



Impacting Human Health

2021 ESG Report

moderna[®]

Table of contents

03	Message from CEO
04	Moderna in 2021
05	Areas of focus
07	Medicines for patients
16	Employees
23	Environment
26	Community
27	Governance and ethics
32	Going forward
33	Appendix

Moderna's Mission:

Deliver on the promise of mRNA science to create a new generation of transformative medicines for patients.

Message from CEO



June 13, 2022

Dear Stakeholders,

I am very proud to share with all of you Moderna's very first Environmental, Social and Governance Report. In its writing, we reflected on how the COVID-19 pandemic has highlighted and exacerbated inequalities around the world: the urgent need to increase access to quality healthcare and medicines, to close the opportunity gap, particularly in underserved communities, and to save the planet from the devastating impacts of climate change. We recognize that Moderna's commitment to Corporate Social Responsibility is more important now than ever.

The past year was one of monumental impact and change for Moderna. In the fight against the pandemic, our team showed relentlessness under tight timelines and COVID-related challenges,

while advancing our COVID-19 vaccine and broad pipeline of mRNA medicines, always with a deep sense of purpose and care for our patients, our employees, the environment, and our communities.

Today, we are guided by our unwavering belief that Moderna's mRNA platform can solve the world's greatest health challenges—from diseases impacting millions to medicines personalized down to the individual level. We are dedicated to pursuing innovative vaccine solutions to address infectious diseases that pose the greatest risk to public health through collaborative research and development. We have focused on developing a global health vaccine program since the beginning and with our recently announced Global Public Health Strategy, we are expanding our work to develop vaccines against priority pathogens that threaten global health. By launching our new mRNA Access program, we are also creating a community of global scientists who can access our mRNA vaccine technology from anywhere in the world. The world needs novel, innovative approaches to address both known and emerging infectious diseases and we know that we can't go it alone. We are committed to bringing the full force of our mRNA vaccine platform to combat infectious diseases of public health concern and we look forward to working with global partners to prevent future pandemics and help millions of people worldwide.

We are also committed to being a great company for our employees, as exemplified by our seventh consecutive year ranked as a best company to work for by *Science* and our recognition as the #1 Best Workplace for Innovators in 2021 by *Fast Company*. Being our best also means building a company that is responsible and minimizes our impact on the planet,

and I am proud of our announcement last year to achieve net zero carbon emissions by 2030. We are passionate about addressing the inequalities made even clearer by the pandemic, while contributing to the communities where we live and work. With the launch of the Moderna Charitable Foundation and the generous engagement of our employees, we are extending our societal impact. And we believe that our continuous focus on quality, transparency, and ethics, is critical to build and maintain trust with all our stakeholders.

As we work to advance these priorities, I want to thank our now global team for their relentless pursuit of our Mission and for embracing our Values and Mindsets every day. Our employees have sacrificed so much to make a difference to people and patients across the globe. I am very grateful to all of them.

We believe Moderna could become one of the most impactful healthcare companies in the world. A strand of mRNA can bind science, technology and humanity together to build a healthier planet. I invite you to read this report and learn about our progress across our Environmental, Social, and Governance commitments. There is much work to do, and we are grateful for your engagement in this journey to help us become the most impactful version of Moderna over the next several decades.

Warmest regards,

Stéphane Bancel,
Chief Executive Officer, Moderna

Moderna in 2021

Key ESG Highlights

Medicines for Patients

25%

of total doses of our COVID-19 vaccine in 2021 delivered to low- and middle-income countries

Announced Global Public Health Strategy to:

- Advance vaccines targeting 15 pathogens identified as biggest public health risks into clinical studies by 2025
- Launch mRNA Access
- Expand COVID-19 patent pledge
- Establish mRNA Manufacturing Facility in Kenya, Africa

Employees

47%

female employees (vs. 46% in 2020)

40%

of U.S. employees identify as racially or ethnically diverse (vs. 35% in 2020)

Grew to Eight Employee Resource Groups

Created Artificial Intelligence Academy

Environment

Pledged to achieve net-zero carbon emissions globally by 2030

Awards

Fast Company's Best Workplaces for Innovators

Debuted at number 1 on 2021 list

Community

Launched Moderna Charitable Foundation

Provided support to humanitarian crises in Haiti and Ukraine in 2022

Hosted 3rd annual Moderna Volunteers Week

Science Careers' Top Employers

Ranked for seven consecutive years; number 7 on 2021 list

Governance & Ethics

Incorporated ESG metrics focused on human capital, engagement and belonging in our bonus program in 2021

BioSpace's Best Places to Work

Ranked number 1 in large employer category on 2022 list

Our areas of focus

At Moderna, our ESG strategy and corporate social responsibility program are built upon a foundation of integrity, quality, and respect. These values provide a foundation for us to build and support long-term programs that demonstrate our commitment to patients, employees, the environment, and local communities.



Our efforts are driven by our belief that:

With the potential of our science comes a responsibility to the multitude of patients our technology could help, regardless of whether they have a disease shared by millions, or one that is unique to them alone

We have a responsibility to do our part to ensure the sustainability of our planet, and we will consider our impact on the environment in the decisions that we make

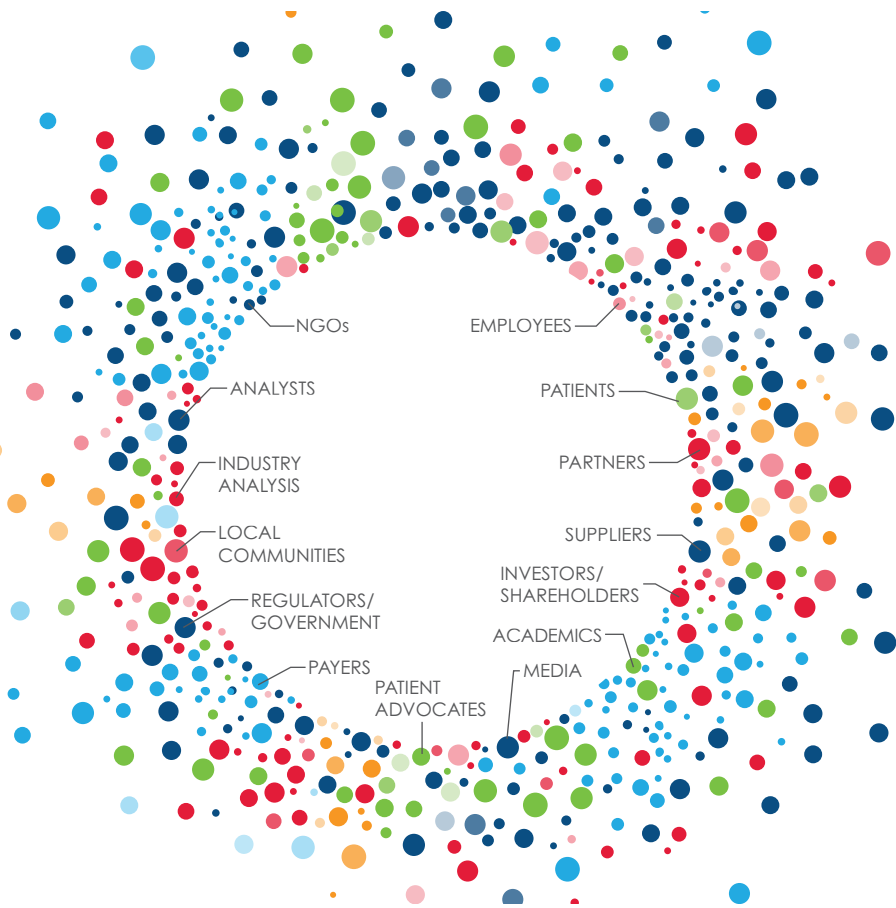
We can and should use our expertise and resources to give back to the communities in which we operate

We have a responsibility to our employees to provide fulfilling, purposeful careers, and that our employees are rewarded for their dedication

We must hold ourselves to high ethical standards across all areas of our business and with our stakeholders—both internal and external—while ensuring we have the governance and practices in place to meet these standards.

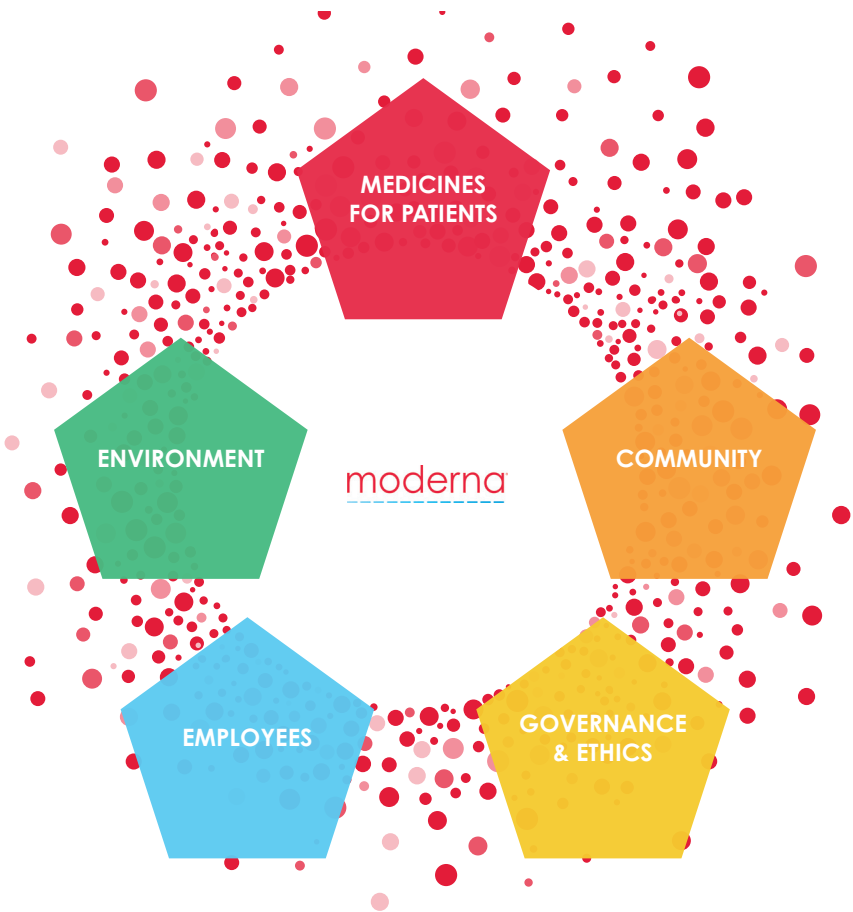
Who are our Stakeholders?

By identifying and engaging with the groups that impact— or are impacted by—our business, we can better align our company’s corporate responsibility activities to their long-term objectives. We have identified and defined our key stakeholders and will continue working to understand their interests as we grow and advance our potential medicines through our pipeline. Moderna’s stakeholders include:



Our Corporate Citizenship Framework

Moderna’s **corporate responsibility strategy** considers the needs and priorities of our key stakeholders and the areas where we believe we can have a direct impact today and in the future. Our work now and beyond is centered on five focus areas:



Medicines for patients

Moderna's mission is to deliver on the promise of mRNA science to create a new generation of transformative medicines for patients. We remain focused on continuing to accelerate the development of safe and effective mRNA medicines for people and patients worldwide.



