

SUPPLEMENTARY BOX

Exclusion Criteria for Culture Specimens in an Active Surveillance for Invasive Mold Disease — Four Hospitals, Atlanta, Georgia, 2020–2024

- **Specimens identified only as “mold”:**
Specimens without identification to at least the genus level, as lack of specific identification limits relevance to IMD surveillance efforts.
- **Yeasts commonly mistaken for molds:**
Includes organisms such as *Candida*, *Saccharomyces*, *Pneumocystis*, and *Cryptococcus*.
- **Dimorphic fungi:**
Fungi that can exist in both yeast and mold forms depending on environmental conditions.
Examples include *Histoplasma*, *Coccidioides*, *Blastomyces*, *Paracoccidioides*, and *Sporothrix*; these genera are dimorphic and are not considered causative agents of invasive mold disease.
- **Specific specimen sites and fungal identifications unlikely to indicate invasive disease:**
 - Specimen site: hair
 - Specimen site: nails
 - *Penicillium* in sputum or bronchoalveolar lavage
 - *Trichophyton* spp.
 - *Trichosporon* spp.
 - *Epidermophyton* spp.
 - *Microsporum* spp.
 - *Exophiala* in sputum
 - *Cladosporium* in sputum
 - *Aspergillus niger* from the ear
 - *Curvularia* spp. from the sinus
- Case classifications and full chart abstractions for specimens collected from patients with cystic fibrosis were not performed.

SUPPLEMENTARY TABLE: Mold species or genera identified among patients with an IMD case by infection site in an active surveillance system for invasive mold disease — four hospitals, Georgia, 2020–2024

Mold taxon identified	All IMD Cases*	Pulmonary	Sinus, nasal, or facial	Cutaneous/deep tissue (not facial)	Central nervous system	Eye	Other	Multiple	Not applicable (serum <i>Aspergillus</i> galactomannan only)
	(N=449)	(N=275)	(N=34)	(N=39)	(N=21)	(N=4)	(N=24)	(N=40)	(N=12)
<i>Aspergillus</i> spp.	319 (71%)	239 (87%)	13 (38%)	5 (13%)	8 (38%)	0 (0%)	11 (46%)	31 (78%)	12 (100%)
<i>Aspergillus fumigatus</i>	94 (21%)	71 (26%)	7 (21%)	2 (5%)	5 (24%)	0 (0%)	3 (13%)	6 (15%)	0 (0%)
<i>Aspergillus</i> spp. (non- <i>fumigatus</i>)†	42 (9%)	30 (11%)	3 (9%)	1 (3%)	0 (0%)	0 (0%)	5 (21%)	3 (8%)	0 (0%)
<i>Aspergillus</i> spp. (not specified)§	180 (40%)	135 (49%)	3 (9%)	2 (5%)	3 (14%)	0 (0%)	3 (13%)	22 (55%)	12 (100%)
>1 <i>Aspergillus</i> species	3 (1%)	3 (1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<i>Fusarium</i> spp.	20 (4%)	3 (1%)	3 (9%)	6 (15%)	2 (10%)	2 (50%)	2 (8%)	2 (5%)	0 (0%)
Mucorales (e.g. <i>Rhizopus</i> and <i>Mucor</i> spp.)	17 (4%)	1 (0%)	9 (26%)	4 (10%)	0 (0%)	0 (0%)	0 (0%)	3 (8%)	0 (0%)
<i>Scedosporium</i> spp.	12 (3%)	5 (2%)	1 (3%)	1 (3%)	2 (10%)	0 (0%)	2 (8%)	1 (3%)	0 (0%)
<i>Curvularia</i> spp.	9 (2%)	5 (2%)	1 (3%)	1 (3%)	1 (5%)	0 (0%)	1 (4%)	0 (0%)	0 (0%)
<i>Penicillium</i> spp.	6 (1%)	3 (1%)	1 (3%)	1 (3%)	0 (0%)	0 (0%)	0 (0%)	1 (3%)	0 (0%)
<i>Exophiala</i> spp.	8 (2%)	2 (1%)	0 (0%)	1 (3%)	2 (10%)	1 (25%)	2 (8%)	0 (0%)	0 (0%)
<i>Purpureocillium</i> spp.	5 (1%)	2 (1%)	0 (0%)	1 (3%)	1 (5%)	0 (0%)	1 (4%)	0 (0%)	0 (0%)
<i>Cladosporium</i> spp.	3 (1%)	1 (0%)	0 (0%)	1 (3%)	1 (5%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<i>Paecilomyces</i> spp.	6 (1%)	0 (0%)	0 (0%)	5 (13%)	1 (5%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<i>Geotrichum</i> spp.	3 (1%)	2 (1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (4%)	0 (0%)	0 (0%)
<i>Alternaria</i> spp.	2 (0%)	0 (0%)	2 (6%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<i>Exserohilum</i> spp.	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<i>Verruconis</i> spp.	1 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (5%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<i>Talaromyces</i> spp.	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<i>Scopulariopsis</i> spp.	1 (0%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<i>Cladophialophora</i> spp.	1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (25%)	0 (0%)	0 (0%)	0 (0%)

