is very low. Am I myself going to get the vaccine? Probably not, because I believe I will do alright, at worst be very sick, and I would rather see the supply be available to those who choose to get it.

7. No one should be forced against their will or with any physical or psychological threat to get the H1N1 vaccine. Is there evidence that this will happen? So far, I do not see such, but I do see some extremely disturbing trends and actions going on in certain circles of local and state governments, particularly in Virginia, that give me grave concerns. However, I do not believe that the federal government would embark on some of the feared “forced vaccinations,” home invasions, etc.

8. Could events arise where it becomes very, very clear that the vaccine is alright, and that massive numbers of people should be vaccinated in an organized program that involves going to schools, workplaces, etc.? Possibly, but here, let's get base to point # 1. As far as the USA is concerned, unlike apparently China and several other nations, we are very unprepared as far as the vaccine supply! There will NOT be enough for all those who want it, during this present pandemic. That is pretty obvious. There are many reasons. Were CUBIT and CRAIDO supported and not blocked by some (Lockheed-Martin for one, and a whole slew of bureaucrats and private-equity/venture capital investors who said there is no pandemic, will be no pandemic, this is not good business, this is not profitable enough, etc.), then I do genuinely believe we would all be in a much better situation at present. Vaccine production may have started earlier, with better knowledge of the specific gene sequences required. Better information would be in the hands and minds of many local, state and federal agencies, and hospitals both private and public, and with general-practice family physicians, if CUBIT, CRAIDO, the VSRB, and the MADIT methods were fully deployed, or even partially/widely deployed Today, and Yesterday.

But it does no good to cry about it, complain about it, mope about it. What is the best thing that can be done now is for you, the reader, to understand what is written here and in the writings, papers, videos, presentations, educational cartoons, etc. from many others, and to do everything within your power to help us to get CUBIT, CRAIDO, VSRB, MADIT, and everything into the public's hands and into public service.

Go read Appendix A here. That is the final report produced by a special CDC committee. Several \$millions of dollars have been spent thus far for a group of high-profile, big-name experts, many of whom are actually good scientists and professional, to produce a tiny several-page recommendation report. What they are recommending is 1:1, precisely, exactly, what we at TETRADYN and within the CUBIT Working Group (CWP) of university, national lab, private, and public experts have produced, are working on, and are trying to put into your hands and for your service.

Help get CUIBT and CRAIDO and everything into operation, and you will be doing the best thing that you can to help protect your family, friends, neighborhood and community.

And by the way, I, Dr. Dudziak, am publicly willing to take a salary of only \$1.00 per year, even though I am not rich, and in fact poor, in order to see all this come into service for America and the World.

Disinfectants, Masks, and Related Countermeasures

This is a really simple thing to talk about.

1. All the disinfectants, hand-wipes, hand-washes, surface sprays (Lysol, Clorox, you name it) are not bad. They do disinfect. For a little while. Minutes. Not much longer.

2. There is a very good surface antimicrobial treatment that is called BioProt and it happens to come from us, TETRADYN. Actually, the base chemical comes from Dow and has been around for over thirty (30) years. It is in use for surfaces, for plastics, for clothing, for astro-turf sports playing fields. It is EPA approved, and it is far better than Lysol, Clorox, and all the similar “stuff” being widely advertised on TV, radio, in print and on the web. Why? Because BioProt stays in and with the surface for the lifetime of the surface, barring abrasions, repainting, loading over with dirt, and other obvious interferences.

3. All well and good, but now we cannot go putting BioProt into every home, school, office, day care, nursing home, etc. We have been trying for the past two years to get things to “click” with investors and the ones with whom we spoke simply could not understand the health or financial value of our BioProt. We did get headway with some places and did some great work for them, but then there were states like Virginia where the heads of the Health Depts and Schools and Social Service Depts. simply refused to even meet or talk to learn about it.

4. Well, now we have our H1N1 Pandemic. What I suggest is that for the future, think about having our Bioprot on your surfaces, whether they are at home, on shopping cart handles, on doorknobs, in hospital rooms, on subway and bus seats and poles, etc. But what about for Right Now?

