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[Spring 2007 Table of Contents](#) > Avian Flu, a Pandemic & the Role of Journalists > Understanding the

Risk: What Frightens Rarely Kills

Avian Flu, a Pandemic & the Role of Journalists

Excerpts From a Conference

Understanding the Risk:

What Frightens Rarely Kills

To communicate with people about risk, journalists need to better understand how and why people respond in the ways they do to messages they receive about danger. An expert in risk communication explains the connection between risks that kill people and those that upset them, and he describes how best to approach audiences based on their beliefs about the risks they face.

Peter Sandman, Risk Communication Consultant, Princeton, New Jersey

Fear of fear and panic of panic: Is it okay to scare people about influenza?

The risks that kill people and the risks that upset people are completely different. If you know this is deadly, then that tells you almost nothing about whether it's upsetting. If you know a risk is upsetting, that tells you almost nothing about

whether it's deadly. So essentially these two variables are unrelated, and it doesn't matter what your measure of harm is, across a wide range of hazards; the correlation between how much harm that hazard does and how upset people get about it is this absurdly low 0.2 correlation.

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– John M. Barry

The key intellectual question in risk perception is, "Why is the correlation so low?" The key practical question in risk communication is, "How do we get it higher?" Half of the problem in getting the correlation higher is figuring out how to get people to get more upset when the risk is serious; half of the problem is figuring out how to get people less upset when the risk is trivial.

A long time ago, trying to make sense out of this universal very low correlation, I came up with new terminology to describe it. I said, "Let's take the concept of risk and divide it in half. Let's consider the technical side of risk—whether it's likely to kill you, hurt you, or damage the ecosystem—let's call that 'hazard.'" And then I said, "Let's take the other half of risk—the culture half of risk rather than the scientific half—that is whether it's likely to upset you, anger you, or frighten you; let's call that 'outrage.'" And I came up with the formula: Risk is equal to hazard plus outrage.

When experts look at a risk, they focus on the hazard and ignore the outrage. Therefore, they systematically overestimate the risk when the hazard is high and the outrage is low, and they systematically underestimate the risk when the hazard is low and the outrage is high, because all they're doing is looking at the hazard. Experts focus on the hazard and ignore the outrage; the public makes exactly the opposite mistake. The public focuses on the outrage and ignores the hazard. The public, therefore, overestimates the risk when the outrage is high and the hazard is

low, and underestimates the risk when the outrage is low and the hazard is high. The only real relationship between hazard and outrage is that they're both called "risk" by different groups of people.

When we look at the high correlation between outrage and hazard perception, the question we're asking is this: Do people get upset because they think something is dangerous, or do people think something is dangerous because they're upset? That's a very important question, because if you want to manage a system, you have to know what the cause is and the effect is so that you won't be in the embarrassing position of trying to influence the cause by manipulating the effect. It's a cycle—with arrows going in both directions—but the arrow for perceived hazard to outrage is very weak, and the arrow from outrage to perceived hazard is very strong. For the most part, people don't get upset because they think something is dangerous. It is much truer that people think something is dangerous because they're upset. It is similarly untrue that people are calm because they think something is safe; it's much truer that people think something is safe because they are calm. Outrage is the engine of hazard perception. Hazard perception is not the engine of outrage. Managing hazard perception is about managing outrage. You don't manage the hazard perception in order to manage the outrage; you manage the outrage in order to manage the hazard perception.

Precaution Advocacy

Is it possible to motivate precautions without increasing outrage? Yes, it is. It's not easy, but you can do it. The most powerful way to get people to take precautions is to mobilize and increase outrage.

Let me talk for a minute about some of the technical specs for precaution advocacy. Low outrage equals apathy: people are not interested, they're not concerned, they're not upset, they're not angry, they're not frightened. They're apathetic. One thing that's true, as a result of people being apathetic, is you're

going to have to keep your message short. Many people have short attention spans. Another thing is you're going to have to work really hard to make your message interesting, because apathetic people are easily bored. If you're a source, you've got to try to make it interesting to the reporter. If you're a reporter, you've got to try to make it interesting to the editor. If you're an editor, you've got to try to make it interesting for the reader or viewer. Those are all very daunting tasks because apathetic people are not easily interested, and they're certainly not interested for long. It is also important to stay on message. If you've only got an eight-second sound bite, it's got to be interesting, because people are going to tune out pretty easily. Craft your message very carefully. Pick your words very carefully and then stick to them. Keep it short, make it interesting, stay on message, and that's all public relations 101.

