

Guide to Working with Mixed Microbial Isolates

I. Introduction and Purpose

A number of laboratories at Harvard University work with mixed microbial isolates (e.g. environmental isolates, fecal isolates, etc.) as part of their research. The risks of working with mixed isolates and cultures are often undefined, as the biological constituents are unknown. This document seeks to provide guidance for appropriate handling of mixed isolates and conditions for amending a COMS protocol in relation to this work.

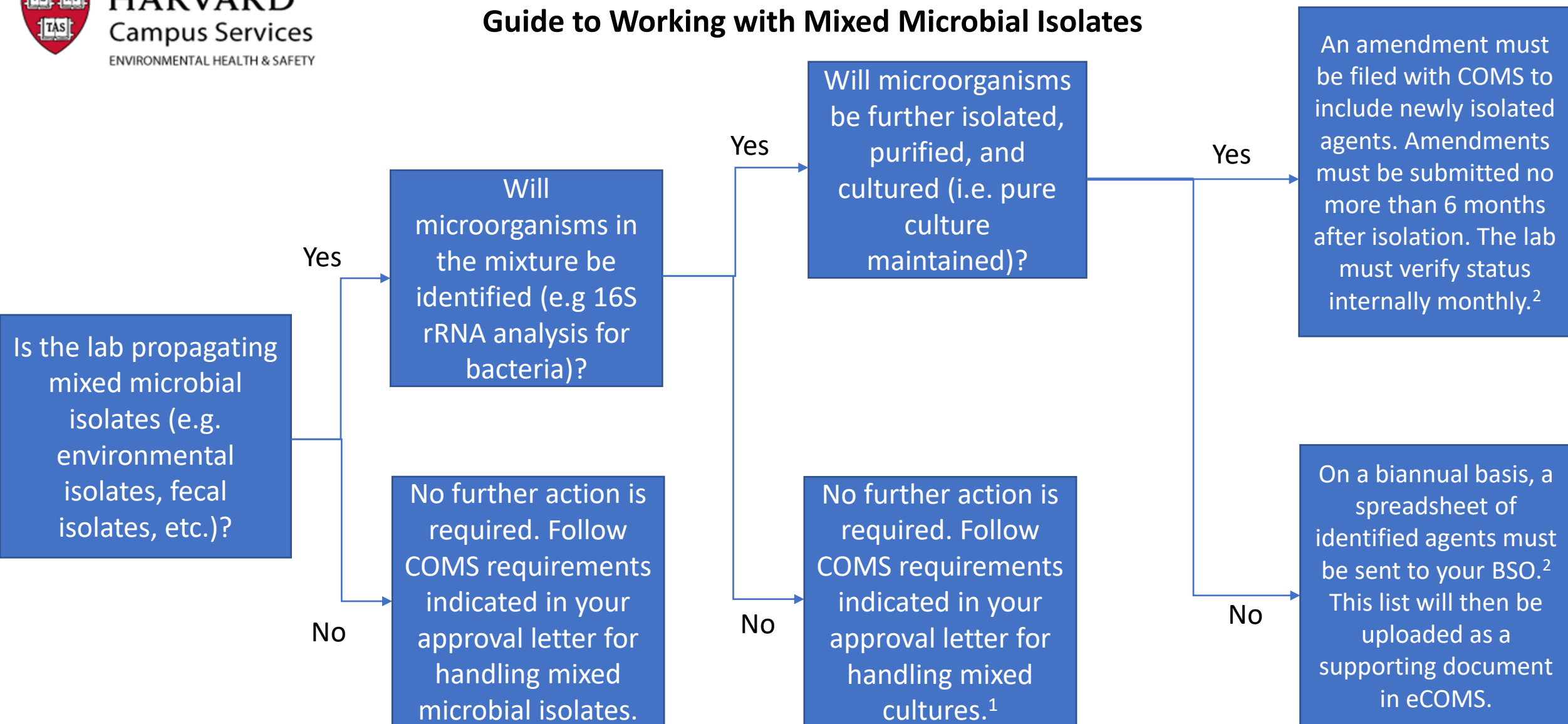
II. Determining COMS requirements

All microorganisms used at Harvard University for research purposes must be registered with the Harvard Committee on Microbiological Safety (COMS) by submitting a protocol through [eCOMS](#). Occasionally COMS will approve projects with mixed microbial isolates or unidentified cultures. COMS approval letters indicate the biosafety level at which isolates/cultures must be handled and may dictate additional stipulations for the work depending upon the activities that the laboratory is engaged in.

The [flowchart](#) on the following page provides guidance for which laboratory activities will require action beyond the initial COMS protocol submission and approval. If microorganisms will be identified but not further isolated and cultured, a spreadsheet of identified organisms/strains must be sent to the lab's biosafety officer (BSO) on a biannual basis. This list will then be uploaded to the lab's protocol as a supporting document in eCOMS. If microorganisms will be identified, further isolated, purified, and cultured, an amendment must be filed with COMS to include the newly isolated agents. Amendments must be reviewed by the committee no more than six months after isolation and the lab must verify status internally on a monthly basis. In either scenario, if a lab identifies an agent listed under the [IATA Category A](#) classification or the [Select Agent](#) list, the lab must immediately cease all related activities and secure the isolates until [EHS Biosafety](#) can advise on handling/disposal.



Guide to Working with Mixed Microbial Isolates



1. Mixed culture: cultures with unknown or undefined constituents (vs. deliberate culture of known microbes)

2. **Immediately** reach out to biosafety@harvard.edu if an agent listed under the [IATA Category A](#) classification or the [Select Agent](#) list is identified (e.g. identification/isolation of *B. anthracis* from soil or verotoxic *E. coli* from stool). Cease all related activities and secure the isolates until EHS Biosafety can advise on handling/disposal.