Well, you have to go back to all those preventive measures and actions described above, and re-read this, and do the best you can with what you have. and here I am going to tell you something point-blank about protecting the surfaces of your body and your world – home, office, anywhere. This is not going to make money today for us, but it is going to keep you healthier and at lower risk of getting H1N1 or a lot of other infectious diseases.

WHENEVER YOU HAVE SOME TRANSITION OF PEOPLE, OBJECTS, CONTACTS – WASH UP!

Sounds too simple? Or does it sound like too much work and remembering to do things? It's neither of those.

You come in from the outside, you wash your hands.

You do something in the kitchen, you wash your counters.

You do not need to be using all sorts of expensive and toxic-in-themselves sprays and chemicals! Wash with regular soap, use water, and wipe it over a few times to get the soap, the substances, and also the excess water off.

You go to the bathroom? Wash your hands.

You sneeze or cough? Wash your face and your hands.

You handle any food? Wash the food, use clean utensils, and just use your common sense.

You have a drink? don't use the old glass used by someone else, or even by yourself.

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You do not need to be “obsessive-compulsive” about this! You don’t need to use excessive amounts of soap. You do need to change your washcloths regularly!

Use hot water, too, and spend the time to make sure you actually get at the whole surface of whatever it is you are washing.

Come on, folks, you all are intelligent enough to know how to do this. You can do a huge good for your family, yourself, your co-workers, just being attentive about washing yourself and surfaces. It does not take a lot of time, it is cheap or hardly any cost at all, and soon it will become a simple automatic habit.

MASKS and DRUGS

Stockpiling on masks, just like Tamiflu or any other medication, is pointless, economically not smart, and it causes trouble for others who just want something themselves.

IMPORTANT – if you take too many meds, especially in advance, you are doing yourself harm, no other way about it.

Masks can be useful if – IFFF – you need to be in an environment of close, less than 1m, frequent breath-exchange contact with people who have the flu, or if you are working or being around an emergency room or other hospital facility. But you don’t gain any added protection, and in fact you can hamper your breathing, by too much mask-wearing if you really are not in a place and situation where it can affect you. Now about airplanes and trains, that does create some open questions that need to be addressed by talking with the airline company, by being observant of where you sit, and in the case of subway trains, distance from the persons who may be sick does matter.

So, you may want to carry a packaged, clean, sterilized if you can, mask in your pocket or briefcase or purse.

But remember this important point – in previous pandemics, many people got sick who were wearing masks, because of how they handled them afterwards! If you have a mask that you believe (and you have to make this assumption for safety’s sake) that it has infection on the mask, then you must be careful at how you remove and dispose of that mask! You cannot just stash it for later use! And you should wash your hands after disposing of the mask.

I recommend, by the way, the approved masks that can be found in stores like Home Depot and Lowe’s, and they are sufficient. You do not need to spend a fortune and don’t let con artists rip you off.

Care for the Person who has H1N1 or related illness

This document is still not finished but we want TO GET AT LEAST THIS MUCH OUT TO YOU ASAP. THE REST SHOULD BE READY BY TOMORROW the 29th of October.

Here are the key points for this section.

Give the sick person your utmost attention and then means watchfulness and good emotional care plus a warm environment, no shocks through changes in temperature, and good food that they can eat. Plenty of fluids, of course, but not an overdose. Read back up in the earlier sections.

Most of all, get professional medical attention so that tests can be run, and that means on the whole system of the person. You cannot do this all yourself at home!

Now here is where CHIPS can help, because if you are having trouble in finding a doctor, or even a registered nurse, or a clinic or hospital, then perhaps, possibly, by contacting us, we will be able to jump into looking things up and helping you get the connection made. CHIPS does not provide medical care. CHIPS cannot guarantee finding you fast medical care. CHIPS does not administer or supply any substances or materials. CHIPS provides information-finding and networking assistance.

See the contact info for CHIPS below.

