



Get your **FREE FICO®** credit score when you buy **Equifax 3-in-1 Credit Report.**



- [Latest News](#)
  - [Browse Topics](#)
  - [Encyclopedia](#)
  - [Health Center](#)
  - [Videos](#)
  - [Science Shop](#)
  - [Ca](#)
- [Health & Medicine](#)   [Mind & Brain](#)   [Plants & Animals](#)   [Space & Time](#)   [Earth & Climate](#)   [Matter & Energy](#)   [Computers & Math](#)   [Fossil](#)  
[Show menu](#) | [ScienceDaily home page](#)   [RSS feeds](#) | [Free newsletter](#)   [Print this page](#) | [Email to friend](#) | [Bookmark](#)   [Tex](#)

Source: [Public Library of Science](#)  
 Date: January 23, 2007

More on: [Influenza](#), [Bird Flu Research](#), [Bird Flu](#), [HIV and AIDS](#), [Cold and Flu](#), [Infectious Diseases](#)

## Bird Flu: Predictions Prompt Call For Antiviral Drugs To Be Shared

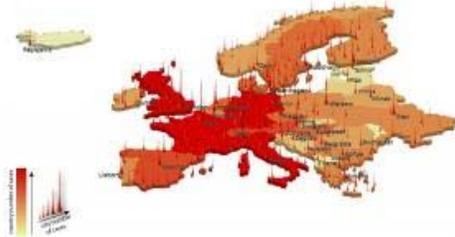
*Science Daily* — New predictions about bird flu, involving the use of a mathematical model, suggest that international cooperation to share antiviral drugs might be the best way to deal with an emerging pandemic.

'Bird flu' (avian H5N1 influenza) has not triggered a worldwide human epidemic yet because it rarely passes between people. If it does acquire this ability, it would take 6-8 months to develop a vaccine effective against the new virus. Public health officials therefore need to consider how they would protect people during the first few months of a pandemic. Measures might include the use of antiviral drugs and international travel restrictions.

In a new study published in PLoS Medicine, researchers use detailed information on air travel to model the global spread of an emerging influenza pandemic and its containment. They conclude that much will depend on the 'reproductive number' (a measure of how many people an infectious individual infects on average) of the new virus that emerges. If this number is low, it will take many months before the virus spreads worldwide and there will be plenty of time to bring an effective vaccine into use. But if the number is high then it could be difficult or impossible to contain the virus with vaccination.

Other measures could therefore be crucial, but it is likely that only a few countries will be able to stockpile supplies of drugs active against the virus. In these circumstances, compared with a 'selfish strategy' in which countries use their antiviral drugs only within their borders, limited worldwide sharing of antiviral drugs would slow down the spread of a flu virus by many months, to the benefit of both drug donors and recipients.

Citation: Colizza V, Barrat A,



*Simulated outbreak of a pandemic influenza in Europe. The epidemic starts in Hanoi, Vietnam, at the beginning of October with  $RO=1.9$  and no containment interventions are considered. The snapshot refers to the situation in Europe on March 1 of the following year. Countries are shown with a different color corresponding to the average number of cases observed within the country by March 1, from cream ( $10^3$  cases) to red color ( $10^6$  cases). The local situation within each city is represented by peaks whose height scales logarithmically with the number of cases reported in the city, from  $10^2$  cases to  $10^5$  cases. Simulations consider 3100 urban areas worldwide (513 in Europe) while for the sake of visualization the map shows only a set of major European cities. (Image courtesy of Public Library of Science)*

Ads by Google [Advertise on this site](#)

**Bird-Flu Horror in U.S.**  
 Star-Gazette blows lid off truth gov't doesn't want you to know.  
[www.star-gazette.net](http://www.star-gazette.net)

**Avian Flu is Coming**  
 How USA Military will deal with an outbreak. Watch video.  
[www.silversolution.biz](http://www.silversolution.biz)

**Bird Flu defense**  
 Are you ready for a pandemic? Learn to protect yourself  
[www.health-minded.com](http://www.health-minded.com)

**Herpes Virus Information**  
 Recognize Herpes Symptoms Learn about Testing and Treatment  
[www.manageherpes.com](http://www.manageherpes.com)

### Health Videos & Features



#### The Role of Weight Loss Surgery

For obese people who meet specific qualifications, surgery can provide a solution to weight loss troubles. Learn what role these procedures can play in improving your health.

