Scientists close to influenza vaccine

27th August, 2015

Scientists in the USA say they are getting closer to developing a vaccine that will provide life-long protection against any type of influenza. This could be welcome news for millions of people around the world who go to the doctor every year to get a flu jab. Two different research teams have been testing new drugs on animals and both have had promising results. Trials will soon begin on humans to determine if the test vaccine has similar successes. Flu expert professor John Oxford told the BBC that: "This is a leap forward compared to anything done recently. They have good animal data, not just in mice but in ferrets and monkeys too." He added that: "It's a very good stepping stone."

The flu virus kills up to half a million people every year. The problem with finding a vaccine is the ever-changing nature of the flu virus. It is in a constant state of mutation. Doctors have to predict which strains of the virus are likely to cause the most infections and then create an updated version of the vaccine accordingly. For this reason, the success rate of most flu vaccines is very low because much of the process involves a lot of guesswork. Scientists say that vaccines in the U.S. reduced the risk of catching flu by just 23 per cent last year. The website Inverse.com said the research could, "point to how we can go about making vaccines for other viruses that mutate rapidly, like HIV or the common cold".

Sources: *BBC / Daily Mail / Inverse.com*

Writing

Compare and contrast the dangers of computer viruses and biological viruses. Which are more dangerous? Why?

Chat

Talk about these words from the article.

scientists / getting closer / developing / vaccine / flu jab / trials / similar / monkeys / virus / nature / constant / mutation / predict / guesswork / research / the common cold

True / False

a) The article says scientists are a year away from a flu vaccine. T / F

b) The article says a vaccine is good for those who have an annual flu jab. T / F

c) The vaccine is being tested by two different research teams. T / F

d) The vaccine has been tested on mice and monkeys. T / F

e) Influenza kills close to 20 million people a year. T / F

f) Finding a vaccine is difficult because the virus is always changing. T / F

g) Vaccines in the USA reduced the risk of getting flu by 50% last year. T / F

h) The new research will not be able to help with a vaccine for HIV. T / F

Synonym Match

1.	scientists	a.	character
2	life-long	b.	information
3.	jab	c.	decide
4.	determine	d.	quickly
5.	data	e.	researchers
6.	every year	f.	alteration
7.	nature	g.	chance
8.	mutation	h.	lasting
9.	risk	i.	annually
10.	rapidly	j.	injection

Discussion – Student A

a) What is the problem of viruses mutating?

b) Do you like movies about viruses that endanger the world?

c) Do you think viruses will fall or rise in number in the future?

d) How worried are you about viruses?

e) What do you think it's like to be a flu vaccine researcher?

f) How can we avoid viruses?

g) What other benefits could the flu virus have?

h) What questions would you like to ask the researchers?

Phrase Match

1.	Scientists in the USA say they are	a.	of mutation
2	developing	b.	stone
3.	provide life-	c.	of guesswork
4.	promising	d.	a million people
5.	It's a very good stepping	e.	a vaccine
6.	The flu virus kills up to half	f.	cold
7.	in a constant state	g.	getting closer
8.	create an updated	h.	results
9.	much of the process involves a lot	i.	version
10.	the common	j.	long protection

Discussion – Student B

a) What do you know about the flu virus?

b) What do you think about what you read?

c) What vaccines have you had?

d) What do you think the results will be of the trials on humans?

e) How often do you get ill?

f) What are viruses?

g) Why is it so difficult to find vaccines for viruses?

h) How dangerous are viruses?

Spelling

1. egvoedipnl a vaccine
2. provide life-long eorttnipoc
3. sgionpimr results
4. eitdmeren if the test vaccine has similar successes
5. Flu ptxere
6. moraepcd to anything done recently
7. a constant state of ontamtiu
8. predict which sstianr of the virus
9. cause the most otnsniicef
10. create an updated version of the vaccine rliyagncdco
11. the process solneviv a lot of guesswork
12. mutate drlyaip

Answers – Synonym Match

1. e	2. h	3. j	4. c	5. b
6. i	7. a	8. f	9. g	10. d

Role Play

Role A – Toothache
You think toothache is the most important thing scientists should find a cure for. Tell the others three reasons why. Tell them why cures their things aren't so important. Also, tell the others which is the least important of these (and why): hair loss, bad breath or stress.

Role B – Hair loss
You think hair loss is the most important thing scientists should find a cure for. Tell the others three reasons why. Tell them why cures their things aren't so important. Also, tell the others which is the least important of these (and why): toothache, bad breath or stress.

Role C – Bad breath
You think bad breath is the most important thing scientists should find a cure for. Tell the others three reasons why. Tell them why cures their things aren't so important. Also, tell the others which is the least important of these (and why): hair loss, toothache or stress.

Role D – Stress
You think stress is the most important thing scientists should find a cure for. Tell the others three reasons why. Tell them why cures their things aren't so important. Also, tell the others which is the least important of these (and why): hair loss, bad breath or toothache.

Speaking – Scientists

Rank these with your partner. Put the things scientists should stop at the top. Change partners often and share your rankings.

- toothache
- hair loss
- acne
- bad breath
- headaches
- tiredness
- memory loss
- stress

Answers – True False

a	F	b	T	c	T	d	T	e	F	f	T	g	F	h	F

Answers to Phrase Match and Spelling are in the text.

