

Rapid Response by Laboratory Animal Research Institutions During the COVID-19 Pandemic: Lessons Learned



RAPID RESPONSE BY
LABORATORY ANIMAL RESEARCH INSTITUTIONS
DURING THE COVID-19 PANDEMIC: LESSONS LEARNED

► MARCH 9-10, 2021

A Virtual Workshop

Nonhuman Primate Importation During the SARS-CoV-2 Pandemic

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CDC NHP Activities

- **Review registration applications**
- **Inspect quarantine facilities**
- **Review import plans**
- **Monitor arriving shipments**
- **Conduct periodic site visits**
- **Review importer records**
- **Assess disease-control measures**
- **Verify NHP imported for permitted purposes**
- **Investigate illness/mortality reports**

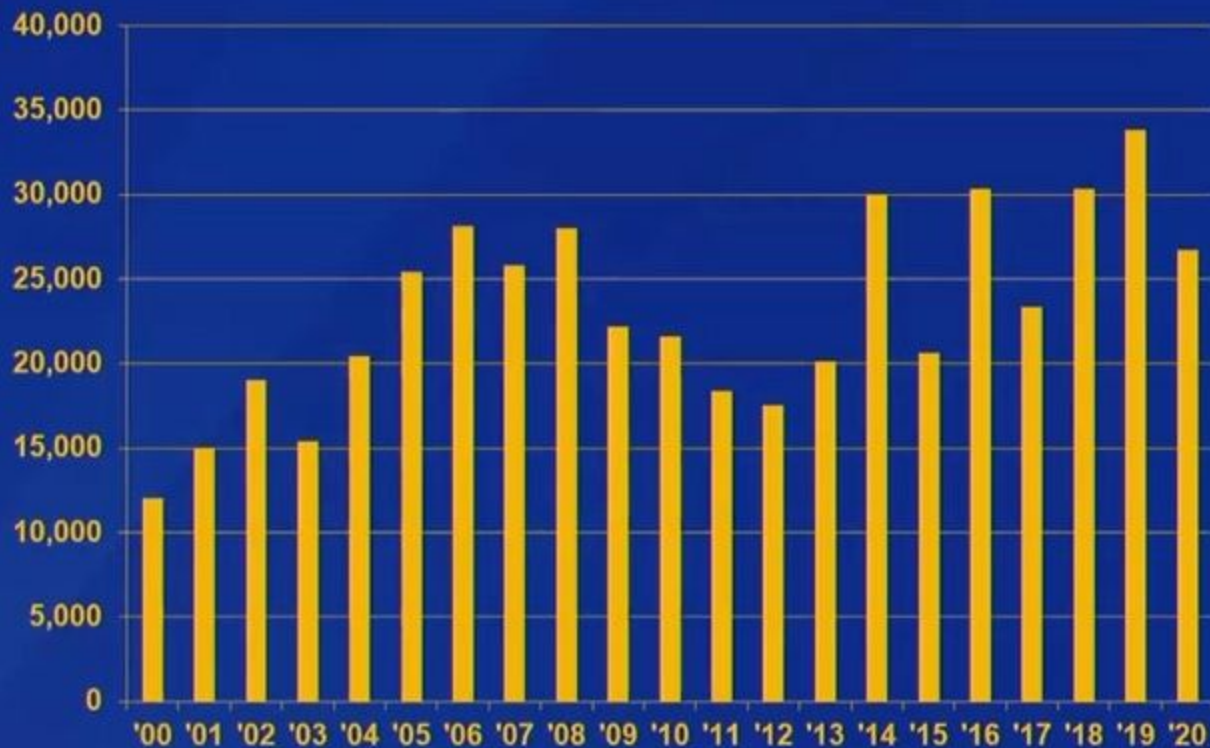
CDC-Registered Importers of Nonhuman Primates (NHP)

- **14 commercial importers**
- **6 zoos**
- **2 national primate research centers**
- **1 university**
- **2 animal acts**

25 total

NHP Imports, All Species FY 2000–2020

Number of NHPs



NHP Summary Data FY 2020 vs. FY 2019

	Number FY2020	Percent	Number FY2019	% Change
Total animals imported	26,728*	—	33,818	- 21.0%
Total shipments	115	—	162	-29.0%
Total animals DOA ¹	4	0.0%	6	-33.3%
Total died in quarantine	75	0.3%	71	+ 5.6%

¹ Dead on arrival

* Includes 1 smuggled spider monkey (not counted as a shipment)

NHP Importation Data by Country of Origin, FY 2019 vs FY 2020

Country	Number FY 2019	Number FY 2020
Cambodia	8571	15,664
Mauritius	3540	5,032
China	20,270	3,723
Philippines	0	700
St. Kitts & Nevis	328	528
Vietnam	840	480

NHP Importation Data by Country of Origin FY 2019 vs FY 2020 (cont.)