And please, look in on your neighbors. Communicate. Get to know who is who, and who is well and who is sick. When this activity spreads through a community, whether it is a neighborhood of houses or apartments, you will see good things happening!

(for now, also see some articles and papers accessible through Appendix B)

Preventive Care for those around an Infected Person

This is very very important because the person(s) around an infected person need to be healthy not only for their own good but in order to give good care to that sick member of the family or neighbor!.

There will be more written here tomorrow. For now, it is really simple – do the things suggested and advised above, make use of the CHIPS team and resources, and take extra precautions about the people who are not sick. This can mean staying home from work or school. You can work it out with your employer or professor or teacher.

Keep that house sparkling crystal clean! Put stuff away, wash dishes quickly, and create a GOOD ENVIRONMENT because it is not just the physical things that matter but the whole feeling, the atmosphere, the ambience.

Everyone needs to have adequate sleep and rest, and no dissonance, no noise, no arguments – create an environment that is like you would want to have if you had just brought home a new baby. Now that sick person is like a baby, needing the utmost care, and so also are the rest of the household.

(for now, also see some articles and papers accessible through Appendix B)

Minimizing the Severity At Home and in supplement to or in cases without Professional Medical Care

Again, there will be more written by tomorrow here in this section.

Go to the CHIPS site that is being set up, feel free to call, to email, to contact CHIPS volunteers.

Most of all RE-READ THE LAST COUPLE OF SECTIONS. If you are in a situation where you don't have the physical access to getting to a doctor's office, or hospital, then don't "lose it" emotionally and go all to pieces, because that will give you less strength, less concentration, less ability to help.

You have the access to 9-1-1. Use it sparingly, but don't be afraid to use it as a last resort.

You have the access to other known resources in your area. There are phone numbers maintained and manned 7x24 for mental health, for poison control, and while these are not the “right places” they can help you all the same. And we hope that CHIPS can have enough volunteers to help as well. I can promise you that if I can answer the phone, I will spend the time to try to help, and I believe that every other CHIPS volunteer will do the same.

(for now, also see some articles and papers accessible through Appendix B)

Working Together as Families, Neighborhoods and Communities

I think we’ve said a lot that helps you to understand this. You need to be open to asking, and receiving, to offering, to doing, for the people who matter directly and closely in your lives, and for strangers.

We need to reverse the awful trend of the past few decades of living isolated lives not doing anything socially, often (certainly not in all cases, but in many!) with the people “across the street” or “next door” or “across the hall.”

Just be more receptive and more active. You will be surprised at the good results and how they will grow after all this pandemic is over.

We can change a lot of things for the better in our society, starting right here and now with something that is affecting all of us – ALL of us – even if we are not individually sick.

(for now, also see some articles and papers accessible through Appendix B)

Working to Help the Public Health System – Hospitals, Clinics, Doctors, and Local/State Govt. Agencies

Everyone should realize that all these organizations are genuinely having our collective best interests in mind, especially among the “worker bees” – the doctors, nurses, technicians, receptionists, drivers, helpers. Almost all of the states and localities are doing their best, and that goes for the private sector as well.

Be patient with them. Be helpful to them. Say thanks. Smile. Be nice.

We have had 99% good experiences with all agencies and departments with whom we have been interacting. We are hopeful that those who have rebuffed us in the past will “come around” and realize that we have a lot to offer them now.

but we have no anger to anyone, and neither should you, because remember – those healthcare workers, those docs, nurses, etc., are just regular human beings like you and I.

(for now, also see some articles and papers accessible through Appendix B)

Advancing the Principles of Self-Care-with-Social-Care

The main points that will be made here are also pretty simple:

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Be aware. Keep records. Take notes. About what? About behaviors, feelings, pains, temperatures, vomits and other bathroom-related things. About medications taken, and about what foods were eaten.

Talk with your neighbors and with strangers. Share informative information like everything that is here in this paper and about CHIPS, and about the pre-established organizations and agencies that are in your community.

SPREAD KNOWLEDGE just like the virus spreads infection.

