# AFPLIED EPIDEMIOLOGY COMPETENCIES

#### **Purpose:**

Create competency-based interview process for a Senior Epidemiologist/State Epidemiologist (Advanced Tier) position in your epidemiology department utilizing the Applied Epidemiology Competencies (AECs).

# How Do I Create a Competency-based Interview Process?

A competency-based interview process uses clear selection criteria, effective interview questions, and structured interviews to evaluate an individual's knowledge, skills, and values beyond what qualifications and work experience are listed on paper. You should use a competency-based job description as a starting point for the creation of questions that assess the candidate's competencies in the essential and non-essential functions of the job they are interviewing for, whenever possible. It is important to design the interview process to be inclusive and equitable to attract diverse candidates and consistently and fairly assess these individuals.

Review the following steps to create a competency-based interview process using the AECs for an epidemiologist position in your department.

# Step 1:

## Develop clear selection criteria

Develop clear selection criteria based on the competencies and skills outlined in the job description. Evaluate which competencies are essential and which are nice to have. Interviewers should understand that certain candidates may not demonstrate all of the job's essential skills but if they are willing to learn and the organization can commit to providing training and support, they may still be a good candidate.

**Remember:** the AECs can be used to describe essential job functions and competencies expected based on the role and the level of skill needed ranging from entry-level epidemiologists to senior-level positions.

# Step 2:

## Create effective, competency-based interview questions

After defining the selection criteria, create effective, competency-based interview questions that allow interviewees to assess the candidate's strengths and weaknesses in the key skills needed for the position. These questions should be aligned with what success looks like for the role and what you expect the answers to demonstrate.

Interview questions should focus on direct experience with the competencies and capability to apply knowledge, experience, and flexibility. Ensure questions do not always focus on a time when something did not go well to balance positive- and negative-geared questions.

Consider utilizing case-based interviews or skills assessments as appropriate for the position to evaluate a candidate's problem-solving performance consistently and objectively. Using skills assessments allows applicants to apply what they know and demonstrate their expertise, which can reduce bias for those who may not have had internships or jobs that were directly relevant to speak about. This provides an opportunity for interviewees to share not just what they have done but also what they are capable of doing.

# Using the AEC's Skill Progression by Tier:

Individuals creating job descriptions and competency-based interview questions can utilize the AECs to select measurable skills that increase in complexity and specificity as the individual progresses through the tiers.

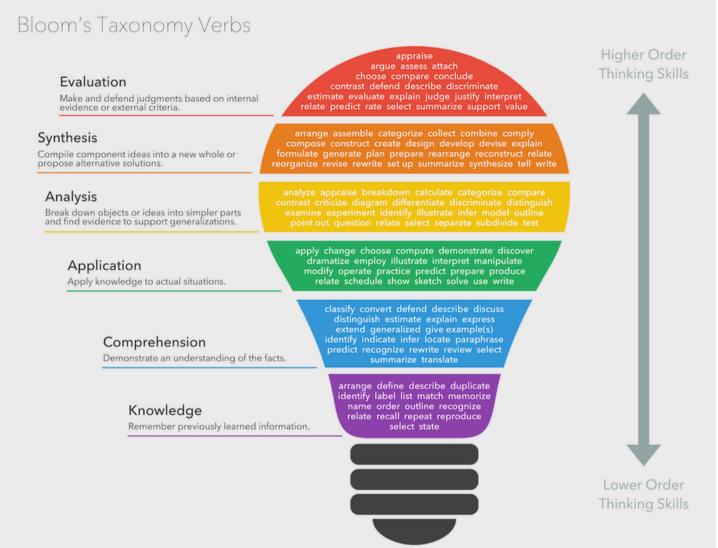
Bloom's Taxonomy was used to describe the progression of skills from knowledge to application, and finally to evaluation. For example, the verb for AECs subcompetency 1.4.1. progresses from identifies, to explains, to assesses, and finally advocates for.