Outrage Management

Now when we are looking at risks that are high in outrage and low in hazard, people are very likely to get upset and not very likely to get hurt. This calls for "outrage management." Now your goal is to decrease the outrage. It's the flip side of precaution advocacy. If the paradigm there is, "Watch out!," here it is, "Calm down." But what happens to outraged people when you say, "Calm down"? Where does the outrage go? It goes up, right? So you don't actually say, "Calm down," but that is your goal. Instead of an eight-second sound bite, you have an eight-hour meeting. It's a very different situation; no need to keep it short. Should you make it interesting? Of course you should not. Your goal is to make this issue as boring as you can possibly make it. The problem is not insufficient interest. They're already interested; in fact, they're obsessed. In outrage management, you very much want to diminish their interest. You can't afford to be boring, but your goal is to make the issue boring; to make the issue lower in outrage.

Outrage management is done largely with the ears; precaution advocacy is done

exclusively with the mouth. But outrage management involves a lot of listening, and a very weird thing happens if you're a good listener. One thing that happens is people get calmer when they get listened to. I'm not saying the outrage disappears. It's not magic, but they get calmer. The other thing that happens is they start wanting to hear from you.

The relationship between information and emotion is that strong emotion provokes biased information-seeking. The stronger your emotions, the more you will learn; but it's not neutral learning. You're learning in order to validate what you're already feeling. People who don't have strong emotions usually learn very little; people with strong emotions learn a lot, but it's biased. Those are your choices.

Journalist: If I write a really factually sound article, if you're afraid are you just going to dismiss it?

Sandman: If you write a factually sound article I will harvest it for things that support my attitude.

John Pope, Medical/Health Reporter, The Times- Picayune, New Orleans:

Can't you sometimes dial down the terror? I've found that just by the words I've used in four years of writing about West Nile. If I used the word "outbreak" instead of "epidemic," it sort of cooled the temperature a bit. People think an epidemic is biblical while an outbreak is just a couple of cases around the block.

Sandman: Yes. You're sending signals, and precisely because people don't have a technical vocabulary, the signals matter significantly more than the words and numbers. The classic example is if you say a pandemic could kill as many as two to seven million, people will kind of shrug off the two to seven, but they'll focus on the "as many as" as evidence that it's a bad number. They'll say, "Oh, shit. It could kill as many as two to seven million people!" If, on the other hand, you said it would only kill two to seven million people, people use "only" as their signal and say, "Oh,

no biggie. It's only two to seven million people." So the number matters less than the signals you put around the number; those tell people whether you're trying to freak them out or you're trying to help them.

Crisis Communication and Pandemic Journalism

Crisis communication is when people are upset and they're right to be upset. That's a third paradigm, along with precaution advocacy and outrage management. With the first one, the message is "Watch out!" And with the second, it's "Calm down." Here the goal of the message is, "We'll get through this together." And this presents yet a third skill set. The things you do when you're doing crisis communication are very different from the things you do with precaution advocacy and outrage management.

Where is pandemic communication on this map? It depends where you are in the pandemic and where you are in the world. Now, for the most part, for those of us who think pandemic flu is a serious issue, we are doing precaution advocacy.

Those who think it isn't serious are doing outrage management. If there is a pandemic, particularly if there is a 1918-like rather than a 1968-like pandemic, we'll all be doing crisis communication. That's obvious.

None of this is what pandemic journalism is about. Reporters are not trying to increase the outrage, they are not trying to decrease the outrage; they are covering the outrage.

Reporters do vary their coverage in ways that are absolutely predictable. Because it's hard to interest your readers in something that could kill them but doesn't upset them, that coverage is dutiful and boring and very low on volume. It is very little investigated, and it is extraordinarily credulous. Any official source can tell you anything, and you'll cover it. You write it off the press release. As the risk gets more serious, or as the reporter gets more worried, even though the editor hasn't and the

audience hasn't become worried, the coverage changes. I can look at a news story and tell if the reporter has gotten Tamiflu.

The coverage changes in very predictable ways. Now it's a crisis, so the coverage gets more extensive. Interestingly enough, the coverage becomes overreassuring. I suspect part of what's going on is the reporter is genuinely worried and is trying to reassure him or herself by reassuring the reader. I think it's a psychological phenomenon; there may be an economic phenomenon. Terrified people are not good advertising audiences. It's not good for business to terrify your audiences. But I don't think reporters really care about business very much. So I think the main thing that's going on is the reporter's individual psychology. In any case, it is extremely noticeable that sources continue to imagine the reporters are sensationalizing, but reporters stop sensationalizing when they start thinking it's serious. Instead they become very overreassuring.