YOU CAN BE “viral” IN A GOOD WAY with information and useful facts.

SPREAD ASSURANCE, CALMNESS, and a reduction of anxiety and fear.

WE CAN HELP EACH OTHER TO WEATHER THIS STORM VERY WELL. And by doing so, we will all come out of it with a stronger feeling of our own self-worth, our self-strength, and our collective, social, spiritual power to solve problems of other sorts – economic, political, natural.

(for now, also see some articles and papers accessible through Appendix B)

CHIPS

CHIPS (Civilian H1N1 and Infectious-Disease Public Service) is a volunteer program established by Dr. Martin Dudziak and TETRADYN Applied Bio Cyber Sciences, Inc. It consists of individuals from around the world who are volunteering their personal time and resources in order to ask the phones and emails, the chats, the faxes, and to help in mainly information-providing, information-gathering, and information-supplying ways so that people in need, or in anxiety and fear, can get the information and in particular the medical care that they want and deserve. This can be in the form of helping them to find where to get an alternate doctor, clinic, or hospital, or where there may be vaccine supplies, or medicines, or masks, or simply good food. CHIPS does not provide anything physically, and we are not all medical professionals, and we do not give out medical treatment. We are, in essence, a LIVE form of a social network, and we will do web searches, and data look-ups, and referrals, and we will do our best to help You.

There will be a main website, still under construction, at this URL:

<http://chips.tetradyn.net>

A Brief Word about Us

All of this work, everything that is CUBIT, CRAIDO, VSRB, MADIT, NomadEyes, and now CHIPS, comes from the dedicated collaboration, cooperation, and thus-far unfunded efforts of TETRADYN Applied Bio Cyber Sciences, Inc. (<http://tetradyn.com>) and the non-profit Institute for Innovative Study (<http://instinnovstudy.org>), plus a growing and rather large group of professionals in medicine, healthcare, biology, biomedical engineering, epidemiology, virology, and other fields from several institutions worldwide.

We provide acknowledgements to some people in Appendix C, herein, but with the proviso that we do not intend, and we apologize in advance, for any omission or error about leaving out due credit to someone upon whose work, labor, help, advice we have relied, and learned.

We thank people who have helped with their minds, their souls, their physical work, their travel, and their funding support. We do ask for serious support now, for all of our benefit, particularly from elected officials, members of the social service, local health, and legal fields, and from the financial sector, hoping that by now there are at least a few people in that financial sector who will understand the importance and value and merit to support this work going forward for our society's benefit.

NOTES

The bulk of our references and bibliography is on the websites listed in **Appendix B**. There is also a substantial list of acknowledged contributors, partners, associates, and experts upon whom all of our work draws and rests. They are listed in **Appendix C** and their works are easily found via the internet.

Here are a few particularly referenced in the text.

[1] National Strategy for Pandemic Influenza – Implementation Plan, Homeland Security Council, May 2006, US Govt. Printing Office, ISBN 0-16-076-75-5

This is interesting, but mainly a lot of bureaucratic verbiage – plans and recommendations about how to make future plans and recommendations, committees, councils, and study groups. Please contrast this with what we have produced with CUBIT, CRAIDO, and now CHIPS

[2] The Report of the National Biosurveillance Advisory Subcommittee (NBAS):
Improving the Nation's Ability to Detect and Respond to 21st Century Urgent Health Threats: First Report of the National Biosurveillance Advisory Subcommittee, delivered to the "Advisory Committee to the Centers for Disease Control, Atlanta, GA, attn. Dr. Eduardo Sanchez

Major contents of this report are reprinted in **Appendix A**, below, along with highlights and notes that point out that everything this NBAS group advocates, the results of their findings, point expressly and directly to what we have produced and are advocating, teaching, and trying to get into the field today, right now, for your public health and benefit.

APPENDIX A

Here are excerpts from a major CDC report that validate and in fact recommend precisely TETRADYN's CUBIT⁴ research, architecture, technology and products (including CRAIDO⁵, VSRB⁶, and MADIT⁷)

I can't think of much better words than from the NBAS which consists of many recognized experts in public health, epidemiology, weaponized and natural biothreats, and general medicine

Highlighted in bold and color are texts that specifically match up with and support what TETRADYN provides TODAY.