Doing our part to fight the pandemic since 2020

The last two years were historic for Moderna. The entire world has been focused on the pandemic and the race against the virus, both with therapeutics and vaccines. The Moderna team itself was incredibly focused in 2020 on getting mRNA-1273, our vaccine candidate against COVID-19, to the market safely and in record time.

In January 2020, just two days after the Chinese authorities shared the genetic sequence of the novel coronavirus, the National Institutes of Health (NIH) and Moderna's infectious disease research team finalized the sequence for mRNA-1273. We recognized important similarities to the MERS virus and based on good preclinical data and analysis from the previous two years of collaboration with NIH decided to encode for the full-length Spike (S) protein. At that time, the National Institute of Allergy and Infectious Diseases (NIAID), a part of the NIH, also disclosed its intent to run a Phase 1 study using our mRNA-1273 vaccine in response to the coronavirus threat. We quickly mobilized toward clinical manufacture.

In just 42 days from sequence identification, we released our first batch of mRNA-1273 for human use. Vials of mRNA-1273 were shipped to NIAID to be used in the planned Phase 1 study in the U.S.

On March 11, 2020, the World Health Organization (WHO) declared the novel coronavirus a pandemic and just days later, on March 16, NIH announced that the first participant in its Phase 1 study of mRNA-1273 was dosed—only 63 days

from sequence selection to first human dosing. Moderna was the first company to launch a SARS-CoV-2 vaccine trial in humans. It was a historic moment.

Exactly one month later, on April 16, 2020, we announced an award from the Biomedical Advanced Research and Development Authority (BARDA) in the U.S. for up to \$483 million to accelerate development of mRNA-1273, which was primarily focused on funding clinical trials. Time was of the essence to provide a vaccine against this pandemic virus. We had already begun to prepare supply for a Phase 2 trial at our own expense. By investing in our manufacturing process to enable large-scale production for pandemic response, we believed that we could supply millions of doses per month in 2020 and, with further investments, tens of millions per month in 2021.

On May 18, 2020, we announced positive interim Phase 1 clinical trial data. By the end of the month, the first participant had been dosed in the Phase 2 study and the Moderna team continued to focus on moving as fast and as safely as possible to start our pivotal Phase 3 study.

July 2020 brought the publication of positive interim Phase 1 data in the New England Journal of Medicine and the initiation of our Phase 3 COVE study, which completed enrollment of more than 30,000 total participants in October. It was another historic moment for our company. The subsequent months also brought the presentation and publication of Phase 1 data from older adult age cohorts, which gave us optimism in demonstrating mRNA-1273's protection in this high-risk population.

It is very important to the Moderna team that we ensure quality and transparency so that the public has trust in COVID-19 vaccines. To that end, we reported weekly enrollment progress in our COVE study, including enrollment numbers from diverse communities. And when we recognized a shortcoming with minority representation in our Phase 3 study, we decided to slow down the overall study enrollment to ensure the participants were representative of the communities at highest risk for COVID-19 and of our diverse society.

We were the first company to file the full, un-redacted version of our Phase 3 protocol online to ensure clinicians around the world could see, in full transparency, the design of our COVE study. We were pleased to set the standard and have others in the industry follow our lead.

On November 30, 2020, the primary analysis of our Phase 3 COVE study demonstrated a vaccine efficacy of 94.1 percent and, importantly, mRNA-1273's ability to prevent severe COVID-19 disease. This positive data analysis confirmed the high efficacy observed in the first Phase 3 interim analysis of mRNA-1273, and the vaccine was generally well-tolerated, with no serious safety concerns identified by an independent Data Safety Monitoring Board. It also confirmed our ability to potentially change the course of this pandemic and help prevent severe disease, hospitalizations and death.

In December 2020, we received Emergency Use Authorization from the FDA and an Interim Order from Health Canada authorizing the vaccine in the U.S. and Canada. At the end of

December 2020, we also published our Phase 3 data in the *New England Journal of Medicine*.

Moderna became a commercial company in 2021 and started scaling rapidly for impact. In early 2021, we doubled our monthly deliveries of our COVID-19 vaccine to the U.S. government, and we worked to double them again by April to more than 40 million doses per month. As we worked to meet these goals, we were continually learning and working closely with our partners and the federal government to identify ways to address bottlenecks and accelerate production.

By June 2021, we made and delivered our 200 millionth dose of the Moderna COVID-19 vaccine to the U.S. government. This was a heartening milestone, knowing that many tens of millions of people had been fully vaccinated or received their first dose in the U.S. It had taken us just two months to go from 100 million to 200 million doses. To put that into perspective, in 2019, we made fewer than 10,000 doses per month. By October 2021, Moderna and our partners ramped up our capacity worldwide and supplied more than 500 million doses of our COVID-19 vaccine globally. There were several efforts in place to continue increasing capacity at a significant pace, including the expansion of our Moderna Technology Center in Norwood, MA.

By year end, we shipped approximately 800 million doses of our COVID-19 vaccine worldwide. That is roughly 295,000 vaccine doses per employee at Moderna in 2021. This was no small task for what was then a team of 2,700 people.

From the beginning, our goal has been to protect as many people as possible around the globe and expanding access to the vaccine has remained a top priority. We recognize that vaccine availability continues to be a challenge in many parts of the world, and we remain focused on ensuring that low-income countries have access to our vaccine.

In April 2021, we announced additional investments to increase global supply of our COVID-19 vaccine, and in May we announced an agreement with Gavi, the Vaccine Alliance to supply up to 500 million doses of our vaccine at our lowest tiered price, in line with our global access commitments. This agreement was subsequently revised, and Moderna committed to provide up to 650 million doses across 2021 and 2022. In October 2021, we also committed to supply up to 110 million doses of the vaccine to the African Union. While COVAX and the African Union have declined to exercise certain of their options for 2022 in response to sufficient vaccine supply, we are committed to expanding our manufacturing and supply until our vaccine is no longer needed in low-income countries.

Our commitment to promoting access goes beyond the immediate needs of the current pandemic. In October 2021, we announced that Moderna will build a state-of-the-art mRNA facility in Africa with the goal of producing up to 500 million doses of vaccines each year, and in parallel, we are working on plans to fill doses of our COVID-19 vaccine in Africa as early as 2023. We subsequently worked with the U.S. government to identify a site for this plant, which we expect to build in Kenya.

In line with our commitment to expanding access, and with the goal of helping to end the pandemic in low-income countries, we worked constructively with the U.S. government and the governments of EU Member States and Norway to enable the delivery of 138 million doses of our COVID-19 vaccine to COVAX and low- and middle-income countries in 2021. These facilitated donations are in addition to direct sales to COVAX and low- and middle-income countries of nearly 70 million doses, which collectively represent more than 25 percent of our deliveries for 2021. As we have continued to study how our vaccine can be used to fight the pandemic, we have pursued approval of booster doses at 50 µg in adult populations (compared to a primary dose of 100 µg), which allows our production to reach farther in providing protection. We are also pursuing the development of mRNA-1283, a next generation COVID-19 vaccine that is designed to be stable at refrigerated temperatures, which will help facilitate distribution in developing countries that lack cold-chain infrastructure. We have also updated our approach to contracting to reflect our commitment to equitable access to our vaccines.

As described further below, we were the first company to announce that we would not enforce our intellectual property rights related to COVID-19 vaccines during the pandemic. We have since expanded upon this pledge to make clear that we will not enforce our COVID-19 related intellectual property against manufacturers in the Gavi COVAX Advance

Market Commitment (AMC) countries, provided that the manufactured vaccines are solely for use in the AMC 92 countries.

These are just a few examples of how we are using dose sharing, technical development strategies, an updated approach to contracting, and a groundbreaking approach to intellectual property rights to help promote the more equitable global distribution of COVID-19 vaccines.



Advancing our global public health strategy

At Moderna, we are dedicated to pursuing innovative vaccine solutions to address infectious diseases that pose the greatest risk to public health through collaborative research and development. We believe the world needs novel, innovative approaches to address both known and emerging infectious diseases and we know that we can't go it alone. We are committed to bringing the full force of our mRNA vaccine platform to combat infectious diseases of public health concern and work with global partners to be part of the solution to prevent future pandemics and help millions of people around the world. In 2022, we announced our global public health strategy composed of four initiatives aimed at advancing mRNA vaccines for the prevention of infectious diseases.

Our Global Public Health Strategy



Advance vaccines targeting 15 pathogens into clinical studies by 2025



mRNA Access, a new collaborative that will offer researchers use of Moderna's mRNA technology to explore new vaccines



Never enforce COVID-19 patents in the Gavi COVAX AMC for 92 low- and middle-income countries



mRNA Manufacturing Facility in Kenya, Africa

Addressing 15 priority pathogens and pandemic preparedness by 2025

We have spent a decade refining our mRNA platform to accelerate the pace and success of mRNA medicines. The speed, scale and flexibility of our mRNA platform is uniquely suited for rapid response to "Disease X." Named by WHO, "Disease X" represents the knowledge that a serious international epidemic could be caused by a pathogen currently unknown to cause human disease. Our early clinical programs targeting pandemic influenza, chikungunya virus and Zika virus demonstrate our long-standing commitment to pandemic preparedness and global health. Our experience in the field runs deep. At the same time, we have the agility needed to respond quickly in the face of public health crisis.

In early 2020, just as the world was first making sense of what was then known only as the novel coronavirus, we began working on development of a SARS-CoV-2 vaccine, and in 11 months, after demonstrated clinical safety and efficacy, our COVID-19 vaccine was authorized and hundreds of millions of people around the world have now received the vaccine. The speed, scale and flexibility of our mRNA platform is uniquely suited for rapid response for "Disease X". We are committed to helping prevent another global pandemic.

We are distinctly aware of the fact that great challenges require the coming together of great minds. To that end, we're proud to partner with foundations, government organizations and universities to develop mRNA solutions to critical global public health challenges. This includes our

Going forward, our goal is to advance into clinical studies a portfolio of 15 vaccine programs by 2025 that will target emerging or neglected infectious diseases. This portfolio will include advancing vaccines that address current diseases of significant impact to low- and middle-income countries as well as those that prepare for Disease X. Our development efforts will prioritize work against pathogens identified as persistent global health threats, including human immunodeficiency virus (HIV), tuberculosis (TB) and malaria, neglected tropical diseases and the priority pathogens of the WHO and the Coalition for Epidemic Preparedness Innovations (CEPI).

partnership with the International AIDS Vaccine Initiative (IAVI) and the Bill & Melinda Gates Foundation to accelerate human validation of novel HIV vaccination strategies, as well as a second mRNA-based approach to HIV vaccination in collaboration with the NIH. Each of these vaccine candidates against HIV are in ongoing Phase 1 trials. IAVI and Moderna will also partner to tackle broad global health priorities using mRNA for vaccines and antibodies, expanding our collaboration to target bacterial and viral pathogens including HIV, SARS-CoV-2, antimicrobial-resistant pathogens, and tuberculosis.