The Three Mile Island coverage was profoundly reassuring. Reassuring paragraphs outnumbered alarming paragraphs four to one, because reporters were scared and scared reporters write reassuring stories. Scared reporters also rely much more on official sources. At Three Mile Island, the antinuclear activists had enormous trouble—this was their moment, you know. My God, they'd been proved right and nobody wanted to quote them. The same thing is happening now with flu, with respect to those reporters who are starting to take it seriously. They are starting to get very solemn and very official. We all think that reporters listen too much to crazies, but as soon as you get worried, as soon as it becomes crisis communication, you listen a little to crazies.

When the issue is not serious but people are upset, reporters have fun. High outrage low hazard stories are fun to write, they get a lot of attention; the editor likes them, the reader likes them. Nothing is really at stake, and what we call sensationalism and you call good journalism is most characteristic of this kind of

coverage. Your use of sources becomes completely different. You're still an objective reporter, but you do several things. You cover the outrage instead of the hazard. You cover people saying, "I'm scared shitless!" instead of people saying what the hazard is. Secondly, to the extent that you cover the hazard, you cover opinions about the hazard instead of data about the hazard.

We've done studies in which we wrote 50 paragraph articles with all kinds of stuff and gave them to different kinds of people, and we said, "This article is too long, get rid of half the paragraphs. Don't just cut from the bottom; pick the paragraphs to get rid of." Reporters invariably get rid of nearly all the science. Editors invariably get rid of all the science. The public gets rid of most of the science, and the scientists get rid of anything that smacks of humanity. So there are very different visions of what the good story is, but if it's a high outrage low hazard story, reporters are going to cover the outrage more than the hazard. Reporters are going to cover opinion about the outrage more than data about the outrage, and reporters are going to cover certain opinions more than others.

Let me draw a range that moves from completely safe to incredibly dangerous, starting at one and going to nine. Reporters do not care whether the real risk is two or five or nine. They judge that they're not qualified to tell, and they judge that it's not their business to try to tell. What especially the general assignment reporter does is go on a scavenger hunt. Reporters sort of ignore one and two and sort of ignore eight and nine as being "too weird." They're also not very interested in four, five and six, because they're boring. It is hard to get a good story out of "Further research is needed." Most journalism is about three and seven. If it's a minor story, often three or seven get their own news release. Normally the story is launched by seven because risky is more newsworthy than safe. So somebody says it's risky, and you cover it; the next day, somebody says, "No, it isn't!" Then you cover that, too.

If it's a bigger story, you get three and seven into a story in alternating paragraphs and, once again, seven is going to get more attention than three because risky is more interesting than safe. But seven and three will all get more attention than two or five or eight. Those will all sort of fall by the wayside, and you get a nice little ping-pong match between three and seven, which seven always wins because the scary side always wins in the ping-pong match.

In choice of sources, government is the preferred source because government is the swing vote. You go to government first. If government says seven, you go find industry to say three. If government says three, you go find an activist to say seven. And then you've got your story. Don't really worry if the truth is in two or five or not. If you cared where the truth was, you'd be writing editorials. Well, that's a gross oversimplification.

Like all professionals, journalists are profoundly ambivalent about their own norms. Any time anybody stands up in front of a roomful of journalists and says, "You ought to care. You ought to make people realize how serious obesity is!," reporters can be counted on to say, "That's not my job, that's your job. I just cover it." But if somebody stands up and says, "That's not your job, that's my job, you just cover it," reporters tend to say, "Well, wait a minute. I'm a person too."

As a participant in another panel discussion about how disaster communication affects the public, Sandman illuminated other facets of his research about risk communication.

There are three points I want to make:

1. We need to overcome our fear of fear and be willing to frighten people. If we want to warn people, we've got to be willing to frighten them. When bad things happen, the bad things will frighten them. Once we have a pandemic, we won't have to frighten them, the pandemic will take care of that, but if we

want precautions, rather than people muddling through as best they can and not having taken precautions, then we have to frighten them before events do.

2. The problem isn't panic; the problem is denial. I want to talk some about how to prevent denial, which is essentially a communication task in which the media can be very helpful.
3. When you frighten people, it's temporary; you can't sustain fear. There is an adjustment reaction phenomenon and then people revert to the new normal.

When people are initially aware of a risk, they overreact. They have a temporary short-term overreaction. People pause what they're doing, become hypervigilant, check out the environment more carefully than they normally would and—this is perhaps the most important characteristic of the adjustment reaction—they take precautions that may be excessive, may be inappropriate, and are certainly premature. For example, a person might go get Tamiflu, even though the government thinks that they shouldn't. If this way of reacting lasts a long time, it's no longer an adjustment reaction, it's an adjustment disorder and you need clinical help. If it lasts a short time, you're perfectly normal and you're going through a reaction.