Improving the Nation's Ability to Detect and Respond to 21st Century Urgent Health Threats: First Report of the National Biosurveillance Advisory Subcommittee

**Report to the Advisory Committee to the Director, CDC
April 2009**

April 30, 2009
Eduardo Sanchez, M.D., M.P.H., F.A.A.F.P.
Chairman
Advisory Committee to the Director, CDC
1600 Clifton Road NE
Atlanta, GA 30030

Dear Dr. Chairman,
On behalf of the National Biosurveillance Advisory Subcommittee (NBAS) and in keeping with our mandate to ensure that the federal government is enhancing state and local government public health surveillance capability, I am pleased to submit the report *Improving the Nation's Ability to Detect and Respond to 21st Century Urgent Health Threats*. The report provides recommendations for action that describe how the United States could deploy people and technologies at all levels of government to improve the collection, flow and interpretation of data in a timely way as a means of preventing and mitigating threats to the health of communities. In this report, NBAS identifies a matter of great importance to U.S. national security, namely, the

⁴ Coordinated Unified Biothreat Identification and Treatment

⁵ Community Rapid Response for Infectious Disease Outbreaks

⁶ Virtual Sample Repository Bank

⁷ Mutation Anomaly Detection, Identification and Tracking

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A Practical Guide to H1N1 and related Public Health threats and for Prevention, Response, and Care Validation and implicit support and advocacy of CUBIT, CRAIDO, VSRB and TETRADYN Applied Bio and Cyber Sciences, Inc. methods & tools by CDC's Nat'l Biosurveillance Advisory Subcommittee Report

ability to use *biosurveillance capabilities* to detect and respond effectively to public health emergencies of national significance. Effective biosurveillance is essential to the management of catastrophic health events; it is also essential to routine public health practice and disaster response.

This report is the culmination of quick work in fact-finding, consultation, and deliberation by the Committee. NBAS is grateful to the many individuals who shared their knowledge and perspective with us in the development of this report.

We appreciate the opportunity to address this important area and hope that our deliberations and recommendations will be helpful to you and the incoming leadership in the new administration.

Sincerely,

Larry Brilliant, MD, MPH

Chair, National Biosurveillance Advisory Subcommittee

Recommendations

How We Can Better Recognize Public Health Hazards, Manage Crises, and Respond to Disasters

The Subcommittee recommends engaging the leadership of President Obama's Administration to embrace and establish a well-functioning and cost-efficient national biosurveillance capacity. The following high-level, cross-cutting recommendations should be considered by the newly appointed Cabinet officials. As part of the work of the NBAS in 2009, additional, more detailed recommendations will be generated and published for review by the appropriate agencies and parties.

1. The Executive Branch must define the strategic goals and priorities of federal investments in biosurveillance activities and technologies, implement a plan to achieve, fund and periodically assess progress toward these goals. To accomplish this, the White House should establish an Interagency Biosurveillance Coordination Committee ("the Committee").

The Committee should be established by the White House and chaired by a representative from the Executive Office of the President (EOP), perhaps from the National Security Council or the Office of Science and Technology, and should include representatives from all federal agencies with a substantive stake in biosurveillance issues. Among federal agencies and departments, the ones that should be represented, but are not limited to the following: Health and Human Services/Assistant Secretary for Preparedness and Response (HHS/ASPR), National Institute of Allergy and Infectious Diseases (NIAID), Centers for Disease Control and Prevention (CDC), Food and Drug Agency (FDA), Department of Homeland Security (DHS), U.S. Department of Agriculture (USDA), Department of Defense (DOD), Department of Veterans Affairs (VA), Office of the Director of National Intelligence (DNI).

Note: TETRADYN has specific positive recommendations from such persons as Dr. Anthony Fauci (NIH), Dr. Nancy Cox (CDC), Dr. Martin Meltzer (CDC), Dr. Thomas Cellucci (DHS), and quite a few others in the intelligence, health, defense, and security administrations.