With our eye always on public health and pandemic preparedness, we also have programs to develop a Zika vaccine and a vaccine against the Nipah virus. The Zika vaccine program is in an

ongoing Phase 2 trial. The Nipah virus is expected to enter a Phase 1 study later this year. Nipah is a zoonotic virus transmitted to humans from animals that is on the WHO's Blueprint list of epidemic threats needing urgent R&D action.

mRNA Access

We believe in the power of mRNA, and we also believe collaboration is key to truly harnessing its potential. To accelerate research with the aim of advancing additional vaccines, we have launched mRNA Access, a new program that offers researchers use of Moderna's mRNA technology to explore new vaccines against emerging or neglected infectious disease. The mRNA Access program will open Moderna's preclinical manufacturing capabilities and research and development expertise to global partners, to promote a collaborative approach to exploring the possibility of mRNA to tackle the world's greatest global public health threats. Through the program, researchers at partnering institutions are invited to take advantage of Moderna's mRNA platform to develop mRNA medicines for existing neglected diseases. These programs will leverage Moderna's early development capabilities to accelerate vaccine development to the clinic. mRNA Access will also allow scientists around the world to explore novel vaccine designs against prototype viral families in preparation for "Disease X." And we are excited that partners around the world have already joined our global platform to accelerate the impact of mRNA science. Overall, the mission of mRNA Access is to explore the bounds of vaccine design and enable new medicines for emerging and neglected infectious diseases through collaborative research and pre-clinical development.

Moderna Patent Pledge

In October 2020, we became the first company to commit to not enforcing our COVID-19-related IP rights during the pandemic. In 2022, to further underscore Moderna's commitment to low- and middle-income countries, and as part of our continued support for achieving global health equity, we updated our patent pledge to never enforce our patents for COVID-19 vaccines against manufacturers in or for the 92 low- and middle-income countries in the Gavi COVAX AMC, provided that the manufactured vaccines are solely for use in the AMC 92 countries.

In non-AMC 92 countries, vaccine supply is no longer a barrier to access. In these countries, we expect those using Moderna-patented technologies will respect Moderna's intellectual property. We remain willing to license our technology for COVID-19 vaccines to manufacturers in these countries on commercially reasonable terms. Doing so enables us to continue to invest in research to develop new vaccines, prepare for the next pandemic, and meet other pressing areas of unmet medical need.

Moderna's mRNA manufacturing facility in Kenya, Africa

Our dedication to vaccine access has brought us to Africa, where there is an enormous need for vaccine manufacturing. In 2022, we announced that with the assistance of the U.S. government, we have entered into a Memorandum of Understanding with the Government of the Republic of Kenya to establish Kenya as the location for our new African mRNA manufacturing facility. We expect to build this state-of-the-art



mRNA facility with the goal of producing up to 500 million doses of vaccines each year to help protect against future pandemics, based upon a 50 µg dose.

The WHO estimates that Africa relies on imports for 99 percent of its vaccine needs*. We want to help to change that by investing up to \$500 million in this new facility, which is expected to focus on drug substance manufacturing for the continent of Africa, and it could also be expanded to include fill/finish and packaging capabilities at the site. In parallel, we are also working on plans to fill doses of our COVID-19 vaccine in Africa as early as 2023, subject to demand. We believe that this step will become one of many on a journey to ensure sustainable access to transformative mRNA innovation on the African continent and positively impact public health.

* <https://www.gavi.org/vaccineswork/why-africa-needs-manufacture-its-own-vaccines>

Access Principles

We recognize that access to vaccines remains a challenge in many parts of the world. That's why Moderna is committed to working on multiple levels to optimize the impact of mRNA vaccines and therapeutics. Our philosophy on pricing and access reflects a few basic principles:

- Moderna is committed to developing a broad portfolio of vaccines and therapeutic solutions to address epidemiological challenges worldwide.
- Moderna will invest in R&D in areas of unmet need.
- Moderna will work to include communities that have historically been under-represented in clinical research in our development programs, as well as those that are disproportionately impacted by the respective diseases.
- Moderna aims to provide effective and affordable vaccines and therapeutics to all populations.
- Moderna will price its products through differential pricing frameworks.
- Moderna is committed to participating in key public-private partnerships such as Gavi, the Vaccine Alliance.
- Gavi-eligible countries will get Moderna's lowest prices, and Moderna commits to an annual independent third-party audit on this commitment.

Bringing new hope in rare diseases

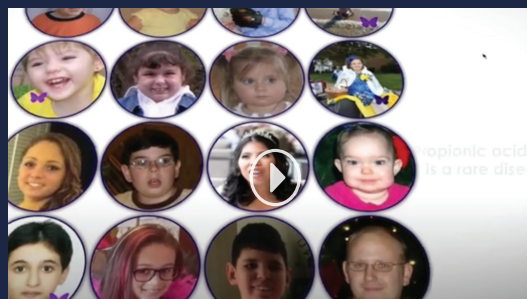
Rare diseases seldom have the spotlight, but they affect the lives of millions of people and their families. There are approximately 7,000 rare diseases that affect more than 300 million people worldwide. Collectively, people living with rare diseases represent one of the largest underserved patient communities in the world, with drugs approved for only five percent of known rare diseases. Moderna recognizes the impact of rare diseases on patients and their families, particularly when the disease lacks any effective treatment options. We are advancing mRNA-based therapeutics with the goal of one day bringing treatment options to patients and their families.

Our programs

In the last year, we made great progress in advancing our rare genetic programs, with two programs in the clinic and another on the path to the clinic. The Phase 1/2 studies are ongoing both for our Propionic Acidemia (PA) candidate, mRNA-3927, and our Methylmalonic Acidemia (MMA) program, mRNA-3705. We have also enrolled participants into an open label extension study, to provide continued access to our treatment to all patients who have completed the trial and would like to continue receiving therapy. In terms of the third program, the U.S. FDA has completed its review of the Investigational New Drug (IND) application for our GSD1a candidate, mRNA-3745, allowing it to proceed to the clinic. The FDA also granted Orphan Drug designation to mRNA-3745 and we look forward to sharing clinical data in the coming months.

Propionic Acidemia (PA)

Propionic Acidemia (PA) is an incredibly rare and severe pediatric disease in which the body can't break down certain parts of proteins and amino acids, which leads to the build-up of toxic chemicals. Learn more about PA and how Moderna is working to one day bring treatment options to patients and their families.



<https://www.youtube.com/watch?v=XgiYs3zrps&t=1s>

Methylmalonic Acidemia (MMA)

Methylmalonic Acidemia (MMA) is a rare genetic metabolic disease with significant morbidity and mortality. Mortality rates are estimated to be as high as 40 to 50 percent,

and there is no approved therapy that addresses the underlying disease. Kidney and liver transplant can provide a benefit, but access to donors is limited and transplants also carry significant risk of morbidity and mortality, with death rates of approximately 11 percent for liver transplants.

Glycogen Storage Disease Type 1a (GSD1a)

In Glycogen Storage Disease Type 1a (GSD1a), stored glycogen cannot be metabolized into glucose to supply energy and to maintain steady blood glucose levels for the body. There are no approved therapies except cornstarch, which children must receive through feeding tubes when they're very young to avoid life threatening loss of sugar. For these children, their lives may depend on a functioning alarm clock to wake them and their caregivers when it is time for their next dose of cornstarch. If a dose is missed, the disease can lead to seizures and, in rare instances, even death. Long term complications of GSD1a include kidney and liver damage, and risk of liver cancer.

In research, we are exploring several other rare genetic disorders with the hope that mRNA technology will offer better alternatives to many more patients and families. We will bring these into clinical studies as guided by the safety and effectiveness data from the research labs. And our work in rare diseases doesn't stop with our own therapeutic development. We have established partnerships to address ultra-rare diseases as well.

This includes our research collaboration with Vertex Pharmaceuticals to investigate how mRNA might be used to treat Cystic Fibrosis (CF). CF is a rare genetic disease, which is progressive from birth and leads to multi-organ damage and early death due to lung dysfunction. It is caused by the mutations in the CFTR gene which results in the loss of CFTR chloride ion channel function. This decreased function of CFTR at the cell surface leads to thick, sticky mucus in multiple organ systems but most pathologically the lungs. Our approach, in collaboration with Vertex, is to deliver mRNA to the lungs to provide functional CFTR protein expression that translates to transformative clinical benefit. It is estimated that there are approximately 75,000 patients with cystic fibrosis in the world, with approximately 5,000 of these patients not addressable with the approved CFTR modulators. Our program is designed to treat the underlying cause of CF by enabling cells in the lungs to produce functional CFTR protein for the treatment of the 10 percent of patients who do not produce any modulator-responsive CFTR protein. Pre-clinical studies are ongoing and Vertex expects to submit an IND in 2022.

Our commitment to addressing ultra-rare diseases

We are proud of a new collaboration with the Institute for Life Changing Medicines to develop a new mRNA therapeutic (mRNA-3351) for Crigler Najjar type 1 (CN-1), an ultra-rare disease. The goal of this partnership is to make an mRNA therapy for the treatment of CN-1 available at no cost to patients and their families. The Institute will not pay Moderna an upfront fee or any downstream payments and Moderna will also provide the mRNA-3351 material free of charge. We are proud to be able to deploy our mRNA platform to help combat this ultra-rare disease.

Crigler-Najjar Syndrome Type 1 (CN-1)

Crigler-Najjar Syndrome Type 1 (CN-1) is a severe condition characterized by high levels of a toxic substance called bilirubin in the blood (hyperbilirubinemia). Symptoms become apparent shortly after birth and can be life-threatening. It is estimated that there are only approximately 70 to 100 known cases of CN-1 in the world. Current standard of care treatments rely on phototherapy treatments of up to 12 hours a day throughout life. The only definitive treatment is a liver transplant, which is associated with its own set of side effects and risk of death.



Ensuring diversity in clinical trials

Moderna is committed to developing medicines and vaccines for all. We realize we cannot maximize the potential of mRNA without ensuring that access to these vaccines and medicines

is inclusive of all communities. We remain unwavering in our commitment to researching mRNA-based vaccines and therapies with a goal of bringing better health for all populations.

Moderna is committed to **increasing diversity** in our clinical trials by identifying the **barriers that currently impede inclusion**, and implementing approaches to more efficiently **identify, engage, recruit, and retain** study participants from racial/ethnic **minority communities and vulnerable populations**.

Diseases don't discriminate—neither should clinical research

2020 was an unexpected year for all of us. The world looked to industry to run clinical trials for vaccines against COVID-19 as quickly and safely as possible. With our partners, Moderna enrolled more than 31,000 participants in our COVID-19 vaccine trials, and our Phase 3 COVE study was conducted in more than 100 locations across the U.S. However, speed and quality were not the only considerations for our vaccine program.

COVID-19 has a disproportionate impact on racial and ethnic minority communities. It was our goal to design a trial for everyone. We were so committed to diversity and inclusion in our COVE study that we slowed enrollment to ensure broad representation. In the end, our trial included more than 11,000 participants from communities of color, representing 37 percent of the study population.

Why is clinical trial Diversity & Inclusion important?