The knee-jerk reaction of overreacting early to a potential crisis is extremely useful. Like other knee-jerk reflexes, it protects us. Perhaps the most important thing to say about the adjustment reaction is that people who have gone through it come out the other side calmer and better able to cope. People become able to cope with a crisis by going through an adjustment reaction, either in midcrisis, in which case they're late in coping, or they do that in advance of the crisis, in which case they are ready to cope.

It is inevitable that people will have this reaction: What we want is for them to have it early rather than late, and the way to accomplish that is to guide the adjustment

reaction, rather than trashing it, as it seems officials often do and journalists sometimes do.

Denial is why panic is rare. We are equipped with a circuit breaker and, when we're about to panic, we go into denial instead. Denial is not useful in that people in denial don't take precautions, but it's preferable to panic. People who are panicking do themselves harm; those who are in denial don't accomplish much, but at least they don't make things any worse. So denial is nature's way of protecting us from the horrible effects of panic and, whereas panic is rare, denial is extremely common. We need conscious effort on the part of the sources and—insofar as journalists are willing to make conscious efforts—we need a conscious effort on the part of journalists to protect people from denial by seducing them out of denial.

I want to identify what the research literature suggests are the five principle bulwarks against denial:

- The first is to legitimize fear. People go into denial because they don't feel entitled to be afraid. The more entitled people feel to be afraid, the less likely they are to go into denial. This is why the message, "Don't be afraid," is a very destructive message in serious circumstances, a very harmful message. Much superior is the message, "Well, of course, you're afraid, I'm afraid too. We're all afraid. We'll get through this together."
- The second bulwark against denial is things to do. It's not that if you have things to do you are less afraid; it's that if you have things to do you are better able to bear your fear. So you can tolerate higher levels of fear if you're busy. The military understands this very well, and it tries to keep soldiers busy so that they can tolerate their fear.
- A third bulwark against denial is things to decide; this is even better than things to do because instead of only enlisting our ability to act, you enlist our ability to choose. Wherever possible, offer people menus of things to do so

they have opportunities to decide what they want to do and what they don't want to do. This makes them less likely to go with the denial, because it makes them more able to bear their fear.

- Bulwark No. 4 is love. Anyone who has had the experience of loving knows that we are much better able to bear fear on behalf of those we love than on our own behalf. The military knows well that soldiers don't fight for their country, they fight for their buddies, so that's a bulwark against denial. Again it's not that loving makes you less afraid, it's that loving makes you more able to bear your fear and less likely to trip that circuit breaker into denial.
- The fifth bulwark is one that's much more controversial—hate. Having somebody you hate or maybe a virus you hate can enable you to bear your fear and hang in there without tripping the circuit breaker into denial.

We have to overcome our fear of fear. We have to understand that fear is a solution, not the problem. It simply makes no sense to say, "I want you to take precautions, but I don't want you to be afraid." An important point to remind you of is that fear is a competition. When you make people afraid, you don't make them more fearful people (except very momentarily during the adjustment reaction), but what you do is get a larger slice of their fearfulness pie. When I try to scare people about a pandemic, I'm not trying to turn them into more frightened people; I'm trying to sap the fear that will otherwise be allocated to other fears they already have. The research is very clear: This is the law of conservation and outrage. The level of fear a person has is the level of fear he or she has, and it changes glacially. Most of us are more fearful than we were as teenagers, so it does change a little bit, but a person's level of fear is mostly stable. In talking about the pandemic flu, we are not going to produce more frightened people, but we will get more of their fear for our issues. My sense is that in understanding this people feel a little bit less fearful of frightened people.

Later, in response to a question, Sandman spoke about the arrival of the H5N1

avian virus in the United States.

I look forward to H5N1 reaching our shores in birds because it will be a teachable moment. And the first thing we're going to have to teach people is no, this isn't the start of the crisis; this is a reminder of the crisis we've been looking at all along. A flu pandemic is still likely to hit us from the developing world and not from a bird in this country. By the time the pandemic flu gets to this country, it will have already made that transition [from a bird virus to a human virus], and it will be transported in people. We're going to have to teach this to people. We've taught them the wrong stuff and now we'll have to teach them the right stuff. We can do it; we're going to have to do it.

[Next Article](#)

[Table of contents](#)

[Printer-friendly format](#)

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