Guidelines for Naming RH Alleles

As the RH blood group systems is encoded by two genes and there are many hybrids alleles with part of RHD and RHCE joined they present some unique challenges.

- *RHD* conventional sequence is assigned *RHD*01*
- *RHD* null (D- phenotypes*)* are designated with N and the background allele on which the null mutation has occurred. For example the common deletion is *RHD*01N.01*. The inactivated 37-bp insertion background is designated *RHD*01N.02*.

Partial D phenotypes are defined by document risk for production of anti-D and the RBCs often lack epitopes defined by lack of reactivity with some monoclonal antibodies.

- Partial D phenotypes have been given **allele numbers associated with the phenotype or category designation as much as possible**. For example alleles encoding partial DVI are numbered as *RHD*06*. As numerous DVI types encoded by different alleles are known, these are number sequentially as *RHD*06.01*, *RHD*06.02* etc.
- When only partial analysis is performed and polymorphisms uniquely associated with a partial D allele group (such as DIII, DIV, DVI etc) are present, the allele name should be abbreviated to the first period stop, e.g., *RHD*06.01* could be *RHD*06* (or *RHD*DVI*.)

Weak D phenotypes do not appear to lack defined epitopes when tested with monoclonal antibodies and are NOT USUALLY associated with production of anti-D Uncommon exceptions are seen.

- Weak D phenotypes **will not** be considered Mod phenotypes and *M* will not be used in the Rh system
- Weak D alleles will be designated by *RHD*01W.01* (type 1) **OR numbers begin with 100.**
- Del will be numbered consecutive with weak D **OR beginning with 200 and consecutive numbering**.
- The phenotype, i.e. weak or Del, may depend on the RHCE alleles present and/or the reagent used for testing.
- When weak D phenotypes have been associated with anti-D in multiple or numerous cases relative to their prevalence, the terminology “weak partial D” will be used to reflect both the weak D RBC typing and the risk for anti-D production.
- Silent changes will be given as they contribute to diagnosis of alleles is some cases.
- RHCE common alleles are designated *RHCE*01* for ce, *RHCE*02* for Ce, *RHCE*03* for cE, and *RHCE*04* for the allele endcoding CE.