<i>Lichtheimia</i> spp.	1 (0%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<i>Acremonium</i> spp.	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
>1 genus [¶]	18 (4%)	4 (1%)	2 (6%)	9 (23%)	0 (0%)	0 (0%)	1 (4%)	2 (5%)	0 (0%)
Other mold not listed**	17 (4%)	6 (2%)	2 (6%)	4 (10%)	2 (10%)	0 (0%)	3 (13%)	0 (0%)	0 (0%)

Abbreviations: IMD = invasive mold disease; MSG = National Institute of Allergy and Infectious Diseases Mycoses Study Group criteria.

* IMD cases meet a combination of criteria including mycologic evidence (e.g., culture or histopathologic findings), clinical factors (e.g., chest computed tomography findings), host factors (e.g., recent history of neutropenia or ever received a solid organ transplant), and clinician suspicion for IMD as indicated by patient receipt of mold-active antifungal treatment. Potential cases determined not to be IMD cases are included in the surveillance system on the basis of a positive mold culture or a positive *Aspergillus* galactomannan test (serum or bronchoalveolar lavage specimen with index value ≥ 0.5) but do not meet criteria for an IMD case.

† Among IMD patients, non-*fumigatus Aspergillus* spp. included *Aspergillus niger* or *A. niger* species complex (12 patients), *Aspergillus flavus* or *A. flavus* species complex (11), *Aspergillus sydowii* (five), *Aspergillus lentulus* (three), *Aspergillus terreus* (three), *Aspergillus versicolor* (three), *Aspergillus tubingensis* (two), *Aspergillus calidoustus* (one), *Aspergillus caelatus* (one), and *Aspergillus ustus* (one).

§ Among these IMD patients, the species of *Aspergillus* was unavailable because the only positive mold test result was an *Aspergillus* galactomannan antigen test (164 patients) or because the species result from the specimen tested was not available (16).

¶ Among IMD patients with infections involving more than one genus of mold, most frequent combinations included *Aspergillus* spp. and *Fusarium* spp., *Aspergillus* spp. and *Purpureocillium* spp., and *Fusarium* spp. and *Scedosporium* spp.

** Among IMD patients, other mold taxa identified included *Aureobasidium* spp. (one patient), *Beauveria peruviansis* (one), *Chrysosporium submersum* (one), *Drechslera* spp. (one), *Eutypella scoparia* (one), *Fonsecaea monophora* (one), *Nigrospora sphaerica* (one), *Paraconiothyrium cyclothyrioides* (one), *Parasarocladium* spp. (one), *Phialemonium obovatum* (one), *Pleurostomophora richardsiae* (one), *Pseudallescheria angusta* (one), *Rigidoporus ginkgonis* ([within Basidiomycota], one), *Schizophyllum radiatum* (one), and Zygomycetes species (three).