[Read Transcript](#)   [Related Programs](#)

- News:**
- [Dental Bleaching is Not Linked to Cancer](#)
  - [Tuning Out: Music Makes Colonoscopies Less Painful](#)
  - [Seek Treatment Now to Avoid Next Fall's Allergies](#)

**More:** > [General Health](#)   **Multimedia Library:**  
 > [Men's Health](#)     
 > [Women's Health](#)  
 > [Healthy Aging](#)

### Se

Finc

### Fir

Key  
 e.g.,

Loc:

City,

Job

- Se

Se

Get the m  
 you des

FIND TECH



Barthelemy M, Valleron AJ, Vespignani A (2007) Modeling the worldwide spread of pandemic influenza: Baseline case and containment interventions. PLoS Med 4(1): e13.

**Run for the hills?**  
How soon will Bird Flu hit the US? Get the latest on Bird Flu here.  
[RealAge.typepad.com](http://RealAge.typepad.com)

Ads by Google [Advertise on this site](#)

**Free Photo Widgets**  
Get photo updates straight from blog to mobile with WidSets!  
[www.widsets.com](http://www.widsets.com)

**Da Lat Hotels**  
Info on Da Lat Hotels. Get Prices, Pictures & Ratings!  
[travel.yahoo.com](http://travel.yahoo.com)

**Blogger: Free Blog Site**  
Have Ideas To Share? Setup A Blog & Contribute To The Blog-O-Sphere!  
[www.blogger.com](http://www.blogger.com)

**Start a travel blog**  
Start your travel weblog today With your photos and your maps  
[www.trayle.com](http://www.trayle.com)

**Da Vinci, fine art prints**  
Customized fine art prints of of Leonardo Da Vinci: 156 paintings  
[www.art-prints-on-demand.com](http://www.art-prints-on-demand.com)

Ads by Google [Advertise on this site](#)

**Bird-Flu Horror in U.S.**  
Star-Gazette blows lid off truth gov't doesn't want you to know.  
[www.star-gazette.net](http://www.star-gazette.net)

**Avian Flu is Coming**  
How USA Military will deal with an outbreak. Watch video.  
[www.silversolution.biz](http://www.silversolution.biz)

**Bird Flu defense**  
Are you ready for a pandemic? Learn to protect yourself  
[www.health-minded.com](http://www.health-minded.com)

**Herpes Virus Information**  
Recognize Herpes Symptoms Learn about Testing and Treatment  
[www.manageherpes.com](http://www.manageherpes.com)

**Run for the hills?**  
How soon will Bird Flu hit the US? Get the latest on Bird Flu here.  
[RealAge.typepad.com](http://RealAge.typepad.com)

<http://dx.doi.org/10.1371/journal.pmed.0040013>

Note: This story has been adapted from a news release issued by Public Library of Science.

Ads by Google [Advertise on this site](#)

**Pandemic: What You Need**  
Meet US Gov. Guidelines for Flu Protection, Sanitation, Food, Water  
[www.lifesecond.com](http://www.lifesecond.com)

**What is The Flu?**  
Learn About The Types Of Flu And Treatment Options.  
[fluFACTS.com](http://fluFACTS.com)

**Herpes and Nutrition**  
Stop herpes outbreak forever with everyday foods, and no more drugs..  
[FoodsThatCure.com](http://FoodsThatCure.com)

Ads by Google [Advertise on this site](#)

[How Hot Are You?](#) [Easy Blogger Creator](#) [My Da Vinci](#)

Offering Flexible Options for Advancing Your Career



[LEARN MORE](#)

weekends	online
graduate	over 190 locations
flexible schedules	evenings
undergraduate	<a href="#">CLICK HERE</a>

[View Additional Information](#)

Offering Flexible Options for Advancing Your Career



[LEARN MORE](#)

weekends	online
graduate	over 190 locations
flexible schedules	evenings
undergraduate	<a href="#">CLICK HERE</a>

[View Additional Information](#)