Medical diseases and conditions may affect all people differently, but they still can affect anyone. We can only advance science and clinical outcomes for all patients if they are represented in clinical trials. In the U.S. and abroad, regulatory approvals for investigational products are based on clinical trials where the participant population enrolled in the associated trial reflects the composition of the general population or of those affected by the disease. Trials must reflect our diverse society, especially as populations shift.

The demographics of the U.S. population are significantly shifting. By 2045, it is expected that those currently identified as racial or ethnic minorities will become the majority. As these demographics change, it is paramount that the composition of trial participants also shifts. We have a responsibility to trial participants and patients to help ensure that medicines and vaccines that help protect everyone have everyone involved.

Just as we worked to ensure representation of communities of color and vulnerable populations in our COVE study, for the Phase 3 clinical trial of our cytomegalovirus (CMV) vaccine candidate, we set a goal of enrolling a diverse group of participants, including approximately 42 percent participants in the U.S. representing Persons of Color.



About CMV

Cytomegalovirus (CMV) is a leading cause of birth defects around the world. CMV is a common viral infection that usually goes unnoticed or only causes mild symptoms in most people. But if a woman becomes infected with CMV while she is pregnant, she can pass the infection to her unborn baby. This can cause her child to suffer long-term disability due to birth defects, including hearing loss, or even death in very severe cases. Currently, there is no approved vaccine against CMV.

Where will we go now?

We recognize that there is not a “one size fits all” approach to cultivating inclusivity. To that end, we have centered our efforts on three main pillars:

- **Education:** We are deliberate in our efforts to provide culturally appropriate educational materials and recruitment support tools for different populations.
- **Transparency:** We want to be very explicit in our intent to attain age, sex, and racial/ethnic balance, and we will provide regular updates to sites about our enrollment data, specifically as it relates to enrollment demographics.
- **Collaboration:** We won't try to do it alone. We proudly partner with sites, trusted community organizations and experts to help assure trial access is extended to all neighborhoods.



Moderna Research Fellowship

In 2021, we were proud to announce the launch of the [Moderna Research Fellowship](#). The goal of our Fellowship program is to support the next generation of scientists and healthcare professionals as they innovate in the field of mRNA research towards improving patient care and population health. Prospective fellows may be clinicians and scientists who are interested in advancing mRNA research and innovation and the program underpins Moderna's commitment to supporting independent research. The fellowship program will select approximately 50 global fellows in the first year with a focus on infectious diseases. It will be overseen by an independent steering committee of international experts in science, medicine, and healthcare. The committee expects to receive applications from institutions around the world who wish to appoint a fellow in either clinical medicine, scientific research or another healthcare related discipline. We can't wait to see what our first round of fellows can do to impact human health.

We have the opportunity as an industry to do the right thing and to break down barriers to inclusivity in clinical trials. As we build out our portfolio at Moderna, we will focus on reducing the barriers to diversity and inclusion in our clinical trials and ensure that we are open and transparent every step of the way.

Moderna named

'Champion of Diversity and Inclusion in Clinical Research' during the 2021 Citiline Awards.

Employees

During a year of great uncertainty and struggle, Moderna employees worked every day to deliver on the promise of mRNA science. We're proud of our team's relentless focus on bringing innovative medicines to patients and our commitment to them is rooted in an inclusive environment that fosters well-being.

Workforce Highlights*

2,700

full-time employees

39%

female leaders (at vice president level and above) (vs. 37% in 2020)

47%

of employees hold Ph.D., Doctorate, M.D., J.D., or Master's degrees

40%

of U.S. employees identify as racially or ethnically diverse (vs. 35% in 2020)

47%

female employees (vs. 46% in PY)

7.4%

turnover (vs. 9.9% in 2020 and 16.3% in 2019)

8

Employee Resource Groups

Driving growth and innovation

2021 was a year of monumental impact and change for Moderna. We more than doubled our workforce, moving from 1,300 full-time employees at the end of 2020 to 2,700 as of December 31, 2021. We have undertaken significant hiring of talent to facilitate manufacturing of our COVID-19 vaccine, in addition to building out our commercial and regulatory organizations, as well as other functions, to support this continued roll-out. While much of this hiring has occurred at our headquarters in Cambridge, Massachusetts and our manufacturing facility in Norwood, Massachusetts (outside Boston), we also increased our hiring elsewhere in the United States and internationally during 2021. At year-end we had employees in 12 countries around the world, with a presence in North America (the U.S. and Canada), Europe (Switzerland, the United Kingdom, Poland, Germany, France, Italy, Spain) and the Asia-Pacific region (Australia, Japan and South Korea).

Established in 2021, Moderna Poland hosts the Moderna International Business Services (MIBS) Center, which provides critical functions, including finance, pharmacovigilance, human resources, and digital services and will also expand to provide commercial capabilities. To support our growth as we build out our commercial and regulatory capabilities, we've focused our hiring on talent with experience at other pharmaceutical companies, particularly as we fill roles to facilitate our operations and commercial

activities in markets around the globe. We have also continued to hire talent to support our research and clinical capabilities across the rest of our pipeline.

We plan to continue to expand our commercial network in 2022 across additional countries in Europe (Belgium, Denmark, Norway, the Netherlands, and Sweden) and in Asia (Malaysia, Taiwan, Singapore, and Hong Kong). And we have announced plans to establish an Enterprise Solutions Hub in Atlanta, Georgia. Moderna's Atlanta office will initially host finance, human resources, procurement, and digital functions, expecting to hire approximately 150 to 200 full time employees in the Atlanta Hub over the next two years. Atlanta was identified as the market best-positioned to deliver on Moderna's objectives for the Hub, particularly the highly skilled and diverse workforce, vibrant business community and growth trajectory.

This expansion will support the delivery of mRNA vaccines and therapeutics locally. Our remarkable team continues to be the engine behind everything we have been able to accomplish and the driving force behind our scientific progress and our culture.

We expect to have commercial subsidiaries in 21 countries globally in 2022.

* As of December 31, 2021

Encoding our Culture

As an organization, we are bold, collaborative, curious and relentless. These values are underpinned by a core set of what we call “basecamp” values – they are non-negotiable for every Moderna employee: integrity, quality, respect. We share our values as individuals and as teams focused on making continuous advances in mRNA science, delivery technology and manufacturing that allow for the development of therapeutics and vaccines for infectious diseases, immuno-oncology, rare diseases, cardiovascular and auto-immune diseases. In relentless pursuit of our mission, our commitment to Belonging, Inclusion & Diversity makes us better, stronger and more innovative.

To support our growth, in 2021 we articulated the Moderna Mindsets. The Mindsets are a set of beliefs by which we govern Moderna. They define how we each behave, how we lead, and how we make decisions. We believe they will be integral to our future success, and we are working to integrate them into every facet of how we identify, onboard, grow, and manage the highest impact talent. We also began to roll out a new coaching and development program for our senior leaders that is based on our Moderna Mindsets. This program represents a significant investment in our growing senior leader cohort, providing every senior leader with individualized coaching to help them become stronger leaders for Moderna’s future.



Bold

Deliver on the promise of mRNA technology to transform the lives of patients. Be a visionary.



Collaborative

Accomplish goals by working together and respecting others’ viewpoints. Be a part of one team.



Curious

Seek to challenge and improve upon the status quo. Be innovative.



Relentless

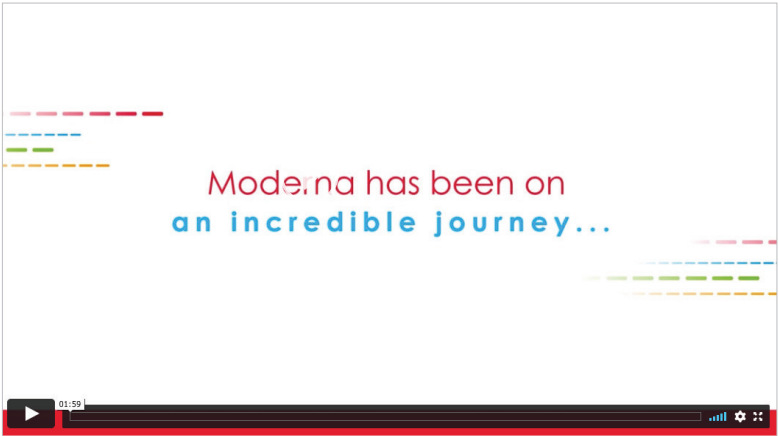
Stay undaunted by challenges and build quickly on successes. Be tenacious in pursuit of our mission for patients.



Our Mindsets



<https://www.modernatx.com/moderna-mindsets>



For more information on our Mindsets, visit <https://www.modernatx.com/newsroom/our-blog-coding-region/mindset-matters>.

Supporting Belonging, Inclusion & Diversity

We believe our strength comes from our diversity, and we are committed to building a culture of inclusion and belonging for all.



I am inspired and motivated by how diversity is deeply ingrained in our company culture... It's personal for me, as a Black, female scientist who was born in Africa.

I am very proud that my contribution in our field of infectious diseases has a positive global impact.



Sayda Elbashir
Associate Director,
Infectious Disease-Immunology

In 2021, we continued to act on our commitment to Belonging, Inclusion & Diversity. Some highlights include:

- engaging all members of our Executive Committee, senior leaders and managers in our Conscious Inclusion education series;
- conducting diversity-related events, celebrations and learning opportunities for all employees throughout the year, including Pride Month, Women's History Month, Black History Month, Hispanic Heritage Month and Asian & Pacific Islander Month;

- hosting a company-wide event on Neurodiversity in line with the CEO Action for Diversity & Inclusion's #DayofUnderstanding;
- increasing the monitoring and reporting of company-wide gender and ethnicity data;
- including a belonging, inclusion and diversity-focus in every employee engagement survey;
- doubling the number of our Employee Resource Groups; and
- joining the Disability:IN Inclusion Works Program, an initiative that assists employers in all aspects of disability inclusion at work.

Empowering our employees

Our Employee Resource Groups (ERGs) are voluntary, employee-led groups that harness the power of belonging in service to our people, our company, and the community at large. They provide support, help with personal or career development, and create a safe space where all employees can bring their whole selves to work. ERGs enhance our culture with a focus on shared identities, experiences, and allyship.

- **ADAPT** (Accessibility and Disability Allies Partnering Together) serves employees with disabilities and allies
- **ASPIRE** (ASian and Pacific Islander Resources and Engagement) serves Asian, Asian American, and Pacific Islander employees and allies
- **Moderna RaiNbow Alliance** serves lesbian, gay, bisexual, transgender, queer/questioning, asexual, intersex, nonbinary, and two spirit employees and allies

- **mPOWER** serves Black, African American, and African employees and allies
- **mVETs** (Moderna Veteran Employees Together) serves veteran employees and allies
- **UNIDOS** serves Hispanic and Latinx employees and allies
- **WISDM** (Women in Science Driving Moderna) serves women and allies committed to gender equality at work
- **VOE** (Voice of the Employee) serves all Moderna employees who are interested in strengthening and supporting our culture

To ensure our ERGs are able to foster and grow thriving communities, every ERG is provided a centralized budget and has both an Executive Committee and Senior Leader sponsor. We believe this creates opportunity for under-represented employees at more junior levels to enjoy regular and routine exposure to senior management and gain valuable experience governing a substantial budget. It also builds an environment in which the ERGs are accountable directly to the business—not only to Human Resources.