The Committee should define the strategic goals and priorities of the National Biosurveillance Enterprise, **particularly in the context of detecting and responding to catastrophic health events, and, in collaboration with federal, state and local health**

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officials, clearly delineate the specific biosurveillance responsibilities of particular federal and state agencies or parties.

Note: this is precisely CUBIT (CRAIDO) and Nomad Eyes as the communication architecture for precisely this.

The Committee should carefully consider the critical roles that state and local health agencies serve in contributing to the National Biosurveillance Enterprise and assess whether the current federal and state allocation of public health resources is adequate to sustain a **viable Enterprise view of the national security threats the country confronts** and how a more sustainable and coherent approach might be structured and funded.

The Committee should ensure that federally-funded biosurveillance programs are subject to **objective performance assessments**. The effectiveness of different biosurveillance approaches should be examined in light of **actual experiences, exercises and simulations**. This information should be shared widely in government and the private sector.

Note: CUBIT and specifically CRAIDO are based upon more than ten years of academic, corporate and government research including but not limited to simulations.

To assess the costs, approaches, and effectiveness of biosurveillance systems, the biosurveillance program itself must be well defined with clear criteria to evaluate activities core to achieving the program strategy, goals and objectives. To that end, the Committee should recommend that Congress assign a budget activity line for all federally-appropriated biosurveillance activities. **Performance measurement and evaluation of biosurveillance appropriations could then be tracked** and reported to the Office of Management and Budget (OMB). The Committee should recommend that OMB conduct a cross-agency budget analysis and review of biosurveillance programs to ensure that critical programs are adequately funded, to **eliminate redundant activities and to ensure that top priorities are being met.**

Note: TETRADYN's architectures and products were specifically designed to provide such self-tracking, self-accountability, and strong fault-tolerance, even to the level of "fail-safe" features.

The Committee should consider initiating and/or leading an interagency **review of food safety biosurveillance that meaningfully engages the appropriate agencies and private sector actors. Food safety is exceedingly complex scientifically, organizationally and politically and involves issues of human, animal and plant health.** The Subcommittee recognizes that food safety requires urgent review and improvement.

Note: this is precisely the TETRADYN method, process, and solution-set for food safety!

2. The U.S. National Biosurveillance Enterprise must include global health threats in its purview and scope

In today's "flat" and richly interconnected world, the United States has compelling security, economic, development and humanitarian interests in global health security. Improving international biosurveillance capabilities should be a priority for U.S. national and homeland security and for U.S. foreign policy. Moreover, the revised International Health Regulations **obligate the United States to participate in global disease surveillance activities.**

Note: TETRADYN's method, process, and solution-set for biodefense and public health (pandemic prevention and abatement) is precisely favored by specific ranking officials in:

A Practical Guide to H1N1 and related Public Health threats and for Prevention, Response, and Care Validation and implicit support and advocacy of CUBIT, CRAIDO, VSRB and TETRADYN Applied Bio and Cyber Sciences, Inc. methods & tools by CDC's Nat'l Biosurveillance Advisory Subcmte Report

China, Russia, Canada, Mexico, Colombia, and through the UN including WHO, UNESCO and ISTIC.

The EOP representative to the Interagency Biosurveillance Coordination Committee should lead coordination of U.S. government policy on global biosurveillance, along with a lead federal agency designated by the President. The designated lead agency would coordinate global biosurveillance policy and programs, and should improve **communication across U.S. federal agencies and with key donor organizations.**

Note: Experts within the consortium, from the recognized top influenza and virology research centers including CDC, have stated the precise benefits of CRAIDO and VSRB in this respect.

The EOP representative to the Interagency Biosurveillance Coordination Committee along with the lead agency on global health should craft, coordinate and implement **multilateral initiatives that strengthen core capacities in global biosurveillance and respond to public health emergencies in order to support the effective and sustainable implementation of the International Health Regulations of 2005.**

Note: These regulations and guidelines, plus others from WHO, are what governed the design and implementation of everything within the CUBIT Suite and Ensemble.