**Related News Sections**

- Health & Medicine
- Plants & Animals
- Computers & Math

**Related News Topics**

- Influenza
- Bird Flu Research
- Bird Flu
- HIV and AIDS
- Cold and Flu
- Infectious Diseases

**Related Science Stories**

[> more ...](#)

- Analysis Of Spanish Flu Cases In 1918-1920 Suggests Transfusions Might Help In Bird Flu Pandemic
- Threat Of Avian Influenza Pandemic Grows, But People Can Take Precautions
- Who Should Receive Vaccines And Antiviral Drugs In The Event Of A Flu Pandemic?
- Medical Experts: U.S. Unlikely To Have Enough Vaccines To Stop Avian Flu
- Drugs Could Make Life-or-death Difference If Avian Flu Strikes

**Related Encyclopedia Articles**

[> more ...](#)

- Flu vaccine
- Influenza pandemic
- Pandemic
- Avian flu
- Antiviral drug
- Spanish flu
- H5N1
- Nasal congestion
- Infectious disease
- Transmission (medicine)

**Related Book Reviews**

[> more ...](#)

- The Singing Life of Birds : The Art and Science of Listening to Birdsong
- The Sibley Field Guide to Birds of Eastern North America
- Merck Index: An Encyclopedia of Chemicals, Drugs, & Biologicals
- 2006 Physicians' Desk Reference (PDR): Your Complete Print and Electronic Drug Information Solution
- Feeding the Hungry Heart: The Experience of Compulsive Eating

This Free Personality Test will show you how Hot you really are!  
[www.ruhotquiz.net](http://www.ruhotquiz.net)

You Can Literally Build Hundreds Of Blogger Blogs In Just Minutes  
[dpg12.lmsebc.hop.clickbank.net/](http://dpg12.lmsebc.hop.clickbank.net/)

Turn Your Photos Into Art, Caricatures, Watercolor, More!  
[www.MyDaVinci.com](http://www.MyDaVinci.com)

Ads by Google

[Advertise on this site](#)

**Pandemic: What You Need**

Meet US Gov. Guidelines for Flu Protection, Sanitation, Food, Water  
[www.lifesecond.com](http://www.lifesecond.com)

**What is The Flu?**

Learn About The Types Of Flu And Treatment Options.  
[fluFACTS.com](http://fluFACTS.com)

**Herpes and Nutrition**

Stop herpes outbreak forever with everyday foods, and no more drugs..  
[FoodsThatCure.com](http://FoodsThatCure.com)

New! Search [Science Daily](#) or the entire web with Google:



Web  ScienceDaily.com

- [Science Articles](#)
- [Encyclopedia](#)
- [Books](#)

**Analysis Of Spanish Flu Cases In 1918-1920 Suggests Transfusions Might Help In Bird Flu Pandemic** (August 30, 2006) -- Transfusions with blood products taken from people who had recovered from Spanish influenza may have reduced risk for death and improved symptoms of hospitalized patients who contracted Spanish ...  
 > [full story](#)

**Threat Of Avian Influenza Pandemic Grows, But People Can Take Precautions** (December 6, 2005) -- An editorial in the December issue of Mayo Clinic Proceedings paints a picture of a world population very susceptible to an avian flu pandemic, but also offers suggestions to physicians that could ... > [full story](#)

**Who Should Receive Vaccines And Antiviral Drugs In The Event Of A Flu Pandemic?** (October 18, 2006) -- A new study in PLoS Medicine finds that 30 percent of nations have prioritized neither vaccine nor drugs in their pandemic influenza preparedness ... > [full story](#)

**Medical Experts: U.S. Unlikely To Have Enough Vaccines To Stop Avian Flu** (March 24, 2006) -- A group of medical experts who attended a national avian flu conference last fall believe there is little chance the United States will be able to manufacture and stockpile enough vaccine or ...  
 > [full story](#)



**Drugs Could Make Life-or-death Difference If Avian Flu Strikes**

(November 3, 2005) -- In the absence of a specific avian flu vaccine, could antiviral drugs thwart a pandemic should the virus spread from birds to humans? One person with a detailed knowledge of that subject is Dr. Anne ...  
 > [full story](#)