95/100%

Score from 2022 Rights Campaign's Corporate Equality Index, marking first rating

At Moderna, we believe that celebrating our employees' unique cultures and fostering an inclusive environment is core to driving our mission forward.

Interview with Alana Lewis



In February 2021, as we prepared to celebrate Black History Month at Moderna, we caught up with our colleague Alana Lewis, who is the chair of Moderna's Black and African-American Employee Resource Group. Alana talked about her love of a good challenge, spending downtime on what truly matters, and the importance of reflection this time of year.

<https://www.modernatx.com/moderna-blog/qa-with-alana-lewis>

Interview with Huijuan Li



In March 2021, as we celebrated Asian and Pacific Islander Heritage Month, we caught up with our colleague Huijuan Li, who is a senior sponsor of Moderna's ASPIRE (Asian & Pacific Islander Resources and Engagement) Employee Resource Group. Huijuan talked about accepting failure, turning the impossible into the possible, and the important role we can play in fostering diversity, inclusion and collaboration.

<https://www.modernatx.com/moderna-blog/questions-answers-huijuan-li>

Meet Adrian Ledesma-Mendoza



Principal Research Associate at Moderna and Co-Chair of Unidos, our Hispanic and Latino Employee Resource Group. Adrian is also involved in the Moderna Rainbow Alliance, a resource for our #LGBTQ+ and ally communities.

https://www.linkedin.com/posts/modernatx_the-people-behind-the-science-activity-6844376671647232000-hUMZ

YouTube Hear from more of our team members on what it means to be women in science. We're proud of all our colleagues who serve as inspirational role models for young women in STEM.

<https://www.youtube.com/watch?v=idCXDQqgyW4&t=93s>

Attracting and retaining talent

We operate in a highly competitive environment for talent, particularly as we seek to attract and retain people with experience in the biotechnology and pharmaceutical sectors. We are committed to ensuring that our employees find that their careers at Moderna are filled with purpose, growth and fulfillment. We believe that a career at Moderna provides opportunity for:

- **Impact:** Our people have the opportunity to do work that is unparalleled in terms of its innovation and scope of impact on people's lives.
- **Growth:** We provide incredible opportunities for growth and we obsess over learning. We invest substantially through Moderna University in the development of our people.
- **Well-being:** We are dedicated to the health and well-being of our employees and their families and provide numerous family-friendly benefits and opportunities to be healthy, including annual allowances for personal enrichment and monthly allowances for fitness and nutrition.
- **Inclusion:** We believe in the benefits of bringing together a diverse set of perspectives and backgrounds, and creating an environment where differences are celebrated and leveraged. We measure and hold management accountable to creating an environment of psychological safety.
- **Compelling rewards:** To attract and retain the best talent, we provide competitive rewards that help to drive groundbreaking work and allow employees to share in the value we will create together, including through our equity programs.

We are committed to equal employment opportunity and non-discrimination for all employees and qualified applicants without regard to a person's race, color, gender, age, religion, national origin, ancestry, disability, veteran status, genetic information, sexual orientation or any characteristic protected under applicable law.

Though we have grown considerably in the past year, we're equally committed to further developing and retaining our talent. We conduct periodic talent reviews that identify key talent within the organization. We use that data to inform specific development opportunities for key current and potential future leaders, and to support our periodic succession planning activities for key roles. Not only does this help ensure Moderna has a robust understanding

of our workforce and a talent pipeline to grow future leaders, it gives our employees a chance to continuously grow and advance in a way that meets their aspirations and talents.

In addition to career advancement opportunities, all employees participate in our corporate equity programs through the receipt of equity grants, and the percentage of equity as a component of overall pay mix increases with seniority. We believe that in addition to incentivizing growth that leads to shareholder value, broad eligibility for our equity programs helps promote employee retention as these awards generally vest over a four-year period and embed our “We act like owners” mindset.

We are grateful to our employees for their dedication and being relentless to pursue our mission, so we are committed to their wellbeing. Based on employee feedback, we invested in our global benefits offerings to move toward delivering a fully holistic well-being experience that provides a personalized and inclusive set of benefits.

We offer medical, dental, life and disability insurance, critical illness coverage, and 401(k) matching (for US employees). Our employees receive a monthly allowance for fitness and nutrition, an annual allowance for personal enrichment and subsidized daily lunch. In addition to paid vacation days and public holidays, the company provides a discretionary annual one-week shutdown for our employees to reenergize. After five years with Moderna, employees are eligible for a one month paid sabbatical and for an additional one month paid sabbatical every three years thereafter. We also support our

employees and their families during important moments in life, including fertility coverage, 16 weeks of paid parental leave, and an adoption assistance program.

We obsess over learning: our approach to training our employees

To further invest in our teams, we have established a structured training curriculum for our employees through Moderna University and have a full-time team dedicated to developing its curriculum and conducting activities. The objective of Moderna University is for every employee to be deeply familiar with our core technology and able to learn about technologies that might further enable our innovation. In addition, Moderna University is also focused on creating strong leaders through management and leadership training.

There are four core areas within **Moderna University** including:

- **Professional development:** This program provides on-site training programs, including those focused on leadership and project management, as well as tools to improve interpersonal communication.
- **Digital learning library:** We have built an online library of videos covering a variety of scientific material that our employees can access flexibly. This content includes:
 - Presentations by external speakers at in-house scientific seminars;
 - Scientific courses at external universities; and
 - Peer-to-peer video series in which in-house experts provide an introductory view of complex topics they tackle within their teams.

- **Learning management system:** We have deployed a digital system to track and administer training programs for each of our employees. Training content is developed digitally and offered to our employees.
- **New hire orientation:** Moderna ONE is our program for onboarding all new employees. During this intensive learning program, new employees meet with members of the management team and senior functional leaders to learn about our company and functional activities.

In December 2021, we also announced the launch of our Artificial Intelligence (AI) Academy in partnership with Carnegie Mellon University. The AI Academy is intended to educate and empower employees at all levels to identify and integrate AI and machine learning solutions into every Moderna system and process to bring mRNA medicines to patients.

We believe AI is a key enabler of our ability to build the best version of Moderna now and into the future.

Engaging our employees

We believe that our employees are highly engaged, and our company and team have been publicly recognized for our leadership, innovation and good corporate citizenship. *Science* magazine ranked us as a top employer for each of the last seven years. Additionally, in 2021, *Biospace* ranked us the number one employer in its 2022 Best Places to Work in Biopharma report and *Fast Company* named us the number one company on its

2021 Best Workplaces for Innovators list. We measure employee engagement through a vendor-supplied engagement software, using validated external benchmarks to track employee engagement factors.

Protecting well-being & safety

Our mission depends on the health, well-being and safety of our employees.

Our teams work hard in their pursuit of scientific advancements, and their health and safety are of the utmost importance. We are committed to providing a safe work environment for all our employees, contingent workers and visitors. Every operation is performed in a manner that ensures safety and protects the environment and we conduct periodic internal inspections. New employees are provided safety training for their specific roles and refresher training is conducted as appropriate for all employees. At our Moderna Technology Center in Norwood and the Moderna Science Center, in Cambridge, MA, Safety Committees comprised of representatives from various departments meet regularly to discuss safety programs and performance.

Employee safety during COVID-19 pandemic

Throughout the COVID-19 pandemic, we have implemented various initiatives to promote the safety of our workforce and continuity of our operations. We created a Coronavirus Response Team that is responsible for implementing various safety measures at our global sites. Our protocols include regular COVID-19 testing and the provision of personal protective equipment (PPE). Throughout the pandemic, much of our workforce has worked remotely, wherever possible and when local conditions recommend social distancing. Those employees who work in roles that cannot be performed remotely—including the scientists, engineers, and operators who worked tirelessly to deliver our COVID-19 vaccine to hundreds of millions of people around the world—were supported in every way possible to ensure their health and safety were protected and their families were cared for and supported. We also implemented remote hiring and onboarding programs to facilitate significant hiring during 2021 in a remote work environment.

Since October 2021, we have required all employees in the United States to be vaccinated against COVID-19, including a booster dose, absent an approved medical or religious accommodation. In December 2020, following the receipt of an Emergency Use Authorization from the U.S. FDA for our COVID-19 vaccine, we made the vaccine available to our employees and adult members of their households to help ensure continuity of our operations due to the critical nature of our production of the vaccine. In December 2021 and early 2022, as the Omicron variant drove a surge in COVID-19 cases globally, we made booster doses of our vaccine available to our U.S.-based employees and adult members of their households, as well as to employees in Switzerland.

Committing to respect human rights

We believe that we will only succeed in our goals if we are able to attract and retain individuals of diverse backgrounds, regardless of age, gender, ethnicity, religion, country of origin, or sexual orientation. Our commitment to respect human rights is described in our [Human Rights Policy](#).

Environment

We're building a company that seeks to drive change through what we make and how we make it. We believe that ensuring the health of our planet is critical to impacting human health.



Growing responsibly to protect our planet

To enable us to increase our impact on public health and the number of patients that we can reach worldwide, we are rapidly scaling our company. The COVID-19 pandemic has been another reminder that human health is inextricably linked to the health of the planet, and the WHO has stated that climate change is the biggest health threat facing humanity*. At Moderna, we believe that it is our responsibility to grow our company in a way that protects the planet and minimizes our impact on the environment. As a relatively young commercial company, we have a unique opportunity to grow in a way that puts the protection of the environment as a key consideration in the design of new facilities, processes, and products.

Before we became a commercial company—and given our expectations for significant ongoing pipeline expansion and the long lead time required to build manufacturing infrastructure—we built a dedicated in-house manufacturing facility in Norwood, MA, the Moderna Technology Center (MTC), which we have expanded to a multi-building campus. In 2021, we announced we will more than double the space at MTC to approximately 650,000 square feet, which will allow us to continue to optimize our mRNA products as we explore additional pharmaceutical delivery forms such as prefilled syringes and lyophilized products.

* <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

One of the key aspects of our mRNA platform is that a single manufacturing facility can be used to manufacture any of our mRNA medicines. Our facility in Norwood produces not only mRNA medicines for all of our preclinical experiments and clinical trials, it has also produced millions of doses of our COVID-19 vaccine for commercial use. In 2016, following the receipt of positive Phase 1 data, we decided to build our clinical manufacturing site in Norwood, Massachusetts.

We are excited to have announced a strategic partnership with the Australian Federal Government to establish a state-of-the-art, domestic mRNA vaccine manufacturing facility in Australia. We have an agreement in principle with the government of Canada to also build a local manufacturing facility in this country. We're also excited about our Memorandum of Understanding with the Government of the Republic of Kenya to establish Kenya as the location for our mRNA manufacturing facility in Africa. As we continue to expand manufacturing capabilities, our teams are putting sustainability as a priority in the design of these new facilities. Also, this expansion will minimize the need to ship products from US or EU sites and increase our social and economic impact in the countries.

In addition, substantial manufacturing capabilities are realized through relationships with Contract Manufacturing Organizations (CMOs) in the United States and abroad, providing drug substance and fill-finish capacity for the COVID-19 vaccine, and we expect to enter into additional collaborations as we continue to scale.