3. The federal government must make a sustained commitment toward ensuring adequate funding to hire and retain highly competent personnel to run biosurveillance programs at all levels of government.

Federal public health preparedness funding allocated to state and local health departments and schools of public health beginning in 2002 has greatly enhanced biosurveillance capacity for both emergencies and for important non-emergency public health conditions. As a result of this funding, a trained corps of epidemiologists and laboratory personnel has been created that is our current biosurveillance capacity. **It is critical to maintain rather than allow further erosion of the public health preparedness funding that supports this added capacity since 2002** until the objectives and funding needs of a more integrated National Biosurveillance Enterprise have been defined.

National leadership should undertake a sustained effort to **recruit, hire and retain highly competent and properly trained personnel to plan, evaluate, design and execute biosurveillance programs at all levels** of government. Consideration should be given to establishing tuition-for-service programs and to attracting technical experts to government with Intergovernmental Personnel Assignments (IPAs) and other mechanisms.

To improve interagency cooperation and data sharing, and to enrich civil servants' understanding of the resources available across the government, agencies that are a part of the National Biosurveillance Information System (NBIS) should establish career tracks that ensure that appropriately skilled and senior civil servants perform interagency service and participation in NBIS. Individuals who rotate through the NBIS should see the assignment as a growth opportunity rather than as a diversion from their career path.

4. Government investments in electronic health records and electronic laboratory data should be leveraged to improve how they serve biosurveillance and public health missions. ***Note: The VSRB is a prime example of this, and CRAIDO is already pre-designed to tie in with Electronic Health Records at individual, local, state and federal levels.***

The President has initiated an intense effort to establish electronic health records (EHRs)

A Practical Guide to H1N1 and related Public Health threats and for Prevention, Response, and Care Validation and implicit support and advocacy of CUBIT, CRAIDO, VSRB and TETRADYN Applied Bio and Cyber Sciences, Inc. methods & tools by CDC's Nat'l Biosurveillance Advisory Subcmte Report nationwide as a key component of health reform and of economic recovery investments. The American Recovery and Reinvestment Act (H.R. 1) of 2009 has allocated \$2 billion for development of a nationwide health information technology infrastructure that improves health care quality and efficiency, but also "improves public health activities and facilitates the early identification and rapid response to public health threats and emergencies, including bioterror events and infectious disease outbreaks." Priorities for State grants under this section should include the **establishment of electronic laboratory reporting to public health agencies and nationwide electronic death surveillance. Establishing these surveillance capacities would greatly improve situational awareness during large-scale public health emergencies and routine public health practice.**
Note: this is precisely, exactly what was designed into CRAIDO and the rest of CUBIT functions – and the reason for doing so is exactly what is described above.

The Act also provides for approximately \$30 billion dollars in Medicare and Medicaid **incentives to providers who demonstrate "meaningful use" of qualified EHR systems. Clinical care data provide the highest quality, most specific inputs for biosurveillance of populations, but most commercial EHRs are not oriented toward data sharing between public health agencies and clinical care providers. The criteria for qualifying EHRs and meaningful use must include functionality and use that improves prevention by enabling bidirectional communication between clinicians and public health officials.**
Note: TETRADYN's technology and products are precisely so oriented!

Widespread use of increasingly **electronic clinical data for public purposes (whether in research, quality measurement, or biosurveillance)** will require a policy foundation and sound network architecture for information sharing that can earn and keep the public's trust. This framework would also help to define and facilitate data sharing among federal, state, and local officials. The federal government must lead an **open and transparent process** to develop these policies, or endorse an existing set of principles such as the **Connecting for Health Common Framework.**
Note: CUBIT is precisely doing and providing this, designed for this, and is the most mature solution meeting these needs.

5. The federal government must make strategic investments in new technologies to strengthen U.S. biosurveillance capabilities.