**Novel Peptide Targets Viral Cells And May Inhibit Influenza Virus Infection** (December 13, 2006) -- Researchers from the University of Wisconsin have identified a novel antiviral peptide that may inhibit influenza viruses including the H5N1 strain. They report their findings in the December 2006 ... > [full story](#)

**The Next Flu Pandemic: When It Happens, Restricting Air Travel Won't Help** (May 6, 2006) -- Restricting air travel from countries where there is a serious influenza outbreak will do little to hold back the spread of the infection, according to the findings of a study conducted at the UK ... > [full story](#)

**Sweetgum Tree Could Help Lessen Shortage Of Bird Flu Drug** (April 5, 2006) -- Chemists have found that the seeds of the sweetgum fruit -- also called "gumballs" -- contain significant amounts of shikimic acid, the starting material used to produce the main antiviral agent in a ... > [full story](#)



**Researchers Model Avian Flu Outbreak, Impact Of Interventions** (August 3, 2005) --

A carefully chosen combination of public health measures, if implemented early, could stop the spread of an avian flu outbreak at its source, suggest two international teams of researchers in Nature ... > [full story](#)

**'Bird Flu' Infections In Humans Prompt New Investigation** (January 17, 2006) -- In 1918, nearly 40 million people died in a flu pandemic. Three

B  
B  
B  
B  
B  
B  
H  
B  
I  
R  
I  
M  
M  
E  
M  
S  
M  
A  
M  
N



comes a new portable ... > [read more](#) (4)



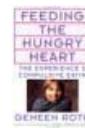
**Merck Index: An Encyclopedia of Chemicals, Drugs, & Biologicals**  
An extensively revised and updated one-volume encyclopedia of chemicals, drugs, and biologicals that contains more than 10,000 ... > [read more](#)

U  
a  
l  
(4)  
B  
i  
d  
e  
(2)



**2006 Physicians' Desk Reference (PDR): Your Complete Print and Electronic Drug Information Solution**  
Brandon/Hill Medical List minimal-core, first-purchase selection (#519). Annual reference features FDA-approved labeling for drugs as well as prescription information provided by manufacturers for ... > [read more](#)

P  
r  
e  
(2)  
E  
r  
t  
o  
(2)



**Feeding the Hungry Heart: The Experience of Compulsive Eating**  
This is how Geneen Roth remembers her time as an extreme overeater and self-starver. After years of struggle, Roth finally broke free from the destructive cycle of bingeing and purging. In the ... > [read more](#)

C  
i  
A  
n  
e  
(2)  
U  
a  
l  
(3)



**Feeling Good : The New Mood Therapy**  
FEELING GOOD FEELS WONDERFULThe good news is that anxiety, guilt, pessimism, procrastination, low self-esteem, and other "black holes" of depression can be cured without drugs. In FEELING GOOD, ... > [read more](#)

U.  
n  
e  
(3)  
H  
i  
s  
u  
(4)



**Animal Speak: The Spiritual & Magical Powers of Creatures Great & Small**  
Want to learn how to speak the language of critters, large and small? Easy-to-read and understand, Ted Andrews's bestselling Animal Speak shows readers how to identify his or her animal totem and ... > [read more](#)

S  
c  
q  
(4)  
U.  
r  
a  
(4)



**Delivered from Distraction : Getting the Most out of Life with Attention Deficit Disorder**  
Medication? Maybe. Marry the right person and find the right job? A must if you are an adult suffering from ADD (Attention Deficit Disorder). So say psychiatrists Edward M. Hallowell and John J. ... > [read more](#)

U  
a  
l  
(4)  
...  
a  
t  
u  
f  
m



**The Harriet Lane Handbook: A Manual for Pediatric House Officers, 17th Edition**  
For more than 50 years, The Harriet Lane Handbook has been the pediatrician's reference of choice and for good reason. Its unsurpassed diagnostic and management guidance, recommended tests, ... > [read more](#)



**The Bible Unearthed: Archaeology's New Vision of Ancient Israel and the Origin of Its Sacred Texts**  
The Bible Unearthed is a balanced, thoughtful, bold reconsideration of the historical period that produced the Hebrew Bible. The headline news in this book is easy to pick out: there is no evidence ... > [read more](#)