



COUNTRY REPORT OF VIETNAM

10th **December 2020**

Dr. TRAN Ngoc Toan

Vice – President of Vietnam Atomic Energy Institute







- 1. Introduction
- 2. Status of nuclear technology applications under the Pandemic
- 3. Activities in response to the Pandemic
- 4. Conclusion



1. Introduction



Over the world update, 21st Nov 2020

- Cumulative cases: 58 480 602

- Cumulative deaths: 1 385 778

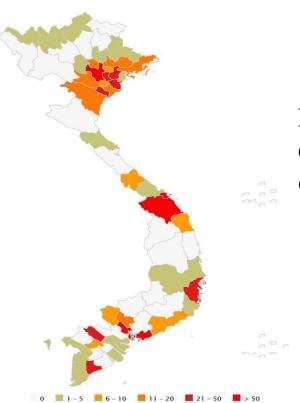
- Recovered: 40 459 893

Vietnam, update 21st Nov 2020

- Cumulative cases: 1306

- Cumulative deaths : 35

- Recovered: 1142



In Viet Nam, the pandemic COVID-19 is basically controlled, some of new cases are all imported and quarantined on arrival.

Map of provinces and cities by the number of COVID-19 confirmed cases (update 21st November, 2020



2. Status of nuclear technology applications under the Pandemic



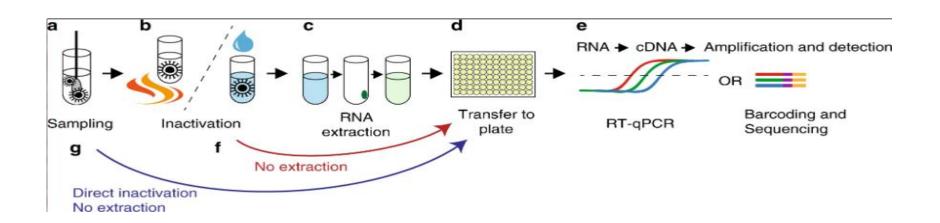
- In the pandemic situation and implementation of social distancing, nuclear medicine and radiotherapy facilities have been maintained under radiation safety conditions and prevention of virus transmission.
- Since March 2020, Cyclotron centers nationwide have decreased the production of radiopharmaceuticals F18-FDG due to decline in PET/CT demand (as a consequence of social distancing). However, the production of Cyclotron centers has been maintained to serve for patients being treated in nuclear medicine and radiotherapy facilities.
- In 2020, as a consequence of COVID-19, the total volume of irradiated goods for export has decreased dramatically.



3. Activities in response to the Pandemic



Viet Nam has applied RT-PCR, a nuclear-derived method, and developed successfully the test kits to detect the coronavirus COVID-19. It continues to be the most accurate method available for the detection of the COVID-19 virus.





3. Activities in response to the Pandemic



Irradiation of medical equipment

In the complicated situation of the COVID-19, to join hands and fight the pandemic, Hanoi Irradiation Center, VINATOM has irradiated medical equipment and products:

• Till the mid of April, 2020, the total number of sterilized medical equipment for Bach Mai Hospital are: 102.300 Nano face masks; 22.525 N95 face masks and 960 protective clothing.



Irradiated face masks





3. Activities in response to the Pandemic



Dalat nuclear reactor increases the production

of radiopharmaceuticals

- The widespread of COVID-19 results in difficulties in importing radiopharmaceuticals, but the Dalat Nuclear Research Institute has strived for supplying enough radiopharmaceuticals for nuclear medicine facilities in Viet Nam during the pandemic.
- Update to November 2020, Dalat nuclear reactor operated nearly 3700 hours and produced 1200 Ci radiopharmaceuticals (increased by approximately 3 times and 48% respectively compared with the five-year average)



Dalat Nuclear Research Institute





4. Conclusion



- Applications of nuclear science and technology have made significant contribution to the social and medical well-being development in Viet Nam, especially under the Pandemic. Towards sustainable development, these potential applications should be further enhanced at global scale.
- Viet Nam desires to strengthen cooperation with FNCA and other cooperation channels to promote peaceful applications of nuclear energy for socio-economic development in Viet Nam, particularly addressing issues of human health, environmental protection and climate change mitigation





THANK YOU FOR YOUR ATTENTION