Country	Number FY 2019	Number FY 2020
South Africa	160	320
Barbados	0	192
Canada	17	40
Guyana	52	40
Czech Republic	0	4
Germany	39	4
Argentina	1	0
Total from all countries	33,818	26,727

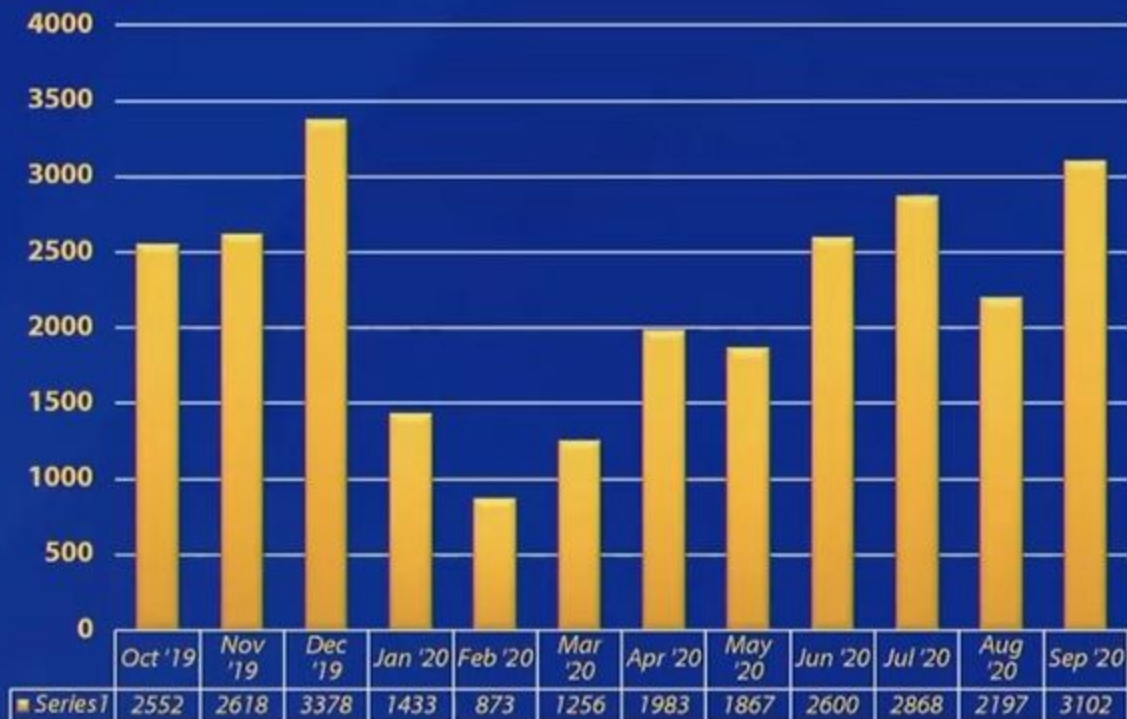
NHP Importation Data by Species, FY 2019 vs. FY 2020

Species	Number FY2019	Number FY2020	% Change
Cynomolgus	32,439	24,879	- 23.3%
Rhesus	844	763	- 9.6%
African green	282	720	+ 155.3%
Marmosets	195	326	+ 67.2%
Squirrel monkey	30	34	+ 13.3%
Capuchin	15	0	- 100.0%
Various*	13	6	- 23.0%
Total	33,818	26,728	- 21.0%

* FY2020 Includes 2 Colobus, 1 De Brazza's, 2 Siamang, and 1 (smuggled) spider monkey
 FY2019 Includes 7 Saki, 1 Colobus, 4 Gelada, and 1 Orangutan

NHP Imports by Month, FY 2020

Number of NHPs



NHP Importation Data FY 2020 vs. FY 2021 October – January

Country of Origin	Species	Number of Animals FY 2020	Number of Animals FY 2021
Cambodia	Cynomolgus	3636	7084
China	Cynomolgus	3003	0
Mauritius	Cynomolgus	3725	3725
Philippines	Cynomolgus	700	350
Vietnam	Cynomolgus	120	240
Canada	Rhesus	45	45
China	Rhesus	720	0
Germany	Rhesus	4	0

NHP Importation Data FY 2020 vs. FY 2021 October – January

Country of Origin	Species	Number of Animals FY 2020	Number of Animals FY 2021
Barbados	African greens	0	144
St. Kitts & Nevis	African greens	0	100
South Africa	Marmosets	80	80
United Kingdom	Marmosets	0	44
Guyana	Squirrel monkeys	0	63
Guyana	Capuchins	0	38
Total monkeys Imported		9981	11,923

NHP Importation Trends and Changes

- **NHP importation decreased in 2020 by 21.0%**
- **NHP imports from China decreased by 81.6%**
- **NHP imports from Cambodia increased by 82.8%**
- **Importation of African green monkeys from the Caribbean appear to be increasing**
- **Importers continue to ship primarily medium-sized shipments on commercial flights**