

KAPITAŁ LUDZKI  
NARODOWA STRATEGIA SPÓJNOŚCI

UNIA EUROPEJSKA  
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"Polski Uniwersytet Jagielloński - Uniwersyteckie Centrum Badawcze i Uniwersyteckie Centrum Współpracy z Uniwersyteckim Hospicjum Onkologicznym"  
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# Introduction to Human Genetics

## Module 1 Mendelian genetics

# Pedigrees

Dr Ewa Piotrowska  
Department of Molecular Biology

# Pedigree charts

are a way of tracing the pattern of inheritance of a genetic condition through a family

# SYMBOLS

	Normal	Affected	Carrier
Male			
Female			
Sex unknown			

# SYMBOLS

Mating	
Consanguineous mating	
Siblings	

# MAJOR TYPES OF INHERITANCE

## Autosomal dominant (AD)

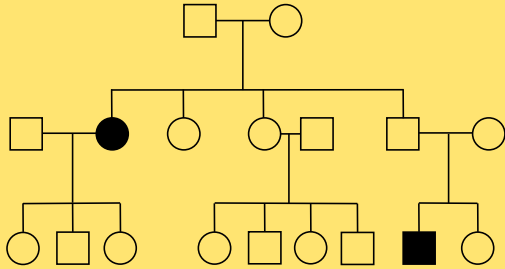
# MAJOR TYPES OF INHERITANCE

## Autosomal dominant (AD)

- Affected individuals have at least one affected parent
- About one-half of the children who have one affected parent are affected
- Both sexes are affected with roughly equal frequency
- Affected parents can have unaffected children

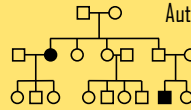
## MAJOR TYPES OF INHERITANCE

Autosomal recessive (AR)



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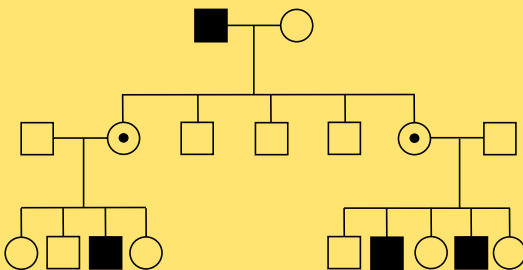
☞ Most affected individuals have normal parents

☞ 25% chance that a child of heterozygotes will be affected

☞ Both sexes are affected in roughly equal numbers

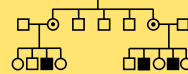
## MAJOR TYPES OF INHERITANCE

X-linked recessive (AR)



## MAJOR TYPES OF INHERITANCE

X-linked recessive (AR)



☞ Hemizygous males are affected and transmit the trait to all their daughters, but not to any son

☞ Heterozygous females are unaffected carriers

☞ Phenotypic expression is much more common in males than in females

For more information,  
see **Supplementary Materials**

**THE END**