Wind-dispersed ascospores can initiate an epidemic and contribute to secondary infection over long distances.

Infected seeds with fungal mycelium or straw with pycnidia can initiate seedling infection.

Pycnidiospores splash-dispersed ~1-5 m

Pycnidia which form on infected green leaves during the growing season and can persist on stubble between seasons, produce pycnidiospores that move short distances by rainsplash to neighboring leaves, ears and adjacent plants.

Pseudothecium (sexual)

Pseudothecia which form on older leaves during the growing season and on stubble between seasons, produce ascospores that move by wind to upper leaves and to neighboring plots.

Ascus + ascospores

Seedling infection

Stubble

Pycnidium (asexual)