The National Biosurveillance Enterprise should **support and encourage innovative ideas, technologies and applications. Next generation biosurveillance technologies, including genomics-based and digital innovations** could transform **the way we recognize, assess, communicate and respond to risks to individual and population health.**
Note: Right on the money" – CUBIT as a whole, the whole Suite, but specifically CRAIDO, VSRB", MADIT, and Nomad Eyes, remembering that these are all components of the Same Whole.

Innovation in biosurveillance technologies and approaches would be furthered by continuous benchmarking of performance against specific objectives such as **earliest possible detection of pathogen or disease events; rapid agent identification with potential to obtain forensic data; prediction and projections of temporal-spatial progression of disease outbreaks and bioterror attacks; producing actionable information; advancing situational awareness after an event,** etc.
Note: this is basically a definition and description of what we have designed, architected, and are able to Provide.

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Many issues related to data sharing, intellectual property and federal contracting and regulations have high impact on the likelihood, cost and ease of designing innovative technology platforms and approaches to biosurveillance. The Biosurveillance Coordinating Committee should be **cognizant of potential barriers to innovation and suggest efforts to minimize or remove them.**

Note: TETRADYN believes that it has mastered the approach to solving these issues, beginning with its own core technology, intellectual property, and contracting methods.

The **federal government should make strategic investments in efforts to develop rapid, point-of-care clinical diagnostic tests that can be used quickly to identify ill persons and to help isolate contagious persons from those who are well.** Clinical diagnostic tests could have important strategic value in managing an epidemic, particularly if there were shortages of vital medicines or supplies.

Note: this is CRAIDO specifically, and why so many people connected with CDC, NIH, FDA, and NBAS have said so many positive things about our work, our capability, our team, our technologies.

Contact data for TETRADYN and the CUBIT Working Group:

<http://tetradyn.com/contact.php>

A good starting point: <http://tetradyn.com/h1n1-plus-healthcare>

Thank you and let's all work Together and overcome all the negativity from fear, avarice, and inertia. We have too much to gain by working together, as partners, and too much to lose by following separatism and divisiveness.

Sincerely,
Dr. Martin Joseph Dudziak

October 26, 2009

APPENDIX B

Basic web resources that we, as TETRADYN and the IIS, provide to you.

Note: If any web page or site is blocked off due to “closed, permission required, password required” or a similar message, please contact us. We have had problems with malicious hackers and attempts to disrupt our information, and we believe we know who those people are (alas, the Virginia problem)

These are essentially mirror sites, one and the same:

<http://tetradyn.com/h1n1-plus-healthcare>

<http://h1n1.tetradyn.com>

<http://h1n1.nomadeyes.com>

<http://tetradyn.net/h1n1-plus-healthcare>

<http://h1n1.instinnovstudy.org>

<http://sites.google.com/site/cubitcraidoh1n1/>

The “Daily VLOG” (as in V-for-virus Blog)

<http://tetradyn.net/blog>

The CHIPS main site (under construction but usable by 10/29/2009)

<http://chips.tetradyn.net>

APPENDIX C

Some acknowledgments, to persons and institutions who have helped us in different ways, through knowledge, their work, their support. This is a definitely incomplete list, we will continuous update it, and for now we are brief but any of these people can be found via the web and contacted if you so wish. However, please respect their privacy, their needs and obligations, and don't overload anyone with requests. For that, there is the CHIPS organization, and its active volunteers. Please let these folks keep on doing their work, in science, medicine, and other fields.

Note that not everyone, not in this list or elsewhere, can be expected to be in 100% or any particular degree of support of anything from TETRADYN, the Institute for Innovative Study, or CHIPS. This is not a list of people who can be automatically called "validators" or "stamper of approval" for everything in our work, practical or theoretical. However, I believe that everyone in this list does genuinely care about You and Your Health. Each person knows about all of our work to some degree, and each person is a mature expert in their field and with genuine good character, in our opinion. We recommend that you read some of their papers and books, too! Thus we acknowledge their work, their contributions, their discoveries, their efforts, without which we would (in my opinion) be nowhere at the point that we are presently.

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