With the rapid growth ahead of us, we understand that we are uniquely positioned to act with urgency and make sustainability a key priority in our manufacturing design and investments, working with our partners to create a value change that minimizes impact to the environment.

With this sense of urgency, in 2021, we announced our goal to achieve net-zero carbon emissions globally by 2030. We are making progress on key environmental sustainability initiatives, including:

- Establish baseline metrics including Energy, Waste and Water to inform the creation and implementation of a comprehensive environmental sustainability program, which is one of the five key areas of our CSR program.
- Develop a comprehensive renewable energy strategy.
- Our Cambridge headquarters is located in a Gold LEED-certified building, and the Moderna Technology Center, located in Norwood, Massachusetts, was designed to incorporate many LEED energy efficient design elements when it was first opened in 2018, and it will continue to do so as we expand.

- Invest in the new Moderna Science Center at 325 Binney Street in Cambridge, Massachusetts, to create a purpose-built space to support our next chapter of discovery and serve as our principal executive offices. The high-performance building is targeting LEED Platinum Core & Shell and LEED Zero Energy certifications. The building will include ultra-efficient building systems with acoustical and light pollution mitigation measures.
- Incorporate sustainable design and construction elements into all new projects, starting with our new manufacturing plants in Canada, Australia, and in Kenya, including access to renewable energy sources and LEED Certifications as part of site selection criteria.
- Continue to encourage green transportation among our employees by offering fully subsidized public transport, bike sharing and free electric vehicle charging stations across all campuses.
- Work with each of our suppliers to ensure that they also move to net-zero carbon and partner across industries to seek innovative solutions and achieve net-zero targets.

“The journey ahead to achieve net zero carbon emissions in our global operations in 2030 is a challenge in line with our mindsets at Moderna to act with urgency and push past possible. With our engineering and manufacturing teams, we are designing our roadmap to embed sustainability by design in our current facilities and future manufacturing sites. The advantage of our mRNA platform is that we can apply sustainability design learnings across sites”

Deborah Donovan,
Senior Vice President Environment, Health and Safety

In 2021, our teams in Moderna Science Center in Cambridge continued with efforts to improve lighting, water efficiency and recycling. In the Technology Square R&D Center, we changed all office space lighting fixtures to LED; this work is continuing in lab spaces where possible. Work also has been done to adjust lighting schedule to ensure maximum efficiency to scale back during not occupied times. There were replacements of key equipment which are contributing to water efficiency that support our laboratories, such as parts and labware washers. A Green Team, made up of people from different parts of the business, seeks to improve sustainability on-site by identifying and implementing ideas to reduce waste and conserve natural resources. They have recently established site wide composting and recycling programs, expanding to include metal and plastic from kitchens, office area and laboratories.

In our journey to get a clearer picture of our environmental impact, in Q1 we calculated our Scope 1 and 2 greenhouse gas (GHG) emissions in 2021 to establish our baseline. This baseline is critical as we work on our roadmap to net zero. We will share our 2021 baseline data on our website after third party verification has been completed in the first half of 2022.

Accelerating our commitment to the environment

We have a lot of work to do and are deeply committed to understanding our impact on the environment and taking action to protect the health of the planet. It is critical for a high-growth company like ours to set ambitious environmental goals and we aspire to also put Moderna among the global leaders in managing the impact of waste from our business and decreasing the natural resources we use, to promote long-term, sustainable growth for the planet and our organization. We will continue to work on our roadmap to net-zero carbon emissions, establishing next our baseline for Scope 3 GHG emissions. In this journey, we are committed to remain transparent with our stakeholders and are also working to increase our ability to share data according to recognized reporting standards. We are creating the best version of Moderna by investing in a sustainable future.



Community

We aspire to be an active contributor to the communities where we live and work.

Moderna Charitable Foundation

We launched the [Moderna Charitable Foundation](#) in 2022 to support organizations and causes that promote public health and access to quality healthcare, advancing scientific education and innovation, and advocating for diversity and inclusion, particularly in underserved populations. The Moderna Foundation is an extension of the societal impact we have made with our COVID-19 vaccine. We are passionate about addressing the ongoing needs in communities impacted by COVID-19, including the societal conditions exacerbated by the pandemic along with the inequalities this challenging period has revealed.

We aspire toward a long-lasting impact by:

- Grant-making to support organizations that align with our mission
- Philanthropic giving to provide support during humanitarian crises
- Employee matching to enable our people to support causes that matter most to them

The Moderna Charitable Foundation was established by the Moderna Board of Directors, which approved an initial up-front endowment of \$50 million. The Foundation and its grant program will focus on charitable programs with a particular emphasis on supporting local and global communities impacted by the pandemic, advancing scientific education and innovation, promoting public health and access

to healthcare, and advocating for diversity and inclusion. When we launched the Moderna Charitable Foundation in 2022, we announced approximately \$5 million in initial grants to five local and global nonprofit organizations working to address these areas of need, including:

- Boston Medical Center's [Good Grief Program](#), to help meet growing demand for trauma-informed, culturally responsive therapeutic services for children who have experienced loss, such as the death of a loved one due to COVID-19
- [Heading Home](#), to provide permanent, supportive housing for extremely low-income individuals in Cambridge, Massachusetts
- [International Rescue Committee](#), to support infection prevention and control programs for improved and resilient health systems in West and Central Africa, particularly in countries that have been impacted by conflict
- [Life Science Cares](#), to support nonprofit partnerships and programs fighting poverty and its effects in the Greater Boston Area
- [Year Up](#), to support a workforce development program that closes the opportunity divide between young adults and companies across the U.S.

Giving back to communities

At Moderna, we're proud to support efforts that aim to make a difference in the world. We know that we hire talented and passionate people who are committed to making a difference in the world beyond our four walls—and many of

our employees already contribute their time and expertise to causes and organizations in our region and beyond. As a company, we are proud to support these efforts. We will continue to encourage individual employee volunteerism by providing our people with paid time off to volunteer at the organizations of their choice. We will also leverage our collective strengths and expertise for community engagement.

In 2021, the number of employees that participated in volunteering activities increased by 70% compared to the previous year. This is a remarkable engagement in a year marked by our efforts to scale-up the company. And during our annual #VolunteerWeek in 2021, our employees around the world were able to make a difference for 16 nonprofit organizations in our local communities.



Moderna Switzerland's first donation drive

Governance and ethics

At Moderna, our basecamp values of quality, integrity, and respect guide our work and actions every day. These values are critical to bringing new medicines to patients around the world.

Central to our mission is our commitment to transparency and upholding the highest ethical standards. These values are embedded in every aspect of our business, from our preclinical research and clinical trials to our regulatory and manufacturing processes and our commercial functions to how we conduct ourselves in our relationships with employees, patients, investors and other stakeholders.



Building good corporate governance

Our Board of Directors believes that sound governance practices and policies provide the foundation for establishing Moderna as a responsible corporate citizen and maintaining the trust of our stakeholders, as well as ensuring the success of our company. Our Board of Directors has set high standards for themselves, our employees, officers and directors.

We have adopted a Code of Business Conduct and Ethics that applies to our Board of Directors and all our officers and employees. In addition, we have adopted Corporate Governance Guidelines that formalize certain fundamental board policies and practices.

Among other things, we expect that all our directors will have the following experience and traits:

- substantial experience at a strategic or policymaking level in a business, government, non-profit, or academic organization of high standing, able to contribute to Moderna's strategic growth and able to offer advice and guidance to Moderna's senior management based on that experience;
- highly accomplished in his or her respective field;
- the ability to contribute positively to the Board's collaborative culture;
- knowledge of our business;
- understanding of the competitive landscape facing our business; and
- expertise relevant to our growth and business strategy.

Our Board of Directors has established four committees: Audit, Compensation and Talent, Nominating and Corporate Governance, and Product Development. All members of all four Board committees are independent directors.

 **For more information, please see our [Proxy Statement](#) (page 12).**

Board diversity

We believe that the best decisions arise when people of varied backgrounds, perspectives and experiences come together. Our Board of nine directors includes three directors that identify as female and two directors that identify as members of two or more races or ethnicities. As we pursue future Board recruitment efforts, our Nominating and Governance Committee will continue to seek out candidates who can contribute to the diversity of views and perspectives of the Board in accordance with the committee's Policies and Procedures for Director Candidates. This includes seeking out individuals of diverse ethnicities, a balance in terms of gender, and individuals with diverse perspectives informed by other personal and professional experiences.

 **Please see Board Diversity Matrix in our [Proxy Statement](#) (pages 12 and 13).**

ESG governance

A true commitment to ESG requires engagement and oversight at every level of the organization. Our Board's Nominating and Corporate Governance Committee oversees ESG matters and practices so that ESG is incorporated into

our governance practices at the highest level of the organization. The committee reports to the full Board on ESG matters and our progress on sustainability initiatives. Our Chief Legal Officer, reporting to the CEO, leads Moderna's ESG strategy, with Executive Committee members overseeing additional elements of particular ESG initiatives. For instance, our carbon footprint reduction efforts pull on multiple functions, including our facilities team, which is overseen by our Chief Technical Operations and Quality Officer.

In 2021, we took ESG accountability a step further by incorporating human capital metrics in our bonus program for that year. These goals were focused on maintaining or improving upon employee survey responses that seek to measure belonging and engagement, which we view as key elements of attracting and retaining a diverse workforce. In 2022, in addition to maintaining a human capital metric for our bonus program, we are adding a vaccine access metric focused on low- and middle-income countries to incentivize meeting demand from these countries.

Transparency

Clinical trials

We believe that making clinical trial data accessible ensures trust and transparency between researchers, participants/patients, the public and the pharmaceutical industry. Moderna recognizes that it is important for regulators, researchers, trial participants and other concerned parties to have access to clinical trial information to advance medical understanding and progress. Knowledge enlightens and empowers stakeholders to help make sound

medical decisions. It is also important that this access works in ways that protect patient privacy, preserve regulatory authority, and cultivate/encourage new research.

We share clinical trial results and data in the following ways:

- We submit clinical trial results for publication in peer-reviewed journals after the primary completion date.
- We provide results on ClinicalTrials.gov and the European Union Clinical Trials Register (EU CTR) within the timelines required by United States law and regulations issued by the U.S. Department of Health and Human Services (HHS) and the European Medicines Agency (EMA).
- We provide access to detailed clinical data in response to reasonable requests from researchers and regulators.
- We post clinical study report (CSR) synopses on our website with a link to the data on ClinicalTrials.gov.
- We will be rolling out easy-to-read summaries of trial findings to eligible clinical trial participants who wish to receive them and will begin piloting this with certain Phase 2 trials.

 **Read more about our commitment in our [Moderna Clinical Trial Disclosure and Transparency Policy](#).**

Political engagement

We believe that public policy and legislation related to our industry and the patients that we serve should be rooted in sound science and an understanding of how innovation benefits us all. To that end, we engage directly with government officials and policymakers, as well as

through trade associations and other advocacy organizations, to help ensure that public policy decisions and legislation are well informed and that they continue to promote innovation and our mission of delivering for patients. The Nominating and Corporate Governance Committee of the Board of Directors, which is composed solely of independent directors, annually reviews our policy on political engagement and disclosure (our Political Engagement Policy) and exercises oversight of Moderna's political engagement, including our engagement with trade associations and other tax-exempt organizations that may engage in political activity.

