Scenario 1: *Bacillus* spp. consultation

This is an example of how a laboratory asked the NPHL for bacterial consultation. NPHL received text page and email notification that an “urgent” message was received via STATPack from Lab Site 1 as follows:

8/16/2005 2:13pm  
*From:* Lab Site 1  
*Subject:* Bacillus???
*Priority Level:* Urgent  
*Description Source:* skin  
*Gram Stain:* gram positive rod  
*Catalase:* positive  
*Media:* Blood Agar  
*Age of Culture:* 24 hour

*Image Description:* Non motile, Non hemolytic, Oxidase negative. Looks like Bacillus. What do you make of it?
8/16/2005 2:16pm
From: NPHL
To: Lab Site 1
Subject: Bacillus?
Priority Level: Routine
Gram Stain: gram positive rod
Media: Blood Agar
Age of Culture: 24 hour

*Image Description:* Could you zoom down further and take another picture, could you also send a picture of the gram stain?

8/16/2005 3:20pm
From: Lab Site 1
Subject: Bacillus?
Priority Level: Routine
Gram Stain: gram positive rod
Media: Blood Agar
Age of Culture: 24 hour

*Image Description:* This is the best zoom the camera will do. Anything closer is blurry. Did you receive the gram stain? Any advice on how to make it lighter?
NPHL telephoned the laboratory and provided support so that the microscope image could be sent.

8/16/2005 3:27pm
From: Lab Site 1
Subject: Bacillus?
Priority Level: Routine
Gram Stain: gram positive rod
Media: Blood Agar
Age of Culture: 24 hour

NPHL telephoned the laboratory and provided step-by-step instruction so that the white-balance adjustment could be made. The laboratorian then took and sent another microscopic image.
8/16/05 3:41pm
From: Lab Site 1
Subject: Bacillus?
Priority Level: Routine
Gram Stain: gram positive rod
Media: Blood Agar
Age of Culture: 24 hour

*Image Description:* Rhonda, How is this?

8/16/05 3:52pm
From: NPHL
To: Lab Site 1
Subject: Bacillus gram stain
Priority Level: Routine
Gram Stain: gram positive rod
Media: Blood Agar
Age of Culture: 24 hour

*Image Description:* This last gram stain image looks much better. If you have the time, look at various fields and if you see any rods that appear to have spores, please send us those images. The colony morphology is not exactly typical of an anthracis, but we would like you to send this isolate in to us to do PCR. Your lab manager is familiar with this procedure. Great work. Thanks. – Rhonda

The specimen was received and PCR performed. NPHL was able to rule out *B. anthracis* with no further workup.