The federal government has agreements with [Moderna](https://www.cbc.ca/news/politics/vaccine-procurement-anand-bains-1.5674820)and[Pfizer/BioNTech](https://www.cbc.ca/news/politics/vaccine-procurement-anand-bains-1.5674820) on Aug. 5; with [Novavax](https://www.cbc.ca/news/business/novavax-covid-19-vaccine-1.5706067)and[Janssen](https://www.cbc.ca/news/business/novavax-covid-19-vaccine-1.5706067), a subsidiary of Johnson & Johnson, on Aug. 31; with [Sanofi/GSK](https://www.cbc.ca/news/health/canada-vaccine-agreements-1.5734101) on Sept. 22; with [AstraZeneca](https://www.cbc.ca/news/politics/covid19-briefing-trudeau-tam-1.5738503), which is manufacturing a vaccine developed at the University of Oxford, on Sept. 25; and with [Medicago](https://www.cbc.ca/news/politics/trudeau-vaccine-rapid-tests-1.5774309) on Oct. 23.

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| COMPANY | VACCINE | TYPE | AVANTAGES | DISADVANTAGES | CLINICAL |
| Novanax / Emergent | NVX-CoV2373 | Sub-unit | No live components  Few side effects  Matrix-M adjuvant | Memory for future response is uncertain | Phase 3 since September  nAB same or higher than convalescent sera  S.E. : Headaches and fatigue |
| Moderna Tx | mRNA-1273 | RNA vaccine | Translates in cytosol : cannot integrate in host genome | Instability  Safety issues (reactogenicity) | Phase 3 since July  100 ugm dose surpassed nAB of convalescent sera  250 ugm poorly tolerated |
| Pfizer/  BioN Tech | BNT162b1 | RNA vaccine | T4 added immunogenicity | Instability  Safety issues (reactogenicity) | Phase 3 since July  IgG levels 8-46x those of conv sera. nAb 1.8-2.8x |
| Sanofi/GSK | Spike protein | Sub-unit |  | Memory uncertain |  |
| Medicago | Virus-like Particles (VLPs) from plants | Sub-unit | Non-infectious (lack core genetic material)  Long-lasting response | Reactogenicity |  |
| Astra-Zeneca/ U Oxford | AZD1222 | Viral vector based (adenovirus) | Efficacy in MERS  Strong immunogenic response | Host may possess immunity against vector | Phase 3 since August  Myelitis in one patient |