Our approach to political engagement, as outlined in our Political Engagement Policy, is defined by the following principles: We do not contribute corporate funds to political candidates, parties, or committees for public office or to 527 groups (including political action committees, or PACs); we do not make independent political expenditures in direct support of or in opposition to political campaigns; and we do not sponsor an employee PAC, and have no plans to do so.

Trade associations

We believe that membership in trade associations and contributions to advocacy organizations can help advance the biotechnology industry, promote a policy environment that continues to encourage innovation, and promote our mission of creating a new generation of transformative medicines for patients. To the extent that we contribute more than \$25,000 in any calendar year to a trade association, we will disclose the name of that organization and the dollar amount of any membership dues or contributions that

are ineligible for deduction as an “ordinary and necessary” business expense. Such disclosures will be made twice per year.

In 2021, Moderna, Inc. and its subsidiaries paid dues and made other payments in excess of \$25,000 to the following trade associations and 501(c)(4)s: Academy of Managed Care Pharmacy, the American Pharmacists Association, and the Biotechnology Innovation Organization (BIO).

Healthcare partners and patient organizations

Collaboration between industry, healthcare professionals and healthcare organizations is critical to the development and effective use of new vaccines and medicines. Moderna recognizes that ethical relationships with healthcare professionals and organizations are critical to its mission to deliver on the promise of mRNA science to create a new generation of transformative medicines for patients.

We are committed to complying with all applicable laws, regulations, and codes of conduct governing the transparency of our interactions with healthcare professionals and organizations. We are working to publicly disclose the transfers of value made to healthcare professionals, healthcare organizations, and patient associations through applicable government portals and the Moderna website.

Corporate Policies

Our Code of Business Conduct and Ethics establishes the minimum standards that are expected from all our employees when conducting business and their day-to-day activities. To ensure it's top of mind, all directors, officers, and employees are

expected to review the Code and acknowledge their understanding on a periodic basis.

We have established comprehensive policies to guide our employees in applying the highest ethical standards in their decisions. Some of our key compliance policies and guidance are summarized below:

- **Anti-Bribery:** Moderna does not permit or condone bribes, kickbacks or other improper payments, transfers or receipts.
- **HCP Engagements:** Moderna requires the specific business need for each healthcare professional (HCP) engagement to be documented and approved before conducting any business, and will only compensate HCPs based on an independently established fair market value for their time.
- **Conflict of Interest:** our employees are responsible for avoiding activities and situations that present a potential or actual conflict between their personal interests and Moderna's interests.
- **Ethical Promotion:** we require and train our employees to follow regulatory requirements for promoting our products for their approved and intended use, and other company policies that govern the creation of promotional material to ensure it is consistent with our approved commercial label.
- **Trade Compliance:** Moderna is committed to meeting the regulatory requirements of all countries in which we operate, including international trade regulations. Our Code of Business Conduct and Ethics requires all Moderna personnel to understand how international trade regulations apply to their work.
- **Sexual Harassment and Other Discriminatory Harassment:** Moderna promotes a workplace

that is free from all forms of discriminatory harassment based on protected personal characteristics, including, without limitation, sexual harassment. We do not tolerate prohibited discriminatory harassment towards our employees and third parties with whom Moderna works, including partners, vendors, and consultants.

- **Human Rights:** Moderna personnel have an obligation to report any human rights concerns they may identify in the course of their work responsibilities, including those that may occur in a Moderna service provider or supplier.

Patient Safety

There is nothing more important to Moderna than the safety of the people and patients receiving our products.

Clinical trials

Moderna is committed to designing and conducting clinical trials in accordance with the highest scientific and ethical standards and in compliance with all applicable regulatory requirements. We have defined a framework of policies and standards to design all Moderna-sponsored clinical trials in accordance with local laws and regulations, international standards including those defined under the International Conference for Harmonization-Good Clinical Practice and Moderna's policies and procedures. Our standards are applicable to all Moderna employees and agents and to all parties with whom Moderna contracts (e.g., contract research organizations (CROs), vendors, or consultants) involved in Moderna-sponsored clinical trials. A qualified and independent Institutional Review Board (IRB) or Ethics Committee must review and approve all Moderna-sponsored trials prior

to initiation of a given study. Study participants may only be enrolled in a clinical trial only after providing their voluntary informed consent or informed assent, as applicable, in compliance with local laws and regulations. Moderna respects the privacy rights of its study participants and safeguards the confidentiality of their medical information in accordance with all applicable laws and regulations.

“As we embarked on our journey to create, make, study, and deliver our Covid-19 vaccine, I saw the industry come together in an unprecedented fashion to address a global public health crisis. Regulators, manufacturers, and suppliers worked together to eliminate competitive boundaries, align on standards, expedite the regulatory processes, and address distribution and access challenges. I saw our company pivot fearlessly from its initial focus on clinical projects to a fully operational commercial company delivering on a COVID-19 vaccine in less than 12 months. That remarkable transition would not have been possible if not for the quality culture, the commitment of our leaders and talented associates, and the collaborations with industry, partners, regulators and governments. I am proud to have been part of that effort.”

Jennifer White,
SVP, Global Quality

Animal welfare

Sometimes using animals in testing is the only way to advance science, but we take our responsibility to these animals seriously and look for non-animal alternatives whenever possible. Moderna's Institutional Animal Care and Use Committee (IACUC) oversees the welfare and humane treatment of any animals used for testing at Moderna. Animals used for research at Moderna are treated humanely and we comply with the 3R-principle (Reduce, Refine, Replace). To qualify testing facilities to which we contract animal studies, we require IACUC and appropriate accreditation for utilizing animals in research that ensures the welfare of the animals.

Quality

We believe that quality is essential to our mission to deliver on the promise of mRNA science to create a new generation of transformative medicines for patients. Our Quality Unit, led by Moderna's Chief Technical Operations and Quality Officer—a member of our Executive Committee—grew into an international organization with the introduction of our COVID-19 vaccine and scale out of manufacturing capabilities. Leaders at Moderna drive our quality culture and Quality Assurance ensures it is applied consistently and thoughtfully across the globe. We seek to ensure quality and compliance at Moderna through a combination of a robust Quality Management System (QMS), our quality culture, and our people.

We have established, documented, and implemented a global QMS to assure continued compliance with applicable national and international regulations and laws related to



product quality. We work with partners and vendors to ensure Moderna standards are understood and followed. We train and develop our teams, providing a learning environment where team members and leaders build and expand their technical capabilities and regulatory skillsets. As part of our governance and oversight obligations, the QMS elements within Moderna and at our partners and vendors, are periodically audited and effectiveness verified. Senior management is engaged in the review of the quality system's performance and the organizational health, while driving a culture of sustainable compliance and continuous improvements.

We have established a culture that encourages transparency, accountability, and ownership of quality at all levels in the organization. As we scale, we have focused on hiring the best talent with the required experience, training, and education.

Clinical Safety and Pharmacovigilance

The safety and quality of our products is paramount to us, and we are deeply dedicated to the safety of all our patients in our clinical trials and of those receiving our products after authorization. The Clinical Safety and Pharmacovigilance team supports Moderna's mission of bringing transformative mRNA therapies to patients through proactive safety assessment, effective risk management, and transparent risk communication throughout the life cycle of our products. All products in clinical development have dedicated cross-functional Safety and Risk Management Teams (SRMTs) which continuously review and assess all emerging safety data for the program. The SRMTs are overseen by Moderna's Safety Review Board (SRB), a senior level, cross-functional, safety governance body led by the Chief Safety Officer.

Moderna has a pharmacovigilance (PV) system that assures comprehensive safety monitoring and signal detection across Moderna's portfolio of products and clinical programs. Moderna's standards and our QMS assure compliance with national and international reporting requirements as well as special reporting obligations in accordance with regulatory commitments. As part of Moderna's governance and oversight obligations, the effectiveness of the PV system is monitored and periodically audited, with outcomes reported to our senior leadership. All Moderna employees and contractors are required to complete training on the company's adverse event reporting policy.

Brand Protection

The illicit trade of falsified medicines is carried out by criminal organizations. Criminals do not adhere to any sort of standards in production, so the trade

in counterfeit medicines can have a serious impact on public health and safety, lead to social and environmental concerns (substandard labor and production practices), and result in other criminal acts, such as fraud. With all these concerns in mind, Moderna's Brand Protection Team works to proactively counter this criminal activity.

Suppliers

Our business activities are built on a framework that drives economic, social and environmental sustainability. We always aim to do the right thing the right way and we expect the same of our business partners. As a result, we strive to conduct business with entities who share our commitments, standards and values.

Moderna's Third Party Code of Business Conduct (Third Party Code*) was established to document our expectations of the companies with whom Moderna has agreements, such as distributors, consultants, service providers, joint ventures, co-promotion and research or licensing partners.

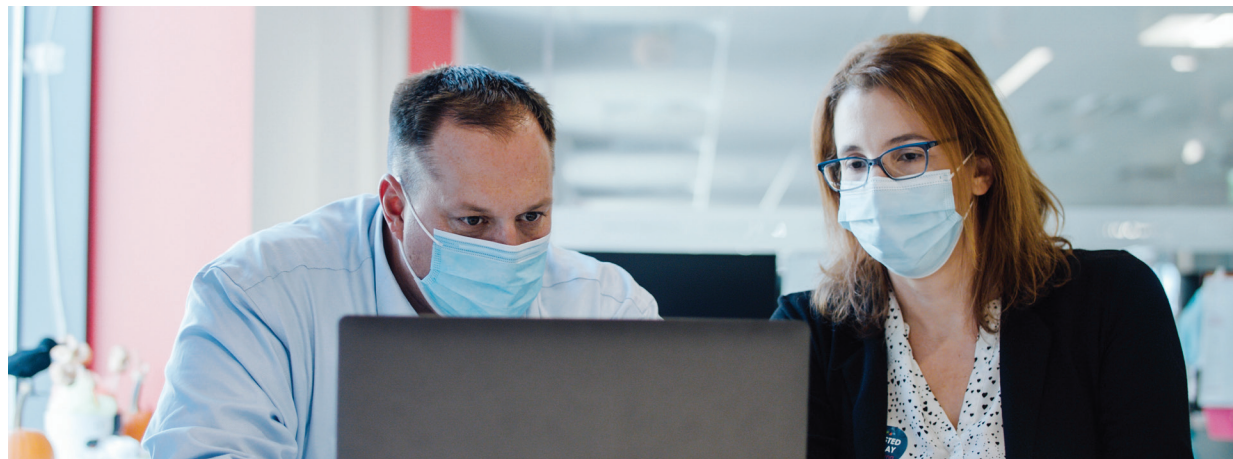
Our distributors and agents are evaluated for any concerns related to corruption, money laundering, human rights, and other ethical principles before agreements are signed.

