

# ପ୍ରକାଶକ ପରିଷଦ୍ ପରିଷଦ୍ ପରିଷଦ୍

# ପ୍ରତିକାଳିକ ପର୍ଯ୍ୟାନ୍ୟ ପରିବାର

Health Protection Agency  
February 25 at 8:30 PM ·

## Response to common myths of COVID-19

Does garlic cure #Covid19? No.

Dr. Mohamed Ali answers common rumors and myths from Viber Groups. See Less

مَرْجَرِرُو! تَعْوِيْعٌ وَّمِسْرَرُو! مِسْرَرُو!

عَيْنِيْرُو! تَعْوِيْعٌ وَّمِسْرَرُو! مِسْرَرُو!

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Does garlic cure **#Covid19**? No.

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## Mythbusters

Dr. Mohamed Ali responds to common myths circulating in our community on COVID-19

8:30 PM · Feb 25, 2021 · Twitter Media Studio

وَهُنَّ مُؤْمِنُونَ إِنَّمَا يَعْرِفُنَّ أَنَّمَا يَعْرِفُنَّ مَنْ يَعْرِفُهُمْ وَهُنَّ لَا يُؤْمِنُونَ

The choice of suitable cell substrates for the manufacture of viral vaccines has over the years engendered considerable discussion. The primary focus in these discussions on cell substrates have been safety, in particular the potential safety concerns from residual cellular DNA and from adventitious viral agents.

As history has shown, the need for concern about cell substrate issues was real. We have only to

Dr Bill Egan - Acting Director, Office of Vaccines, Center for Biologics Research and Evaluation (CBER)

<sup>1</sup> <https://www.fda.gov/vaccines-blood-biologics/biologics-research-projects/investigating-viruses-cells-used-make-vaccines-and-evaluating-potential-threat-posed-transmission>

problem with the contamination. But the main disadvantage of the continuous cell line is that many do express endogenous viruses and there has always been this concern over tumorigenic potential, should we say, associated with cellular DNA.

The main three risks then with these different cell lines for producing biologicals are contaminating viruses, and we must include here, the TSEs, the transmissible spongiform encephalitis agents, whatever that may be in the end, residual host cell DNA, and growth-promoting proteins. And as I

The other surprise was the detection of SV40 genome in rare human tumors. This is something which has come back to haunt us after 30 years or so. I am sure you all know that SV40 was a contaminant of some of the early batches of primary rhesus monkey kidney cells used to produce polio vaccines. This is no surprise. During the 1950's, these were actually used in a large number of people -- in the millions. There was follow-up with that to see whether they actually caused any problems, and nothing much materialized. And then suddenly about three or four years ago, the SV40 sequences were picked up in various rare human tumors. That raised the issue of was the vaccine -- was the polio vaccine made in primary kidney cells actually still transmitting SV40

Everybody is together here. We need to consider again, I think, some of the issues of residual DNA. Is it oncogenic? What is the issue there? Is there an infectious DNA in relation to what sorts of cell line you've got and what is in the cell? It is really timely to review and assess the risks in light of a

unless they are very closely related. The concern I would have of vaccines made in higher species, monkeys or humans, is that probably there are -- or not probably, there may be some stealth viruses like these

that don't produce any obvious effect and that we don't even know about their presence to even detect them in animals. Let's say the chicken virus requires

**Dr Elwyn Griffiths, World Health Organization**

## Influenza A (H1N1) 2009 Monovalent Vaccine

### 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

Neither Influenza A (H1N1) 2009 Monovalent Vaccine Live, Intranasal nor FluMist have been evaluated for carcinogenic or mutagenic potential or potential to impair fertility.

## Hepatitis B vaccine (Recombivax)

### 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

RECOMBIVAX HB has not been evaluated for its carcinogenic or mutagenic potential, or its potential to impair fertility [see Use in Specific Populations (8)].

19.10.2005

Vaccines and Related Biological Products Advisory Committee  
November 16, 2005

## Issues Associated With Residual Cell-Substrate DNA

Keith Peden

Division of Viral Products  
Office of Vaccines Research and Review  
CBER, FDA



## Some Landmarks in Cell Substrates and DNA Levels

- 1954: Proscription on use of cell lines for vaccine manufacture; "normal" cells to be used (US Armed Forces Epidemiological Board)
- 1986: WHO established DNA limit for vaccines manufactured in cell lines at  $\leq 100$  pg per dose
- 1996: WHO/IABs and WHO Expert Committee, for vaccines produced in cell lines, DNA limit raised to  $\leq 10$  ng per dose

## Activities Associated with Residual Cell-Substrate DNA

- Oncogenic Activity
  - Consequences of integration into host genome
    - Disruption of tumor-suppressor gene (e.g., *p53*)
    - Activation of dominant proto-oncogene
  - Introduction of a dominant oncogene (e.g., *ras*)
- Infectivity Activity
  - Capacity to generate infectious agent (e.g., DNA virus, retroviral DNA)

وَلَمْ يَرَوْهُمْ إِذَا هُمْ بِهِ مُنْجَذِّبُونَ إِذَا هُمْ بِهِ مُنْجَذِّبُونَ إِذَا هُمْ بِهِ مُنْجَذِّبُونَ إِذَا هُمْ بِهِ مُنْجَذِّبُونَ