Competency 1.4. Conducts surveillance activities (e.g., reviews surveillance data needs, assesses existing surveillance data and systems, collects, analyzes, evaluates, and communicates surveillance data)

Tier 1: Foundational	Tier 2: Intermediate	Tier 3: Practiced	Tier 4: Advanced
Subcompetencies	Subcompetencies	Subcompetencies	Subcompetencies
T1: 1.4.1. Identifies surveillance data needs for factors affecting the health of a community	T2: 1.4.1. Explains surveillance data needs (e.g., case definitions, data sources, quality, limitations, data collection elements, data transfer, data collection timeliness, frequency of reporting, uses of data, functional requirements of information systems to support)	T3: 1.4.1. <u>Assesses</u> surveillance data needs (e.g., data quality, availability, relevance, suitability, simplicity, sensitivity, predictability, timeliness, representativeness, flexibility)	T4: 1.4.1. <u>Advocates</u> for surveillance data strategies (e.g., case definitions, data sources, quality, limitations, data collection elements, data transfer, data collection timeliness, frequency of reporting, uses of data, functional requirements of information systems to support)

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Interviewers should familiarize themselves with the action verbs and progression of the order of thinking skills associated with Bloom's taxonomy to better understand and evaluate the interviewee's responses describing their experience and capabilities.



Bloom's Taxonomy Verbs by Fractus Learning is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

## Using the STAR Technique to Create Competency-based Interview Questions:

A common technique to create and answer competency-based interview questions is referred to as "STAR". The STAR technique can be used to incorporate Bloom's taxonomy in asking interview questions as well as listening for appropriate action verbs in a candidate's response.

The STAR method can be applied in the context of asking a potential candidate about their involvement in an epidemiologic study:

Situation- this part asks for the context of a situation or challenge.

- Consider asking: "Tell me about a time when you were involved in an epidemiologic study."
- You may expect to hear briefly about what the study was and why it was being performed here.

Task- this part addresses what the candidate's responsibility or role was in the situation.

- Consider asking: "What was your role in the epidemiologic study?"
- You should expect to hear briefly about their role, whether it was assigned to them or if they selected it, and why they had those responsibilities.

Action- this part details what actions the individual took during the situation, what they did to achieve success, and contains a lot of information about the applicant's level of competency.

- Consider asking: "What tasks did you perform and what skills did you use during this epidemiologic study?"
- You may hear about study design, data collection, data cleaning/analysis, data interpretation, data presentation, and development of a public health action depending on the experience and skills of the candidate.
- This part of the candidate's answer should help you assess whether they have the correct level of competency based on Bloom's taxonomy and the AECs to successfully perform the role.
  - For an Advanced Epidemiologist, you may listen for verbs such as communicate, administer, analyze, advocate for, facilitate, and justify.

Result- this part describes what results were the outcome of the action performed by the candidate.

- Consider asking: "What was the major outcome or achievement of the epidemiologic study?"
- You should expect to hear about the interventions that resulted from the study, what the candidate learned, and what they gained from the experience.

## Step 3:

#### **Conduct structured interviews**

Conduct structured interviews that ask questions to all candidates in the same order to provide them all with the same opportunity to describe their skills and experience. Allow for additional time for candidates to discuss unique expertise or items from their resume/CV.

Where possible, have multiple individuals interview the candidate either individually or as a panel to evaluate the interviewee from different perspectives. Be mindful about the time of scheduled interviews and number of interviews that will be conducted with each candidate. Often interviewees will need to take time off at their current job to interview for new positions and scheduling multiple interviews on multiple days can be difficult and further inequities. Inform interviewers about the expected scoring system and how to efficiently listen to and evaluate responses to ensure consistent and fair grading of candidates. Instruct them to take notes during the interviewees (e.g., "they did not make much eye contact" as opposed to the interpretation of "they were nervous and uncomfortable"). Consider training interviewers about unconscious bias and ways to combat it before they conduct their interviews. Individuals often prefer candidates who look like, think like, and talk like them and tend to assess them as having better likeability or organization cultural "fit". Educate interviewers about the importance of diversity, equity, and inclusion and the importance of considering soft skills and likeability but as only a part of the candidate's overall skills and capabilities.

