Cystic Fibrosis

Cystic fibrosis is caused by a defective gene that makes the body produce mucus that clogs the lungs, pancreas, and other parts of the body. Clogged airways, chronic coughing, and lung infections can lead to permanent lung damage and cause premature death.\(^1\)

Groundbreaking partnerships between the Cystic Fibrosis Foundation, federally-funded academic researchers, and industry -- emblematic of the power of patient engagement and the importance of each segment of the R&D pipeline -- have driven remarkable progress against CF. Continued cross-sector commitment and investment can, and must, lead to a cure for this disease.

### Research Delivers Solutions

Advances in newborn screening techniques have significantly improved the ability to detect and diagnose CF at birth. In 2000, only 8% of those living with CF were diagnosed at birth. Today, that number has **increased to over 75%**.\(^2,3\)

Since the discovery of the CF gene **30 years ago**, research has led to the creation of **13 drugs**.\(^4\)

Infections remain a leading cause of lung dysfunction among individuals living with CF. With support from the **Cystic Fibrosis Foundation’s Infection Research Initiative**, researchers are examining new ways to detect, diagnose, and treat infections as well as ways to optimize current treatments to improve effectiveness and reduce treatment burden.\(^5\)

### Today

<table>
<thead>
<tr>
<th>More than 30,000 Americans</th>
<th>More than 70,000 individuals worldwide</th>
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<tbody>
<tr>
<td>live with CF(^2)</td>
<td>of those living with CF today</td>
</tr>
<tr>
<td></td>
<td>are over the age of 18(^2)</td>
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</tbody>
</table>

### Cost

<table>
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<tr>
<th>$1.2 billion:</th>
<th>Aggregate cost of hospital visits for CF each year.(^3)</th>
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<tbody>
<tr>
<td>$131,000:</td>
<td>In the United States, the annual cost of medical expenditures for individuals living with CF.(^4)</td>
</tr>
</tbody>
</table>

### Majority Support Federal Incentives for Private Investment in New Treatments & Cures

How important is it for the federal government to incentivize greater private sector investment in new treatments and cures?

- 37% Very important
- 39% Somewhat important
- 8% Not too important
- 4% Not at all important
- 4% Not sure

Source: A Research!America poll of U.S. adults conducted in partnership with Zogby Analytics in January 2019

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\(^1\) "Cystic Fibrosis", Baby’s First Test - US Department of Health and Human Services, 2019
\(^2\) "About Cystic Fibrosis", Cystic Fibrosis Foundation, 2019
\(^3\) Angrawal et al., "Nationwide Trends of Hospitalizations for Cystic Fibrosis", 2017
\(^4\) Grosse et al., "Healthcare Expenditures", 2018
\(^5\) "Cystic Fibrosis Foundation Commits $100 Million to Infection Research", Cystic Fibrosis Foundation, 2018
Then. Now. Imagine.

THEN
In 1962, the median survival age for individuals diagnosed with CF was just ten years. ⁶

NOW
Thanks to research, the life expectancy of people with CF who are born between 2013 and 2017 is predicted to be 44 years. ⁷

IMAGINE
A cure.

Number of individuals enrolled in the Cystic Fibrosis Foundation Patient Registry*, 2016

*Among other crucial purposes, this registry is used to empower CF research, create CF care guidelines, and guide quality improvement care initiatives.

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The Albert and Mary Lasker Foundation is a founding partner in this series of fact sheets. www.laskerfoundation.org

⁶ “Cystic Fibrosis”. National Institutes of Health, 2018
⁷ “Understanding Changes in Life Expectancy”, Cystic Fibrosis Foundation, 2017