Speak Up

At Moderna, we trust and rely on all of our people to be catalysts for acting with integrity and doing the right thing. Asking a question to gain understanding or speaking up when something may be wrong or inappropriate is part of acting as an owner and in accordance with the [Moderna Mindsets](#).

Our [Speak Up Hotline](#) empowers our employees and third parties to submit a question or voice a concern that we may not be meeting the values that we strive to achieve every day. Both employees and third parties may choose to submit reports anonymously.

Moderna strictly prohibits retaliation under its Code of Business Conduct and Ethics.



* expected launch in Q3 2022

Going forward



Dear Stakeholders,

This is just the beginning of a tremendously important journey at Moderna, where we seek to more deeply engage, listen and understand what our stakeholders expect from us as a responsible business and leader in mRNA medicines. We know that we will not be able to create the most impactful version of Moderna in isolation; so we are determined to seek feedback from across our stakeholder groups, to make sure we are meeting your expectations and are able to anticipate your needs. Your continuous input into our purpose is critical for us to create long-term value and impact.

With our long-term ambitions in mind, we began building out a more robust approach to our Environmental, Social and Governance strategy only a few months after becoming a commercial company. We continue to challenge ourselves and to expand the impact that our commitments can have on our stakeholders. As the external ESG reporting landscape evolves, you will see us continuing to improve our programs and disclosures, so we can be held accountable for our commitments and outcomes.

New this year, we will host our first-ever ESG investor and analyst event in November. This is an example of how we are working to increase the visibility that stakeholders can have into our actions, including through the communication of goals and performance that can help others assess our progress in the months and years to come.

Our journey is just beginning. We have a lot of work to do, and this report represents our strong commitment to transparency about our efforts and progress right from the start of our journey. Thank you for continuous engagement and feedback, which helps to keep us on track and ensures that we stay true to our purpose.

With best regards,

A stylized, handwritten signature in black ink, consisting of a series of connected loops and a final horizontal stroke.

Shannon Thyme Klinger,

Chief Legal Officer, Moderna

President, Moderna Charitable Foundation

Appendix

SASB Index

The Sustainability Accounting Standards Board (SASB) Foundation was founded in 2011 as a not-for-profit, independent standards-setting organization. SASB standards are designed to enable communications on corporate performance on industry-level sustainability issues in a cost-effective and decision-useful manner using existing disclosure and reporting mechanisms.

As we continue to progress in our corporate social responsibility and ESG journey, we will refer to widely recognized standards to improve our disclosures of environmental, social and governance impacts, and to share how we create value over the long-term. We are presenting our disclosures within the SASB Framework below for the first time, which is designed for the

biotechnology & pharmaceuticals industry, and include references to sections in this report or other filings we have made with the U.S. Securities and Exchange Commission. We will continue to expand upon our ability to share metrics according to this standard and expand our use of other recognized frameworks that will allow us to report on our activities to relevant stakeholders.

Topic	SASB Code	Accounting Metric Description	2021 Disclosure Location
Safety of Clinical Trial Participants	HC-BP-210a.1	Discussion, by world region, of management process for ensuring quality and patient safety during clinical trials	Page 27, Governance and ethics
	HC-BP-210a.2	Number of FDA Sponsor Inspections related to clinical trial management and pharmacovigilance that resulted in: (1) Voluntary Action Indicated (VAI) and (2) Official Action Indicated (OAI)	We report material regulatory issues in our annual 10K filing.
	HC-BP-210a.3	Total amount of monetary losses as a result of legal proceedings associated with clinical trials in developing countries	None. In 2021, we were not a party to any material legal proceedings.
Access to Medicines	HC-BP-240a.1	Description of actions and initiatives to promote access to health care products for priority diseases and in priority countries as defined by the Access to Medicine Index	Page 07, Medicines for Patients
	HC-BP-240a.2	List of products on the WHO List of Prequalified Medicinal Products as part of its Prequalification of Medicines Programme (PQP)	None
Affordability & Pricing	HC-BP-240b.1	Number of settlements of Abbreviated New Drug Application (ANDA) litigation that involved payments and/or provisions to delay bringing an authorized generic product to market for a defined time period	None in 2021.
	HC-BP-240b.2	Percentage change in: (1) average list price and (2) average net price across U.S. product portfolio compared to previous year	N/A
	HC-BP-240b.3	Percentage change in: (1) list price and (2) net price of product with largest increase compared to previous year	N/A

Topic	SASB Code	Accounting Metric Description	2021 Disclosure Location
Drug Safety	HC-BP-250a.1	List of products listed in the Food and Drug Administration's (FDA) MedWatch Safety Alerts for Human Medical Products database	(FDA) MedWatch Safety Alerts for Human Medical Products database
	HC-BP-250a.2	Number of fatalities associated with products as reported in the FDA Adverse Event Reporting System	FDA Adverse Event Reporting System
	HC-BP-250a.3	Number of recalls issued, total units recalled	Three lots of product manufactured for Japan were suspended in 2021. In October 2021, Takeda and Moderna published a report of the investigation prompted by the observation of foreign particles in unpunctured vials from a single lot of Moderna's COVID-19 vaccine distributed in Japan by Takeda. The lot was suspended on August 26, 2021, and voluntarily recalled on September 2, 2021. Two other lots manufactured in the same series were included in the suspension and voluntary recall as a precautionary measure. The full joint statement and investigation report can be read here: https://investors.modernatx.com/Statements--Perspectives/Statements--Perspectives-Details/2021/Joint-Statement-from-Moderna-and-Takeda/default.aspx There have been no other or further instances of our product being pulled/recalled from the market in 2021.
	HC-BP-250a.4	Total amount of product accepted for take-back, reuse, or disposal	We are not reporting against this metric
	HC-BP-250a.5	Number of FDA enforcement actions taken in response to violations of current Good Manufacturing Practices (cGMP), by type	We report material regulatory issues in our annual 10K filing.
Counterfeit Drugs	HC-BP-260a.1	Description of methods and technologies used to maintain traceability of products throughout the supply chain and prevent counterfeiting	Page 27, Governance and Ethics
	HC-BP-260a.2	Discussion of process for alerting customers and business partners of potential or known risks associated with counterfeit products	Page 27, Governance and Ethics
	HC-BP-260a.3	Number of actions that led to raids, seizure, arrests, and/or filing of criminal charges related to counterfeit products	We are not reporting against this metric
Ethical Marketing	HC-BP-270a.1	Total amount of monetary losses as a result of legal proceedings associated with false marketing claims	None. In 2021, we were not a party to any material legal proceedings.
	HC-BP-270a.2	Description of code of ethics governing promotion of off-label use of products	Page 27, Governance and Ethics
Employee Recruitment, Development & Retention	HC-BP-330a.1	Discussion of talent recruitment and retention efforts for scientists and research and development personnel	Page 16, Employees
	HC-BP-330a.2	(1) Voluntary and (2) involuntary turnover rate for: (a) executives/senior managers, (b) mid-level managers, (c) professionals, and (d) all others	Page 16, Employees

Topic	SASB Code	Accounting Metric Description	2021 Disclosure Location
Supply Chain Management	HC-BP-430a.1	Percentage of (1) entity's facilities and (2) Tier I suppliers' facilities participating in the Rx-360 International Pharmaceutical Supply Chain Consortium audit program or equivalent third-party audit programs for integrity of supply chain and ingredients	We are not reporting against this metric
Business Ethics	HC-BP-510a.1	Total amount of monetary losses as a result of legal proceedings associated with corruption and bribery	None. In 2021, we were not a party to any material legal proceedings.
	HC-BP-510a.2	Description of code of ethics governing interactions with health care professionals	Page 27, Governance and ethics
Activity Metric	HC-BP-000.A	Number of patients treated	Page 07, Medicines for patients
	HC-BP-000.B	Number of drugs (1) in portfolio and (2) in research and development (Phases 1-3)	Page 16, 10K

About this report

This report describes our efforts and progress on Environmental, Social and Governance topics that we consider more important based on Moderna's Corporate Social Responsibility Program and that are relevant to reporting standards and frameworks. All our business operations are in scope and have included ESG performance data from January 1, 2021, to December 31, 2021, unless otherwise stated. Our 2021 Annual Report on Form 10-K contains our financial disclosures.

Forward-Looking Statements

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including statements regarding: the potential for the Company's mRNA platform to solve the world's greatest health challenges and prevent future pandemics; the Company's ability to expand its portfolio and address critical unmet medical needs with its mRNA platform; the Company's plans to expand its portfolio of global public health vaccines to 15 total programs against priority pathogens, and the timing for advancing these vaccine programs into clinical studies; the Company's goal of achieving net-zero carbon emissions globally by 2030; the Company's plans for achieving sustainable growth; timing for clinical data for mRNA-3745; expected timing of the Company's Phase 1 study of its Nipah vaccine candidate; the potential of mRNA technology to address rare genetic disorders; the Company's collaboration with the Institute for Life Changing Medicines on the development of mRNA-3351 and the structure of the collaboration; the potential ability to leverage the Company's platform to address "Disease X"; the Company's mRNA Access initiative to allow researchers access to Moderna's mRNA platform; the Company's commitment not to enforce its COVID-19 patents in the Gavi COVAX AMC 92 low- and middle-income countries; the buildout of the Company's commercial, manufacturing and regulatory capabilities and networks; the Company's collaboration with governments to facilitate donations or prioritize shipments of vaccine to countries with the greatest need; supply of and demand for the Company's COVID-19 vaccine in 2022; the ability of the Company to enroll study participants from minority communities and vulnerable populations in its clinical trials; the Company's plans to construct an mRNA manufacturing facility in Kenya, including the capacity for that facility and the potential for conducting fill/finish services; plans to allow the Company to fill doses of its COVID-19 vaccine in Africa as early as 2023; the Company's plans to establish an Enterprise Solutions Hub in Atlanta, Georgia and anticipated hiring and staffing for the Hub; plans to establish additional subsidiaries in new markets; the expansion of the Moderna Technology Center and the potential for the expansion to facilitate advancements in new pharmaceutical delivery forms; the Company's investment in the new Moderna Science Center and the features of that facility, including its environmental footprint; the Company's collaborations with the Australian and Canadian governments to develop mRNA manufacturing facilities; the Company's expectation that it will enter into additional collaborations with governments; and the areas of focus of the Moderna Charitable Foundation. In some cases, forward-looking statements can be identified by terminology such as "will," "may," "should," "could," "expects," "intends," "plans," "aims," "anticipates," "believes," "estimates," "predicts," "potential," "continue," or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. The forward-looking statements in this report are neither promises nor guarantees, and you should not place undue reliance on these forward-looking statements because they involve known and unknown risks, uncertainties, and other factors, many of which are beyond Moderna's control and which could cause actual results to differ materially from those expressed or implied by these forward-looking statements. These risks, uncertainties, and other factors include, among others, those risks and uncertainties described under the heading "Risk Factors" in Moderna's most recent Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission (SEC) and in subsequent filings made by Moderna with the SEC, which are available on the SEC's website at www.sec.gov. Except as required by law, Moderna disclaims any intention or responsibility for updating or revising any forward-looking statements contained in this report in the event of new information, future developments or otherwise. These forward-looking statements are based on Moderna's current expectations and speak only as of the date of this report.

moderna[®]