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Consult with your Human Resources group to ensure compliance with organizational requirements and any standardized processes for interviews and documentation.

# Example Interview Questions for a Senior Epidemiologist/State Epidemiologist (Advanced Tier):

1. What interests you about this Epidemiologist IV/State Epidemiologist position and how does it fit into your career goals?

- 2. Summarize your expertise and experience that has prepared you for this position.
  - Optional follow-up questions/prompts:
    - What experience do you have in managing financial and human resources for an epidemiology department or program?
    - How can you recruit, retain, and contribute to the professional development of epidemiology staff in your organization?
    - Describe an experience where you have had to communicate unexpected or difficult situation to a community, partner, or funding/regulatory agency (e.g., the findings of a community health assessment, the need for public health action, interpersonal issues between team members, lack of project progress). How do you prepare for these conversations to ensure successful but accurate communication?
    - What experience do you have in facilitating collaboration with diverse partners and communities?
    - How do you lead organizational change management and advocate for additional internal and external resources for your department and other applied epidemiologists nation-wide?

3. Advocacy and communication skills are essential for this role. Please share an example that demonstrates your ability to communicate epidemiological findings or a needed public health action to a diverse audience.

4. Tell me about your experience in overseeing an epidemiologic department. How do you ensure the appropriate financial and personnel resources are available to perform the department's essential functions? How do you ensure that the organization is able to recruit, retain, and train these staff?

#### Optional follow-up questions:

- How many epidemiologists (or other staff) have you managed at a single time?
- How do you apply diversity, equity, inclusion, and accessibility principles to staffing your department?

5. Imagine that you're in charge of a department of epidemiologists that is working on a large, multi-jurisdictional foodborne disease outbreak. The cases are quickly mounting, and your team is struggling to complete all the new case interviews, review the Public Health Lab reports, manage the growing volume of data, and collaborate with other epidemiology departments in neighboring jurisdictions. You've been asked to provide an update to your state's Governor alongside your Public Information Officer, the Director of your health department, and your counterparts in neighboring jurisdictions, but you are having trouble getting a summary of the data from all of the impacted jurisdictions. To make matters worse, you have heard from your team that one of the other jurisdictions does not want to provide you their surveillance data and case interviews. You also need to finish reviewing the drafts from your team on their sections of the CDC ELC grant progress report before the fast-approaching deadline.

#### • Questions for this scenario:

- o How do you prioritize and delegate these multiple, urgent needs?
- What approach would you take to advocate for additional resources for your department during this outbreak?
- How might you work with your jurisdictional counterparts to resolve the data sharing situation?

6. Tell me about a time when you had to work with limited resources or constraints in a previous role. How did you handle that situation?

#### Optional follow-up question:

• How did you advocate for additional resources (financial, programmatic, or personnel) if they were needed either temporarily or long-term?

7. Imagine the following scenario: Your department finished an analysis of local infant mortality data. The trend in infant mortality among infants born to Hispanic moms is getting worse—that is, infant mortality is visually increasing, and this increase was determined to be statistically significant.

#### • Questions for this scenario:

- How do you engage with partners (community members, healthcare providers, and policymakers) to communicate the results of this analysis and the need for public health action while considering diversity, biases, and systematic and structural factors that impact health equity?
- How do you balance the need for rigorous scientific data and the practical realities of public health interventions?
- What if after the analysis the infant mortality trend was not statistically significant but was still visually increasing. How would you communicate those results to your partners?
- Can you give an example of a time when you had to make a difficult decision or recommendation based on incomplete or uncertain data?

8. How do you stay current on developments in data management and analysis tools, epidemiological surveillance methods, informatics, and data visualization technologies?

9. Is there any additional information relating to your resume/CV or past experience that you would like to share with me? If yes, please share it.

10. What questions do you have for me?

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