Microbiologist

What They Do
Investigate the growth, structure, development, and other characteristics of microscopic organisms, such as bacteria, algae, or fungi. Includes medical microbiologists who study the relationship between organisms and disease or the effects of antibiotics on microorganisms.

Is This For You?
Work Interests are described in the following categories (compatible with Holland’s Model). People who tend to succeed in this career are:

Realistic – involve work activities that include practical, hands-on problems and solutions.

Investigative – involve working with ideas, and require an extensive amount of thinking.

Work Values are aspects of work that are satisfying to you. The following work values are generally associated with this career:

Recognition – offer advancement, potential for leadership, and are often considered prestigious.

Achievement – results oriented and allow employees to use their strongest abilities, giving them a feeling of accomplishment.

Independence – allow employees to work on their own and make decisions. Corresponding needs are creativity, responsibility, and autonomy.

Abilities reflect a person’s aptitude to acquire skills and knowledge. The following abilities are important for success in the career:

- Inductive Reasoning
- Written Comprehension
- Category Flexibility
- Deductive Reasoning
- Information Ordering
- Problem Sensitivity

Standard Occupational Code 19-1022.00
Skills You Need

- Science
- Critical Thinking
- Writing
- Active Listening
- Reading Comprehension
- Active Learning
- Speaking
- Judgement and Decision Making

Requirements for the National Career Readiness Certificate (NCRC)

<table>
<thead>
<tr>
<th>Skill</th>
<th>Median Skill Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Mathematics</td>
<td>5</td>
</tr>
<tr>
<td>Reading for Information</td>
<td>5</td>
</tr>
<tr>
<td>Locating Information</td>
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</tbody>
</table>

Where They Work

The South Dakota Industries which employ the largest number of microbiologists are:

- State Government Educational Services
- State Government
- Federal Government
- Architectural and Engineering Services
- Medical Equipment and Supplies
- Manufacturing

SD Employment & Wages

<table>
<thead>
<tr>
<th>Year</th>
<th>Workers</th>
<th>Percent Change</th>
<th>Average Demand for Workers</th>
<th>Median Annual Wage</th>
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<tbody>
<tr>
<td>2014</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2024</td>
<td>130</td>
<td>13%</td>
<td>10</td>
<td>$50,060</td>
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</tbody>
</table>

Provided By

Labor Market Information Center
South Dakota Dept. of Labor Regulation
605.626.2314

Visit [www.dlr.sd.gov/mic](http://www.dlr.sd.gov/mic) and choose Career Exploration & Planning from the left-hand menu, then Hot Careers to obtain most recent workforce data and trends and more resources, including this document. Also available are explanations of the terms used in the work interests, work values, abilities and skills sections of this occupational profile.

Updated March 2017.

Additional References

Labor Market Information Center
[www.dlr.gov/mic](http://www.dlr.gov/mic)

Career OneStop
[www.careeronestop.org](http://www.careeronestop.org)

O*Net Online
[www.onetcenter.org](http://www.onetcenter.org)

mySkills myFuture
[www.myskillsmyfuture.org](http://www.myskillsmyfuture.org)