The Flu – duration 5' 08''

Time Code		Shots	Commentary
IN	OUT		
10:00:00	10:00:21	Ext: L/S of River Thames. Dissolve: Int: Daily Mail newspaper – T/D. Dissolve: B&W Stills: Soldiers lying in beds. Int: Man looking in microscope.	**VO COMMENTARY** At the end of World War I, fifty million people died because of an unknown strain of the flu virus. The mysterious strain has never been identified. In the UK, Professor John Oxford is putting together a genetic map that could unlock the secrets of one of the world's deadliest killers.
10:00:22	10:00:42	Int: Microscopic cells. Int: H&S of Prof Oxford. ***Capt: Prof. John Oxford*** ***University of London.*** Ext: River Thames – building in B/G.	**VO/Sync Professor Oxford:** We are looking for the genetic code for the influenza 1918 genome not just for its intrinsic scientific value but to use it to compare against future influenza viruses as they arise, as they will arise, and thereby make some early warning of whether such a virus arising is going to be as virulent as 1918.
10:00:43	10:01:04	Ext: Houses of Parliament in B/G. Ext: GVs of public in streets of London. (Out of focus). Int: Scientists in lab.	**VO COMMENTARY** Almost every year flu kills 3000 to 4000 people in the UK alone. Its potential danger comes from the ability of the virus to mutate rapidly from a harmless into a lethal version and spread quickly across the globe. Experts all over the world constantly monitor flu outbreaks.
10:01:05	10:01:43	Int: H&S of Dr Zambon. ***Capt: Dr Maria Zambon*** ***Public health laboratory services.*** Int: Scientists in lab. Int: B&W graphics of cells. Dissolve: Int: H&S of Dr Zambon. Int: Public in street. (To B&W).	**VO/Sync Dr. Maria Gambon:** Influenza virus is a very highly variable virus and it's important to track it so that we know how the virus is changing. There are three basic types of influenza, there's type A, type B and type C. Types B and C are primarily human virus' and type A is mainly a virus of animals but there are some influenza A virus' which circulate in humans. However influenza A virus' cause rather more severe disease in humans than influenza B or C.
10:01:44	10:01:59	Dissolve: B&W Still: Hospital ward. Int: Newspaper clip. Dissolve: Int: Public walking in street. Dissolve: B&W Still: Soldiers.	**VO COMMENTARY** Some experts suspect that the 1918 pandemic was caused by a type A virus which moved from pigs to humans. Known as Spanish Flu it wiped out whole communities.

10:02:00	10:02:34	Int: H&S of Dr Hardy. ***Capt: Dr. Anne Hardy Welcome institute for the history of medicine.*** B&W Still: Cemetery. Dissolve: Int: Public in street. (B&W). Int: H&S of Dr Hardy. Ext: Traffic passing.	**Sync/VO Dr. Anne Hardy:** The impact of the 1918 epidemic was fantastic, it was probably the most virulent and fatal epidemic ever to have struck the human population of this planet. We don't know exactly why that epidemic was so virulent. The symptoms themselves were most unusual for influenza. The lungs gradually filled up with fluid and people almost drowned in their own body fluids. It was very rapid and very fatal as we've said but nobody really knows what the physiological mechanisms were that drove the infections.
10:02:35	10:03:07	Ext: L/A of plane flying past. Int: H&S of Prof Oxford – cut to samples.	**VO COMMENTARY** Modern travel and population growth increase the threat of a faster spread of a virus when it occurs. To prepare for such a pandemic the answer lies in the 1918 virus. Professor Oxford can only produce a genetic map if he finds clean samples of the 1918 flu virus. His research is largely centred on isolating the virus from tissue samples of 1918 victims kept at the Royal London Hospital and exhumed bodies.
10:03:08	10:03:31	Int: H&S of Prof Oxford. Int: Newspaper article.	**VO/Sync Professor Oxford:** When we started the project, we thought there were two ways of looking for influenza genes from 1918. One was to take small paraffin blocks of people who died in hospital for example, small blocks of their lungs which had been carefully preserved, that's one way of doing it. And the other way of doing it was to get frozen bodies from 1918, people who died in the Arctic regions.
10:03:32	10:03:51	B&W Stills: Dead bodies. Ext: GVs of graves in cemetery.	**VO COMMENTARY** Until now all exhumations have failed to reveal a pure strain of the virus. Professor Oxford hopes to find the all important key sample at Twickenham cemetery in the grave of Phyllis Burn, a young nurse who died during the outbreak.
10:03:52	10:04:06	Dissolve: B&W Still: H&S of boy. Int: H&S of Prof Oxford.	**VO/Sync Professor Oxford:** People who die and are buried in lead coffins can be very well preserved so we began to look for victims of the 1918 flu pandemic who were buried in lead coffins, that's how we uncovered Phyllis Burn.
10:04:07	10:04:18	Int: GVs of scientists in lab.	**VO COMMENTARY** At the moment Professor Oxford is still waiting for the approval of the church to go ahead with the exhumation. But his research so far has already cast new light on the 1918 virus.

10:04:19	10:04:53	Int: H&S of Prof Oxford. Int: GVs of scientists in lab. Int: H&S of Prof Oxford.	**VO/Sync Professor Oxford:** The virus is totally unique in the sense of how it can mutate and change but the one thing we have found which is of immediate interest from our analysis of the 1918 samples is that that virus didn't mutate. That brings with it a rather positive message, that is in that with the next one, if we've got a vaccine available, if we've got some new anti-viral drugs, the virus will not evade them, the virus will not change and so any drug or any vaccine will work during the first great wave of the outbreak during the whole year and that's a very positive message.
10:04:54	10:05:08	Ext: Public on street. (Into focus). Ext: H/A view of city. ***Graphics:***	**VO COMMENTARY** Professor Oxford's research may prevent another human disaster like 1918 pandemic.